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TUESDAY, MAY 2, 1916.

Special Articles

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W. Swanson.

Agricultural Development in

The Growth of the Banks' Loan Fund.

By H. M. P. Eckardt.

Coal Mining in Pictou County, N.S.

Conditions in the West.

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Women in Industry.

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A Dangerous Precedent

THE report of the Auditor General for Canada is a volume that is looked for by many, especially by Opposition members, who search it for the record of expenditures which they may feel need some investigation. It has, however, another feature that is sometimes of much interest. In the case of expenditures concerning the propriety of which the Auditor General has had some doubt, the volume includes the correspondence by which the matter has been satisfactorily disposed of—if it has been; and if, as once in a while happens, the Auditor General and the Government come into conflict, and his protests are overruled, the report contains the record of the dispute and the conclusion reached. The story of one of these unusual incidents is found in the report recently submitted to the Parliament at Ottawa. A payment of \$22,439.96 was made to a contractor who, in the opinion of the Auditor, had no just claim for a cent of the money.

The work concerned was a breakwater in Nova Scotia, for which the contract price was \$44,500. It is stated that the contractor, in his tender, and that

that his law, but as this would have caused the forfeiture of his deposit, he decided to go on, and signed the contract. On the completion of the undertaking he represented that it had cost \$66,937.96, and he asked the Department of Public Works to pay him the \$22,439.96 beyond his contract price. As to the causes of the higher cost, he pleaded delay in the delivery of creosoted timber and unexpected high cost of stone ballast. When the Department proposed to pay the amount claimed the Auditor General set forth his objections as follows:

"As to the statement of delay caused by delivery of only part of the creosoted timber, at the commencement of the work, the district engineer states that he fails to discover anything in this feature of the claim, as 80 per cent of the whole order was delivered in August, 1912. He also states that the contractor expected the stone to cost from 40 to 60 cents per ton, or say an average of 50 cents. The average cost was, he believes, fully \$1 per ton.

"In view of these statements by your own engineer, I do not see on what ground you propose to pay this additional sum.

"There does not appear to be any additional expense to the contractor through any neglect of the department to supply the creosoted timber. As to the cost of the stone, the department had nothing to do with it. The contractor should have ascertained what it was going to cost him before tendering.

"The chief engineer states: 'In equity there is no doubt but that Mr. Reid is en-

titled to extra compensation, as he constructed this work in an efficient manner; and there is no doubt that the total cost, as given above, and as corroborated by an affidavit attached hereto, is correct.'

"As to the first reason, Mr. Reid was bound by contract to construct the work in an efficient manner, and in equity he is not entitled to an additional dollar on that ground. As to the second reason, viz.: the total cost exceeding Mr. Reid's expectations, that is one of the chances a contractor takes. Had the total cost been less than the amount of the contract, would the department, in equity, be entitled to deduct the saving from the contract price? I think not.

"If the department adopts the principle that when it is found that a work costs more than the amount of the contract, it should pay the total cost, what is the use of calling for tenders? Why not ask the contractor to do the work and render his account for the same?"

Business men will probably find the reasoning of the Auditor General clear and unanswerable. The Treasury Board, so far as the record shows, has no receipt to meet the cost of the Auditor General. After reciting the facts as set forth by the Auditor General the Board rendered judgment in these words:

"Inasmuch as the amount was arrived at as a full and final settlement of the claim by the Department of Public Works, and inasmuch as Parliament by its vote confirmed the settlement and sanctioned the payment, the Board are of opinion that the objection of the Auditor General is not well taken and should be overruled, and that the intention of Parliament should be carried out and the amount paid."

It is here assumed by the Board that Parliament investigated the matter, and, after full consideration, directed the payment of the amount claimed. But if such is the fact the Treasury Board failed to show it, or give any reference to it. The mere fact that an item was placed in the estimates laid before Parliament and passed is not to be taken as evidence that Parliament fully understood the matter and decided on the justice of the claim. The passing of such an item is an authority to the Government to make a payment, but every vote of the kind, every appropriation of public money, properly assumes that the Government will see that the money is applied only to the payment of just claims. It is reasonable to believe that if Parliament had been as fully informed as the Auditor General subsequently became, it would have hesitated to come to a decision that would establish a most dangerous precedent.

What is the object of inviting tenders for a public work? Surely it is that the public shall have the benefit of competition. To obtain tenders from capable and responsible people it is

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provided that a substantial cash deposit shall accompany the tender. The contractor must take the risks of gain or loss which attend every business enterprise. If all goes well and he makes a very handsome profit, nobody complains. He has won it fairly. If things do not go well, if from any cause his venture proves unprofitable, he must be content to bear the loss. That is the fair rule of such transactions, and the only rule that a Government can afford to recognize. No doubt many cases have occurred in which such losses and much hardship have been suffered by contractors. But here is a case in which a contractor calls upon the Government to bear his loss, and the Government obligingly agree to do so. No wonder the Auditor General asks, what is the use of asking tenders if such a claim is to be recognized?

A few years ago a contractor in Ottawa tendered for a large Dominion building. His price was known to be low. But he was an experienced and responsible contractor, who had put up his deposit, and business rules required that the work be awarded to him. The contract proved disastrous to him; he lost very heavily, perhaps was financially ruined by it. But what could be done? He had made his bargain and had to live up to it. No kindly Department or Treasury Board decided that the public must bear his loss. He had to bear his burden until he reached the grave not many weeks ago.

The new principle now laid down by the present Government, through their Treasury Board, opens the door to dangerous things.

Emperor or President?

THE oriental mind is not easily understood. There is some philosophy which tells us ways that are dark and tricks that are vain the heathen Chinese is peculiar. To-day these qualities seem to be particularly well illustrated in the person of Yuan Shi-kai, the head of the Chinese Government. Yuan encouraged revolution against the Monarchy, and succeeded in making himself the President of a Chinese republic. A few months ago rumor attributed to Yuan an ambition to occupy, not the temporary throne of the President of a republic, but the perhaps more enduring seat of a monarch. It was widely reported that he was laying his plans to have himself proclaimed Emperor of China. When these reports reached the President's ears he became very angry. They were, he said, the slanders of his enemies, and without the shadow of a foundation. An American correspondent, desiring to interview the President, prepared a series of written questions. Yuan had no hesitation in answering fully and explicitly. The correspondent published the President's statement as follows:

"The Republic has not been a failure. It is absolutely certain to continue. Monarchical government is as dead in China as it is in the United States, where, excepting in a very limited sense, it never existed.

"I am President of China. I have no desire to be anything else. I am misrepresented even in the American and British press. Your journals cannot too strongly impress upon the officials and people of the United States that the assertions to the effect that I am in favour of the re-establishment of the monarchy and that I desire to be Emperor are made by my enemies, not by my friends.

"Some of my critics, both at home and abroad, think they see in my order for the official resumption of Confucianism a reversion to all things old. There is no political significance in this reaffirmation of our national belief in the Great Sage, unless it might be taken that the closer knitting together of a people in morals and ethics had political significance. It is true that as late as yesterday the Council of State advised that I issue an order for the assembling of a citizens' convention to act on a new constitution. The question of reverting to a monarchical form may be brought up; I presume it will, and that it will be discussed earnestly and at considerable length; but there is not the remotest chance that the royalists will be in a majority."

An occidental statesman might have deemed it expedient to be more diplomatic, less frank. Yuan would have none of such methods. He declined to use any vague or uncertain terms. The plainest and the strongest language was employed to assure the world—and particularly the Western world—that the monarchy was the dearest of all dead things, and that he lived only to maintain the republic. But a very little while after the world received this assurance of Yuan's devotion to the republic the startling news came that the so-called Citizens' Convention had chosen Yuan to be Emperor! At a New Year's reception at Peking he received addresses and congratulations as an Emperor.

This sudden transformation does not appear to have given general satisfaction. Revolution against the Emperor broke out. Now comes the news that Yuan has renounced his Imperial character, declared himself President again, and taken to his Cabinet a number of Republicans who are prepared to make the

revolutionary disposed to make the Emperor any longer, he is willing to be President. The one important thing is that Yuan Shi-kai shall be on top. But there are influential groups in China which are not prepared to adapt themselves to his conveniently adjustable system, and so he is obliged to face another widespread revolution.

The Mexican Situation

ALTHOUGH President Wilson is not a man of sanguinary disposition, he may be pardoned if he desires to receive confirmation of the various reports of the death of the Mexican bandit leader Villa. Mr. Wilson's policy of "watchful waiting" in Mexico can hardly be said to have turned out well. His refusal to recognize the pretensions of President Huerta was based on a high view of public affairs. Huerta's connection with the downfall and death of Madero left him well open to suspicion, and President Wilson was unwilling to treat with a man whom he regarded as a murderer. However, Mexico is Mexico, and some things have to be said and done in dealing with such a country which may not bear close examination in the light that comes to other parts of the world. The British Government, with large experience in dealing with turbulent countries, came to the conclusion that Huerta probably was the best of a bad lot, and that since he seemed to have about as much control of Mexican affairs as anybody had since the retirement of Porfirio Diaz, the recognition of Huerta was the most promising

way of reaching something like national order.

Perhaps Mr. Wilson now finds reason to regret that he did not follow the British example. Huerta, established at the City of Mexico, with the recognition of the United States, might have brought about a better condition of affairs. He could hardly have made matters worse than they have been for the past year or two. At long last, President Wilson decided to recognize Carranza as the "First Chief" of the Mexican Republic. Villa revolted against Carranza, and, regarding the Americans as Carranza sympathizers, attacked the American town of Columbus, just across the boundary line, killing and wounding American citizens. Believing, with good ground, that Carranza's forces could not be relied on to pursue and punish Villa, President Wilson sent an American army into Mexico, having first, it was believed, obtained the virtual consent of Carranza. At Parral a few days ago, a party of the American force was attacked by the Mexican people. Subsequently it was admitted that some of the Carranza troops joined in the attack. Now Carranza confesses that the anti-American feeling among the people is so strong that he cannot control it, and he asks that the American army be withdrawn from Mexican soil.

For the Americans to withdraw their forces while Villa is unpunished is almost too much to expect. Into this situation comes the report that Villa was wounded and has died. Confirmation of this report would solve the American Mexican problem, for the moment at least. The Americans have declared, with sincerity beyond question, that they have no desire to invade Mexico. Their only object in crossing the border was the pursuit, capture and punishment of Villa. If assurance of Villa's death can be given, there is no reason to prevent the immediate withdrawal of American forces. But while there

more remain in Mexico, in the face of Carranza's demand for their withdrawal. A clash between the American and Mexican soldiers seems almost unavoidable. And apart from the soldiers, the one thing upon which Mexicans of all factions seem to be able to unite is hostility to the Americans, or "Gringos," as they are called. This hostile feeling is not of recent growth, but of long standing, and nothing that President Wilson and his associates can say as to the present good intentions of the American Government will remove it. The situation is full of peril.

Better Pay Straight Salaries

A NEW BRUNSWICK paper states that it cost \$5,826.89 to collect the succession duties of the Province last year. The amount, it appears, was paid in fees to the Attorney General. Premier Clarke held the office for six weeks, which proved to be the fruitful period, as he received \$5,350.80 of the amount, while the Hon. Mr. Baxter, who held the office for ten and a half months of the year, found his time a lean one, yielding only \$476.09. It is a pity that the Province adopts this ancient and objectionable method of paying its officials. The salaries allowed to the Ministers are miserably small. The remedy would seem to be the increase of the salaries to respectable figures. The system of allowing Ministers to receive part of their remuneration on the form of fees is not a good one.

The Eight Hour Day

By Prof. W. W. SWANSON.

The Canadian Government has recently made an inquiry into the conditions under which workmen are being employed in munition plants, with special reference to hours of work and wages. The questions now raised are bound to present themselves with even greater insistence after the war, and demand, therefore, the most careful examination and consideration. In the United Kingdom Lloyd George has found his greatest difficulty, in the way of securing an increased output of munitions, in the labor problem, and this not so much in the absence of a sufficient number of skilled mechanics—although his difficulties there have been formidable enough—as in the apparent obstinacy with which the workers declined, without adequate safeguards, to consider any proposals to alter the working day and week. The question of wages is comparatively simple as compared with hours of labor; as the former is one largely determined by market conditions while the latter depends upon custom and practice. And, as everyone knows, it is one of the most difficult of tasks to change habit, tradition and custom, especially where self-interest comes powerfully to their support. It is only in very recent years that the tradition of long hours for the working classes has been broken down, and the labor element is fearful of its being re-established. When it is realized how hard has been the struggle to shorten the working day, and how precious has been the victory to the workers, it may be possible to sympathize the more readily with their demand that, at all costs, the future position of the laboring classes shall, in this respect, be adequately protected. It will not be possible, in this article, to consider all the phases of this problem, but the chief points will be touched upon in a rapid view of the events that have led up to the present situation.

Regulation of Hours of work in Past Century.

It must be admitted that the past century has seen a steady diminution of the number of hours in the working day, and that, in this regard, factory operatives have greatly improved their position. In the United States, where war conditions have improved the position of the workers in many directions, there has been a decided advance in this direction. For example, in September, 1915, 25,000 employes of the Standard Oil Company of New Jersey were given an eight-hour day. With respect to this change a representative of the company said: "This reduction in hours, from ten to eight, is not the result of recent troubles, but is adopted as part of the welfare work that the company has always been interested in. This is significant of a change in workmen's conditions that is making rapid headway in the United States, and holds more of promise, even, than a general increase of wages, as experience has abundantly proved; for an increase in wages may be more than offset by an advance in the cost of living. On the other hand, a decrease in the working day provides leisure to the laborer for a life outside of, and beyond, his humdrum daily work.

Workmen do not forget, although others may, that at the beginning of the nineteenth century men worked from sun to sun; and when the factory system had been firmly established in England, and factories were equipped with costly machinery and artificial lighting was introduced, the hours of labor were extended far into the night. Since that time, however, the ten-hour day has become general, and in some instances the eight-hour day has been adopted. Nevertheless, the twelve-hour day has not become extinct; and although the hours have been greatly reduced in many trades yet, taking the field of labor in general, it may be said that, during the last twenty-five years, the average reduction in the hours of work has not been more than one hour.

It is disheartening to observe that employers as a class have always opposed, and still oppose, the shortening of the hours of work, even although it has been clearly established that they have gained as much as the workers, through the increased efficiency of labor. It should be noted, moreover, that the sixteen hour day, or even the fourteen or twelve, was not an ancient custom of the race from which it escaped, but a product of the factory system of the eighteenth and nineteenth centuries. Employers imagined that expensive machine equipment had to be run to its utmost capacity to take up the yearly depreciation; and hence men and women were required to yield up the last ounce of energy in long and exhausting days of work. In Manchester, during

the year 1830-40, the textile mills ran from five in the morning to nine in the evening, with only an hour's rest in the middle of the day for dinner. This, he it noted, took place fifteen years after Robert Owen proved by his experiments in the cotton mills at New Lanark, that the sixteen-hour day could be reduced to ten to the immense benefit of both the employer and employe. Nevertheless, the majority of the masters continued to oppose a reduction of the hours of labor, perhaps through instinct, and certainly—in the face of the facts—through prejudice. At the same time there have been many employers who, through self-interest as well as the dictates of conscience, have shortened for their workers the hours of labor, and have gained enormously through the added zest and efficiency with which their employes set to work. They, like Owen, have advocated an eight-hour day not only because no loss in industrial results would obtain but because "it is to the real interest of every human being that every other human being should be healthy, intelligent, contented and wealthy"—not an impossible ideal if we substitute for "wealthy" the words "relieved from the menace of want." And if all workers cannot hope to be brilliantly endowed they at least have the right to demand leisure for training and cultural improvement.

It unfortunately remains true that enlightened and philanthropic employers are still too few; and recourse must yet be had to wasteful strikes and unsettling agitations to achieve the desired results. Here and there a Henry Ford may appear, who recognizes that his business is not entirely his own since the well-being, the interest and the very existence of thousands of thinking and feeling men may depend upon it. But for the most part, labor will have to depend on its own efforts, and upon State action, to usher in a reasonable and adequate working day for the mass of the nation's toilers.

Action by the State.

In the past, however, the State has done comparatively little to shorten the work day. It is true that the State has set limits to the hours of work of women and children in industry, with the result that, notably in the textile industries, there has come about also an almost automatic reduction in the working day for men as well; but on the whole the reduction has come about rather because of union organization and the employers' recognition of the wastefulness of the twelve-hour day. In certain dangerous or exhausting occupations, however, as in mines and smelters, the State has restricted the hours of labor to eight or nine. Where Governments have been direct employers of labor—as the British and the French—the hours of work have been reduced to an average of eight for each day of the week. And both for religious and humanitarian reasons the State has restricted within narrow limits Sunday labor, especially in Canada. On the whole, however, as already pointed out, labor has had to depend largely upon its own efforts to obtain a reasonable working day.

What of the Future?

In the light of what has been said it will be realized why the trade unions of the United Kingdom have so jealously guarded the position they have won with respect to the ten-hour, and in some instances, the eight-hour day. For this they have been bitterly assailed for class and political purposes. They are charged with having taken advantage of the war to gain illegitimate and party ends. Notwithstanding the slackers—who, unfortunately, are always present in every country, war or no war—the working classes of the United Kingdom have risen nobly to the occasion, and are courageously and willingly subjecting themselves to a terrific physical and mental strain. The men in the trenches are scarcely more patriotic. History cannot show the equal of this voluntary response, whether for duty on the field of battle or in the factory, in the case of any other great nation. The factories of the Motherland are working day and night, and British men and women intend to keep them going until the enemy is crushed. At the same time they want it distinctly understood, and rightly so, that the present long hours and overtime work are to last during the war, and during the war only.

There are not wanting pessimists in England who maintain that the world will be a harder one to live in after the war and because of the war. They argue that hours of labor will be longer and wages smaller

in Germany; and that English workmen will, therefore, be compelled to share with their masters the burden of increased competition. Germany will, without doubt, be a poorer Germany and a chastened Germany; but not a more efficient Germany. War taxes will crush her industries; frightful losses of men will lessen her labor power. England, no doubt, will have suffered; but capital will be ample for her needs and her labor power will not be sensibly diminished. Relatively, Britain's place in the markets of the world will be higher and more secure than before the war. Finally—and for the purpose of our argument it will suffice—it can be proved that the United Kingdom will best meet German competition by raising wages and shortening the working day, rather than by following the reverse methods. The United States, the world's greatest manufacturing nation, has already demonstrated the soundness of this contention. In that country wages are higher than elsewhere, and the hours of work per day fewer; and yet—with the possible exception of England the United States is the most formidable of competitors in the neutral markets of the world. Surely the pauper labor argument at this late day needs no refutation. Once more, let us emphasize the fact that long hours and low wages for workers in Germany will not make them more effective in the competitive struggle, but will diminish their country's industrial power. Germany will not willingly adopt these conditions for her laboring population; rather, they will be thrust upon her as a vanquished nation.

The Position of Women Workers.

A brief reference in closing may be made to the future position of women workers in the field of industry in the United Kingdom, with respect to their probable attitude to this particular problem. A few extreme feminists—Miss Sylvia Pankhurst among others—have objected to State regulation of the hours of work for women. They have obviously, however, in this regard, been more intent on securing formal rather than real rights when they have demanded absolute equality with men and protested against special State regulations for the protection of those of their own sex. The common-sense of the world, however, proves that hard facts whether of nature or limited experience, must be considered in dealing with the position of women in industry. For these reasons, women are forbidden to work in the mines, in Great Britain; and night work is also either forbidden or greatly curtailed. In the same way they are protected they are given special protection with respect to hours of work—nine or ten per day being the maximum usually allowed, a maximum which also generally becomes the minimum.

Most enlightened men will welcome women to a broader field of industry; as the work of the world will provide scope for the energies of all. Here again the old "lump of labor" theory is being gradually abandoned. It is no longer felt that work is limited in amount, and that it must not be shared by too many. It is recognized that only by setting a limit to human desires and needs can the world's work be curtailed. However, that is another story. The point we wish to make here is that men will be glad to admit women to the ranks of the workers provided that they will not thereby be subjected to "sweated" conditions. That means, again, the acceptance of equal conditions for both men and women with respect to hours of work and wages. Here the advanced feminists are on safe ground. Women in industry should neither ask for, nor accept, favors. Neither should men be compelled longer to subsidize them while they go out and cut wages by means of that subsidy. The war may, and probably has, done more towards advancing the cause of both women and men in industry than all the agitation of the past fifty years has accomplished. We may hope, therefore, not without reason, that women workers will stand firm with the men in demanding that, in the Anglo-Saxon world, labor shall not only get the means of life, but the opportunity to learn how to live nobly.

THE BRIQUET INDUSTRY.

Over a million dollars worth of briquets were made in the United States out of waste coal dust in 1915, the exact production being 221,537 short tons, valued at \$1,035,716. This was the largest output in the United States for any year with the exception of 1914. The manufacture of this type of fuel is, however, still in its infancy, and according to C. E. Losher, of the United States Geological Survey, a good many years will probably elapse before the briquet industry assumes very large proportions.

There were fifteen briquetting plants in operation in the United States in 1915, one less than in 1914.

Possibilities of Agricultural Development in Canada

By ERNEST H. GODFREY, F.S.S.

In a previous article the writer showed what were the average yields of wheat per acre in the principal wheat-growing countries of the world, how these had steadily increased in certain countries and in the province of Ontario, and how the evidence of the past pointed to the possibility of increased yields per acre in Canada as a whole in the not distant future. It is now proposed to assemble what evidence there may be of the extent of land unoccupied in Canada, with a view especially of showing what areas are available for the growth of wheat.

Proportion of Total Area Under Cultivation.

In the first place let us examine into the proportion of the vast Canadian demesne that is at present either occupied or cultivated. The total area of Canada is 3,729,665 square miles, of which 3,603,910 square miles are land and 125,755 square miles are water. The land mileage represents an average of 2,306,502,400. Of this vast area, only 109,948,988 acres were returned as in occupation as farm land at the census of 1911; so that less than 5 per cent of the land area of Canada is as yet occupied for agricultural purposes. From the total land acreage above named we may deduct the whole of the vast areas in the Northwest and Yukon territories, for no question of their agricultural development is likely to arise before the uncultivated lands now within the boundaries of the nine provinces have been completely surveyed and thrown open to settlement. These territories comprise a land area of 905,186,000 acres (Northwest Territories 773,073,000 acres, and the Yukon Territory 132,113,000 acres); so that the total land area within the present provincial boundaries is 1,401,316,400 acres. The first table given in the introduction to the Report on the Agricultural Census of 1911 showed for each province the total land area, the acreage and percentage of the total that was in occupation as farm land at the date of the census, and the acreage and percentage of the total estimated to be possible of cultivation as farm land in the future. The estimates of land capable of future occupation were based partly upon the amount of farm land occupied at the date of census in 1911, and partly upon a percentage of the total area, fixed arbitrarily, but having reference to the more or less definitely ascertained facts as to the character of the lands in each province and the increases both in land occupied as farms and of the area of improved land. Since the census of 1911 was taken, large areas have been added to the provinces of Manitoba, Ontario and Quebec under the Boundary Extension Act, passed by the Dominion Parliament in 1912, and consequently the data in the census table have been altered, and in its revised form the statement stands as follows:

Provinces.	Total land. Acres.	Occupied as farm land, 1911.		Estimate of possible farm land.	
		Acres.	p.c.	p.c.	Acres.
Prince Edward Island	1,397,991	1,202,354	86.01	90	1,253,000
Nova Scotia	13,483,671	5,260,455	38.01	60	8,090,000
New Brunswick	17,863,266	4,537,999	25.44	60	10,718,000
Quebec	442,153,287	15,613,267	3.53	10	44,215,000
Ontario	234,163,030	22,171,785	9.47	25	58,541,000
Manitoba	148,432,698	12,228,233	8.24	50	74,216,000
Saskatchewan	155,764,100	28,642,985	18.39	60	93,459,000
Alberta	161,872,000	17,751,899	10.96	65	105,217,000
British Columbia	226,186,370	2,540,011	1.12	20	45,237,000
Total	1,401,316,413	109,948,988	7.84	31	440,951,000

This table shows that of the total land area within the provinces only about 8 per cent, or nearly 110 million acres, were under cultivation. The estimate of possible farm land is 31 per cent of the total, or 440,951,000 acres. This is a very moderate proportion, and it does not take into account forests and swamp lands, which may ultimately be tilled, nor does it include northern areas within the provinces the agricultural possibilities of which are at present unknown, because the lands are unexplored and unsurveyed.

Areas Available for Immediate Settlement.

Thus far we have looked at the matter from the standpoint of acres alone, without regard to exploration, surveys, railway development or accessi-

bility to markets. It will be well, therefore, to ascertain as far as possible what areas in each province are more or less immediately available for agricultural settlements. The public lands of Canada come under two categories, viz., those belonging to the Dominion Government and those under the control of the Provincial Governments. The Dominion lands are situated all within the three Northwest Provinces, and in what is known as the Railway Belt of British Columbia. The provincial public lands comprise those of the Maritime provinces, of Quebec, of Ontario, and of British Columbia (excepting those of the Dominion Government).

Dominion Public Lands.

Taking first the Dominion lands in Manitoba, Saskatchewan and Alberta, the records of the Department of the Interior show that up to January 1, 1915, the total number of acres surveyed was 195,341,726. Of this area, 133,157,726 acres have been alienated from the Crown, leaving 62,184,000 acres for disposal. Of this area 4,099,000 acres were under timber licenses, 4,394,500 acres were under grazing leases, 25,615,500 acres were under forest reserves and parks, and 28,075,000 acres were available for homestead entry. In addition to the surveyed area there are large tracts of land in the northern parts of the three provinces, which have as yet been explored only in a very partial way. The total area of this unsurveyed track is 290,300,972 acres, of which over 23 million acres are water-covered. No estimate of the area in this tract that may be suitable for agriculture can yet be made with any degree of accuracy:

Provincial Public Lands.

The same can be said, probably, of the Crown lands of the Provincial Governments, especially as regards the two large provinces of Ontario and Quebec. These, since the enlargement of their boundaries in 1912, contain vast areas of land the agricultural possibilities of which are at present quite unknown. The new district of Patricia in Ontario and the Ungava territory in Quebec are both outside the range of present calculations so far as agriculture is concerned.

Nevertheless it is possible to form some idea of the extent of the Provincial Crown lands which are available for agriculture. All the land in Prince Edward Island is settled. In Nova Scotia the area of the Crown lands exceeds 900,000 acres, and grants of 150 acres each for agricultural or grazing purposes may be obtained at the rate of \$1 per acre. Most of the land is, however, suitable only for forestry or mining, and no estimate is available of the extent of the areas suitable for agriculture.

In New Brunswick the Crown lands extend to about 7 1/4 million acres, a survey of which has been

commenced. This survey will provide for the separation of agricultural lands from those suitable only for the growth of timber. It has been stated officially that probably about 1-3 or 1/4 of the total area of the Crown lands in New Brunswick are suitable for agriculture. Out of the extensive lands and forests administered by the Provincial Government of Quebec, new territory is annually taken for division into farm lots, the area so divided in 1914-15 amounting to 286,621 acres. On June 30, 1915, the total area of land subdivided and available for sale or other disposition was 7,022,254 acres. Upwards of 6 1/2 million acres of agricultural lands are available for settlement in Timiskaming, Abitibi and Beauce, the lands in Timiskaming comprising 3 1/2 million acres, those in Abitibi 3 million acres,

and those in Beauce between 50,000 and 60,000 acres.

Of the Province of Ontario, as enlarged by the Extension of Boundaries Act, 1912, it is difficult to realize the dimensions, and still more difficult to compute the extent of land capable of agricultural development. The Province includes, however, 230 million acres of land, of which only 13 1/2 million acres are under cultivation. More than 20 million acres of the very finest arable land await the plough. Ontario is stated to be 3 1/2 times the size of the British Isles, and 1 1/2 times as large as the State of Texas. From east to west its borders are 1,000 miles apart, and the distance from north to south is 1,075 miles. The vacant public lands of British Columbia are approximately 200 million acres; but up to the present only about 90 million acres have been placed in reserve for settlement by pre-emption. In this area surveys are being made from year to year by the Provincial Government; and at the close of the year 1915 there were vacant and available 2,400,000 acres which had been surveyed for settlement.

Total Areas Available.

Leaving out of account the huge unsurveyed areas of Canada, such as the northern part of Quebec, including Ungava, of Ontario, including Patricia, of the Northwest Provinces, and of British Columbia, we get the following rough approximation of the areas which are available for immediate settlement and devotion to agriculture:

Public Lands of	Acres.
Dominion	28,075,000
Provinces:—	
New Brunswick	2,400,000
Quebec	7,000,000
Ontario	20,000,000
British Columbia	2,400,000
Total	59,875,000

There are therefore nearly 60 million acres of land which can be allotted to settlers either by sale at nominal prices or by free grant.

Cultivation of Unimproved Areas.

But there is another direction in which expansion is possible, and that is in the cultivation of the unimproved areas of farm lands in occupation. According to the last census the total area of occupied farm lands in Canada was 109,948,988 acres, of which 48,733,823 acres were improved and 61,215,165 acres were unimproved. Consequently we may count that there are approximately 120 million acres of land in Canada capable of devotion to agriculture as fast as the necessary increase of population can be secured.

Probabilities of Wheat Cultivation in the Immediate Future.

In considering this question a number of different factors must be taken into account. Last year represented probably the most that Canada could do in the matter of wheat cultivation under the exceptionally favourable circumstances which then prevailed. One cannot anticipate a large immediate expansion of the wheat acreage when the flower of the Canadian manhood is fighting in the Imperial cause on the battlefields of France and Belgium, and for the same cause the stream of immigration which was flowing so strongly into Canada up to the year 1914 has now all but stopped. When the war is over it will be reasonable to expect a resumption of Canadian immigration on a large scale. The continuance of high prices for agricultural produce, and especially for wheat is probable, and should attract large numbers to the land. The general conditions in Canada point to the absolute necessity for greater agricultural production and increased exports for the restoration and preservation of a sound economic equilibrium. With regard, however, to the production of wheat, Canada will probably have serious competitors. After the conclusion of the war the agricultural development of the Russian Empire will proceed with accelerated pace, both in Europe and Asia, and there is room in various other countries for considerable expansion in the growth of wheat. It is important, therefore, that in Canada undue dependence should not be placed upon wheat growing, and as the demand for meat is good and the prices for it are high, greater benefit will ensue whenever simultaneous attention can be given to the production of grain and live stock than where grain only is cultivated.

During the ante-bellum period, from the beginning of the century to 1914, when the total immigra-

(Continued on page 31.)

Between 1916, show a rising has se crease of the industr connect the new banks a percen Thus o acquire Notw tioned, creases the To page to first we thereof would f actions credit ment o in New of Mon heavy the Fir in the r on the case of as follo for the would h that an the loan would s hand th of the deposits Now totals. manufa these m loans w all with way to of cuttin to nulli tion. A Board, transfer remittan country while le In case would b 000,000 Dominion agency e the Ban like am perhaps banks a Wall St by or su Of these held to 000,000 of with senting resenting cut dow withdraw accounts adian ba the bank The fo the end large gro virtue of Governm be expect increase. gains in gains rep United S abstract Comptrol 1916; an 1916, is

The Growth of the Banks Loan Fund

H. M. P. ECKARDT

Between February 28th, 1915, and February 29th, 1916, the deposits held by Canada's chartered banks show an increase of roundly \$181,000,000—the total rising from \$1,142,900,000 to \$1,324,300,000. This has seemed to us a rapid growth, the ration of increase for the year being about 16 per cent. The increase of resources necessarily enhances the power of the banks in regard to making loans to their industrial and mercantile customers; but in this connection it is to be remembered that as much of the new deposit money is of a temporary nature, the banks are compelled to carry on extraordinarily large percentage in the form of cash and its equivalent. Thus only a relatively small proportion of the newly-acquired funds can be used in commercial discounts.

Notwithstanding the substantial gains just mentioned, the indications point to further heavy increases during the spring months. A few days ago the Toronto Globe drew attention in its financial page to the large credit transactions completed in the first week of April, and suggested that in consequence thereof the footings of the April bank statement would probably show a phenomenal rise. The transactions mentioned were the placing of \$50,000,000 to credit of the Imperial Munitions Board, and the payment of \$70,000,000 (proceeds of Canada's last loan in New York), by J. P. Morgan and Co., to the Bank of Montreal. Even when allowances are made for heavy withdrawals, by the Munitions Board and by the Finance Minister, these two operations would, in the natural order of things, exert a profound effect on the Canadian bank statement next published. In case of the munitions loan the procedure would be as follows: The banks would either discount paper for the Board to the extent of \$50,000,000 or they would buy outright the British Government bonds to that amount as offered by the Board — thus either the loans of the banks or their holdings of securities would show an increase of \$50,000,000. On the other hand the proceeds of the loan would go to credit of the Board in current account, thus swelling the deposits.

Now let us see how withdrawals would affect the totals. The Munitions Board gives cheques to the manufacturers who have supplied shells, etc.; and these manufacturers use the funds in part to pay off loans which they had obtained from the banks. So all withdrawals applied directly or indirectly in this way to the liquidation of loans would have the effect of cutting down both deposits and loans, and thus go to nullify the effect of the original credit transaction. Also any withdrawals made by the Munitions Board, or by manufacturers to whom the Board transferred the funds, for the purpose of making remittance to the United States or another foreign country would cut down the deposits of our banks while leaving the balance of their loans unchanged. In case of the other large transaction the process would be somewhat similar. At the outset the \$70,000,000 would appear as a new deposit, owned by the Dominion Government, in the books of the New York agency of the Bank of Montreal. On the other hand the Bank of Montreal would show an increase of a like amount in cash or its equivalent — the money perhaps figuring first as balances in New York banks and subsequently a part might possibly go into Wall Street call loans and part into gold coin held by or subject to the order of the New York Agents. Of these proceeds a considerable amount must be held to meet the unconverted portion of the \$25,000,000 note issue maturing 1st August. So, in case of withdrawals by the Finance Minister, any representing payments outside the country and any representing liquidation of bank loans in Canada, would cut down the total of deposits. Most of the other withdrawals, consisting of transfers of funds to the accounts of individuals in the same or another Canadian bank, would not affect the deposit totals in the bank returns.

The foreign paragraphs indicate clearly that as at the end of April there will be in evidence a further large growth of the deposits of Canadian banks. By virtue of its close connection with the Dominion Government the Bank of Montreal, naturally, will be expected to account for a considerable part of the increase. It is decidedly interesting to compare the gains in deposits of our leading banks with the gains reported by the leading national banks of the United States during the same period. The latest abstract of national bank reports issued by the Comptroller of the Currency is that for March 7th, 1916; and as the Canadian return for February 29th, 1916, is nearest in point of date, comparison will be

made with that return. The following table, compiled from a list published by the New York Financier, shows the gains made by each of the 12 United States national banks with deposits of more than \$100,000,000 (Thousands omitted):

Bank	Deposits, Mar. 7, '16	Increase for year	% of inc.
City, N.Y.	\$584,827	\$256,361	78
Commerce, N.Y.	265,309	100,697	61
Cont. & Com'l, Chicago	243,633	48,032	61
Chase, N.Y.	235,830	89,746	61
Mech. and Metals, N.Y.	179,360	61,225	52
Hanover, N.Y.	169,995	53,501	46
First, N.Y.	165,170	46,970	40
Park, N.Y.	163,178	51,143	46
First, C'go.	167,925	36,139	30
Shawmut, Boston	125,293	47,491	61
First, Boston	112,090	34,426	44
Amer. Exch., N.Y.	107,746	35,972	50

We have but three banks able to show deposits in excess of \$100,000,000. Their figures compare as follows with the record of the preceding year (Thousands omitted):

Bank	Deposits Feb. 29, '16	Increase for year	% of inc.
Montreal	\$256,179	\$44,782	21
Commerce	195,915	21,273	12
Royal	173,917	37,132	27

A short time before the war the Bank of Montreal was not so very far behind the National City Bank of New York in the matters of total assets and total deposits, but now the National City has more than double the amount of deposits held by our largest institution. The increase shown by the big New York bank during the past year is almost exactly equal to the total deposits held by the Bank of Montreal as at the end of February this year. Also in ratio of increase our banks are far behind the leading national banks. However, this is what was to be expected from New York's activity in financing the abnormal export trade of North America and in financing the numerous loans to belligerent and neutral nations. The National City Bank has taken a prominent part in this work and naturally the footings of its balance sheet show great expansion. This bank is fiscal agent for the Anglo-French loan commission, and it is clear that the big \$500,000,000 loan to Britain and France had a potent effect in increasing its deposits. After the loan was floated the proceeds lay with the hundreds of banks throughout the United States which had subscribed for the bonds. They were called up in portions of from 15 to 30 P.C. at intervals, the last call having been made a few weeks ago. Whenever a call was made the depository banks were required to pay the funds into the National City Bank at New York to credit of the commission. Altogether the City Bank received something like \$480,000,000 in this connection. The balances of the commission has always been high and even when they drew heavily on the funds, some of the money would stick in the central depository owing to its close connections with the big American industrial concerns to whom the payments were made.

The effects of the Anglo-French loan have been supplemented by numerous other credit transactions of smaller dimensions. There were the loans to Canada, South American countries, Italy and other European countries — all of which would tend to expand credits in New York. It is to be noted that the American banks in the above list are all national institutions. There are some very large state banks also — the Guaranty Trust Co., of New York, being the most conspicuous. What was said about our Canadian deposits applies with equal force to these great American gains — much of the increase represents temporary balances. One can easily imagine a change of circumstances which would perhaps effect very sharp reductions in the imposing totals of deposits. Being fully alive to this contingency the bankers on both sides of the boundary line are carrying abnormally heavy reserves of immediately available assets. Any other course would be almost suicidal.

DIVIDEND DISBURSEMENTS.

Interests and dividend disbursements in April, according to New York Journal of Commerce will reach \$136,696,750, against \$127,093,844 in May a year ago. Stockholders will receive \$52,696,750, against \$47,593,844, while interests payments will approximate \$84,000,000, against \$79,500,000 in the corresponding month a year ago.

Progress in Prince Edward Island

The Prince Edward Island Development Commission.

(From Our Charlottetown Correspondent.)

As the first fruits of a non-political conference held on March the 7th, in this city, and composed of representative men from all parts of the Island, a body known as the "Prince Edward Island Development Commission," has been organized.

The object of this commission is to inquire into, discuss, and make recommendations regarding matters pertaining to the welfare and development of this Province.

One of its functions is to gather information on various matters and act as an Advisory Board to the Government.

The commission consists of twenty members representing all sections of the Province.

At a meeting recently held a number of sub-committees were appointed to deal with the following: Agriculture, Education, Fisheries, New Industries, Immigration, Transportation, and Undeveloped Resources.

The matter of Technical Education is one which will receive special attention, and the committee will avail themselves of the services of two experts in connection with the Department of Agriculture, namely, Professor Reek, Director of Agricultural Instruction, and Professor McCready, Director of Rural Science. Professor McCready in addressing the committee, spoke of the illustrated supplements which are being issued in connection with the Montreal Journal of Commerce, recommending the use of these for the schools.

Under the head of "New Industries" the following branches are being taken up and will be reported on later: Manufacture of Glass, the utilization of our seaweeds and our mosses, and the possibilities of toy making on the Island.

The committee on Transportation are at present working on the following: Closer connection with through trains from Halifax to the West, when the car ferry begins running, cold storage for various products, special rates for distributing centres, better transportation facilities with Newfoundland, steamboat transportation and development of trade with the West Indies, and the appointment of a Prince Edward Islander by the Government to investigate trade and commerce with the West Indies.

The committee on fisheries will make a thorough inquiry into that subject, devoting special attention to the advisability of securing from the European countries, or from Newfoundland, and the other Maritime Provinces, men accustomed to deep sea fishing, especially of cod and mackerel.

DEVELOPMENT OF CANNING INDUSTRY.

When the canning industry was first established in Ontario corn for canning was cut from the cob by hand with a knife. It was then considered good work to put up 800 cans a day. A modern factory will put up 100,000 cans in a day with equal ease.

34 years ago. There are about 120 factories in operation at present, and these give employment to 14,000 people.

The total output of these factories is between three and four million cases, with 24 tins to a case.

This is sufficient to provide a trainload of 20 cars for each working day of the year.

The average yield of tomatoes is around 250 bushels per acre, and canners expect to pay 25 cents per bushel this year.

The average yield of corn runs at four tons of cobs per acre. This brings \$7 to \$8 per ton, and the corn fodder left is worth nearly as much.

The straw from which peas are taken for canning makes excellent feed. In some cases it is hauled back from the factories, dried and utilized as dry fodder. In some other cases it is put in a silo at the factories and sold back to farmers by the ton for winter feeding. In a few cases it is fed direct from the silo to stock owned by the canning companies.

Some 57 steamers have departed from Fort William since the opening, all loaded to capacity. Coal stocks were about depleted when navigation opened, but now there are hundreds of tons in shore, some twelve steamers now unloading.

Captains state that moving ice is making navigation difficult.

Coal Mining in Pictou County, N.S.

The Companies Vountarily Increase Wages.—Strike at the Acadia.

(From Our New Glasgow Correspondent.)

How to cope with the ever-increasing cost of living has been a serious problem in the coal mining districts of Pictou County, Nova Scotia, for a considerable time. Owing to the prevailing prosperity at all the munition plants of New Glasgow, Trenton and Stellarton, the pinch had been ameliorated to a large extent in the case of all munition workers, but conditions at the collieries were entirely different. The miners fully recognized the difficulties of their employers, and continued to bear their pinch with patience and fortitude. The Intercolonial Coal Mining Co., Ltd., who own the Drummond Colliery, were the first to publish the result of their consideration of the problem. After a consultation with a committee of the company's employes, consisting of Frank White (chairman), James Chabassol, F. Smith, Wallie Graham and Howard Salter, Mr. President Fergie wrote the following letter:

Westville, Nova Scotia, April 12, 1916.

To the Committee of Workmen,
Drummond Colliery:

Dear Sirs:—

Referring to our conversation this evening, I now confirm the proposition I then laid before you.

First—There shall be a general advance on all day labor at the rate of 6 per cent, with a minimum advance of 10 cents per day.

Second—There shall be a general advance at all mines of 6 p.c. on all cutting and yardage rates, the minimum cutting rate to be 50 cents.

The above rates to become effective 16th April.

Yours faithfully,

CHARLES FERGIE,

President.

The effect of accepting these proposals is to give men who were getting \$1.60 per day \$1.70, while to miners in the No. 4 Mine are guaranteed a tonnage rate of 50c. per ton. In both cases, it will be noted, the effect slightly exceeds the specified 6 per cent. During the interview referred to, Mr. Fergie is reported to have said that he realized the increased cost of living demanded increased wages, but the company had had such hard sledding during the past few years that they were not in a position to deal as generously with the men as he would like to do. The matter had been carefully worked out, and he was prepared to submit a proposition which he trusted the men would approve of. Mr. Fergie further stated that if the men worked steadily, maintaining a good average daily output, which would gradually increase as the work developed, later on he would make another small advance if he saw his way clear to do so. The company was up against the necessity of putting up a new bankhead which would entail a heavy expenditure, and had not recovered by any means from the effects of the fire and other adverse conditions encountered in the course of last year and the year before that as well.

At a mass meeting of the employes hurriedly convened in the Muir's Hall, Westville, their committee reported, with the happy result that it was promptly resolved that the employers' propositions be accepted. As regarded the promise of further increase, the men readily acknowledged their share of the responsibility for fulfilling the conditions on which alone the company can be put in a position enabling it to realize their mutually cherished hopes. Taking into consideration the reduced profits as the result of the enhanced cost of production during recent years as compared with those halcyon times when big business was the order, the advance now granted must be considered a fairly substantial one, while the willing service assured by the happy relationship between employers and employes is an asset of incalculable value.

A former employe of the company, commenting editorially in "The Evening News" (New Glasgow), of April 13th, writes:

The announcement that the employes of the Intercolonial Coal Co., at Westville, have been granted a general advance in wages naturally opens up the question as to what the employes of the Acadia Coal Co. are going to do about it, particularly the low-paid men. It also puts the issue up to the company fairly as well.

Conditions are more favorable with the Acadia than was the case at the Drummond. The Acadia has not had any serious trouble for some considerable time, has been securing a big daily output at a lower production cost than the

Drummond, and has undoubtedly been making money for the past few months. Whilst the Board of Arbitration went out of its way to suggest that no further advances be asked for during the continuance of the war, it lost sight of the increase, the tremendous increase in the cost of living, on the one hand, and the increase in the selling price of coal on the other.

Under the circumstances the Acadia Coal Co. should be prepared not only to duplicate the action of the Intercolonial Coal Co., but to go one better. If the Acadia Coal Co. were to grant a general increase of ten per cent their men would rise up and call them blessed. If they could see their way clear to do even better than ten per cent for the laboring men and low-paid labor generally they would earn a reputation for liberality and consideration for their workmen which would go far to discount labor troubles in the future.

It is a point worthy of emphasis in passing, especially in view of later developments, that before the penning of the foregoing comments of an aspirant to a nomination as one of the County's candidates for a seat in the Provincial Legislature at the forthcoming election, the management of the Acadia Collieries had already taken the important initiative. And the very next day—Friday, 14th of April—there was posted at their collieries the following:

NOTICE!

Stellarton, April 14th, 1916.

To the Employes of the Acadia Coal Co., Ltd.

Owing to the increased price at present prevailing for coal, I am pleased to advise the employes of the Acadia Coal Co., Ltd., that the question of a general advance in wages has been submitted to our Board of Directors, and I expect at an early date to be in a position to announce the amount of such advance. In the meantime, I can assure all our employes that such advance shall take effect on and after April 16th.

(Sgd.) HECTOR PRUDHOMME,

Vice President and General Manager.

The same newspaper is authority for the statement that the foregoing notice "was read with decided pleasure by the men and boys employed there"; it also stated, what seemed to be at the time the view of everybody else concerned, that,

Whilst it is premature to comment on the advance until it is definitely known just what it amounts to, we feel it is only fair to commend the company for the step which has already been taken. The old proverb has it, "A stitch in time saves nine," and the Acadia and Intercolonial Companies have shown good judgment in readily recognizing the claims of their men for increased wages.

The cost of living has advanced to such a degree that increased earnings were absolutely necessary if people were to make ends meet, let alone save money for future needs. If the companies had held back until the men practically forced their hands, they would have to grant larger increases, and the chances are that friction would have developed, where all is harmony and good will to-day.

Admittedly, therefore, "all was harmony and good will" until "The Evening News" had quite a talk on Saturday with some of the workmen of the Acadia Coal Co., Ltd.:

"I suppose the Acadia men are much pleased with the announcement that they are to get a general increase," said the News. "Yes," replied one of them, "we are, but we don't want to be staved off with any 6 per cent increase. We should have at least 10 per cent." "How do you make that out?" said the News' man.

"The case is not the same here as it is at the Drummond," was his answer. "The Drummond has been up against it for a long time now, and the men don't want to put the company out of business. That would be bad every way, but the Acadia Company is getting out a lot of cheap coal. They have the best coal on the market for house use, and that is the trade that they make their money on. I claim that the Acadia Coal Co. can better afford to give its men 10 per cent than the Drummond 6 per cent. Besides the Drummond have promised to come up a little later on." The others endorsed

his remarks, and the News practically concurred in what was said.

Thus we see that the man who, on Thursday, wrote that "it is highly gratifying to find such good feeling manifested on both sides," and, "if they exercise patience things will probably work out to their satisfaction," on the Monday following wrote that he "practically concurred" in the hostile attitude of the men's spokesman, and he even volunteered the advice that,—

If the company do not take kindly to the idea of giving 10 per cent, whilst a competing concern is only giving 6 per cent, the men might reasonably put up a counter proposition to the company. They might express their willingness to accept the same proportion of profits from the Acadia Coal Co., which the proposed increase will represent as far as the Drummond is concerned. Say for argument's sake that the increase in wages at the Drummond represents one-third of the company's profits. The Acadia men would be quite safe in agreeing to take the same percentage. There is not much doubt that as between the two propositions, the company would prefer to grant the 10 per cent.

In view of the enormous increase in the cost of living, and in view of the large increase in the cost of coal to the public the men have a good case.

The company have had more than their share of hard luck and the shareholders a long, weary wait for dividends. The men recognize these facts, and want to be reasonable. They got such raw hand-out, however, from the Board of Conciliation some time ago that they feel they are justified in asking for at least 10 per cent, and in so doing are not unreasonable in view of all the facts of the case.

We have quoted this so copiously on account of the effect which manifested itself on the next day, when (to quote the same authority again)—

THE ALBION MINERS ARE NOW OUT ON STRIKE.

The Albion Colliery of the Acadia Coal Co., Ltd., is idle to-day, owing to the fact that the men and boys refused to work this morning, and from no more reasonable a cause than that the said men and boys can see no good reason for withholding from them an announcement as to what the promised advance really amounts to. They have therefore dropped their tools and want a clear cut statement from their employers. When they know just what advance is to be obtained they will decide whether the Company's proposition is satisfactory or not.

Was there ever a strike upon a flimsier ground? They did not even know whether the promised announcement would be "satisfactory or not!" The little formality of a legal notice of warning is not worthy of consideration. Consequently, is it any wonder that the question is asked—why should the man who counselled the "exercise of patience" one day, so harshly incite a strike on the next? He has only himself to thank if people will think that the fact of his having conceived the notion of becoming a candidate for nomination for the Provincial Legislature has all to do with it. In fact, the Editor of the "Eastern Chronicle" (another New Glasgow newspaper), boldly asserts that—

"To ingratiate himself with these men he (The Editor of 'The News,') has lately published long articles showing why coal miners should get more pay. The plea was founded on the fact that coal was bringing more money. But was not the article made in his factory bringing more money when he refused the employes more pay? The money of coal companies is not his, so he could be generous with it. All he wanted was to be in a position, providing he secured the nomination, to read his editorials to the coal workers when he was asking them for their votes."

As stated in our issue of April 1st, we believe in helping and protecting to the utmost of our ability the miner when he is engaged in the dangerous occupation of producing one of our most indispensable raw materials, and that never more so than at the present moment, when the supply of coal is so essential a factor in the successful prosecution of this terrible war. But on the face of this evidence, the men and boys of the Albion Colliery were ill-advised in taking so extremely a drastic step for so flimsy a reason. And any would-be politician, who could descend to such a depth of political depravity in his greed for votes as to exploit his country's necessity by encouraging, if not inciting, any body of

(Continued on page 32).

Mentioned in Despatches

Hetty Green, generally regarded as the world's wealthiest woman, is ill at her home in New York. Mrs. Green, despite her eighty-one years, has managed her immense property in a way to excite the admiration and envy of the biggest business men associated with her. In many respects Mrs. Green is very much like the late Russell Sage, both being enormously wealthy and abnormally close-fisted. Mrs. Green was born in Massachusetts in 1835, the daughter of E. M. Robinson, who died leaving her his large fortune when she was thirty years of age. Mrs. Green married and has one son, but never entrusted her immense holdings to anyone's management, and until she received her stroke a few days ago personally superintended her large interests in stocks, bonds real estate and industrial corporations.

Lord Chelmsford.—"Uneasy lies the head that wears a crown," is being found true by Lord Chelmsford, the new Viceroy of India, even if his is only a vice-regal crown. The new head of the Indian Government reached Bombay a few days ago only to learn that his eldest son and heir had been severely wounded while serving under General Townsend at Kut-el-Amara on the Tigris. The ship on which Lord Chelmsford and his wife and three daughters traveled barely escaped a torpedo fired by a German submarine, the torpedo passing but a few feet from the boat. Lord Chelmsford is especially worried about his son as the difficulties of attending the wounded are very great and are apt to become worse unless the British are soon relieved. The new Viceroy, who is the third Baron Chelmsford, was born in England in 1863 and educated at Oxford, graduating as a lawyer. He later served as Governor of Queensland and of New South Wales.

John T. McCutcheon.—Cartoonists are playing an unusually large and important part in the titanic struggle now being waged in Europe. On the continent Raemaekers has become famous through his pictures depicting German atrocities. In England Partridge, of Punch, has added to his already enviable reputation. In the United States several men are doing remarkably able work, but probably the best known cartoonist is John McCutcheon, who is not only a cartoonist but a writer, a war correspondent, and a man who looks out on life from a philosopher's viewpoint. He went through the Spanish-American War, through the Boer War, saw the Russians and Japanese battling for supremacy in the far East, has dodged bullets in Mexico, hunted lions in Africa, and has been all over the battlefields in Europe in the present war. McCutcheon was born on a farm in Indiana in 1870, and was educated in Chicago. In addition to his cartoons he is the author of a score or more books. His cartoons have been described as a combination of editorials, sermons, humor and pictures all in one.

Edward Farrer, popularly known among newspaper men as "Ned," has just written "30" on his life. Farrer, who was 66 years of age, was probably the best known journalist in the Dominion, certainly to the men of the past generation. He has been described as a walking encyclopedia, as he had a most intimate acquaintanceship with both political parties and was thoroughly conversant with the economic and industrial movements which have taken place in Canada during the past half century. Mr. Farrer was born in England, of Irish parentage, and educated in Stoneyhurst, and at the Jesuit College in Rome. He came to Canada in 1870 when a lad of 15, and entered upon his journalistic career, serving on many of the leading papers in the Dominion, at one time being chief editorial writer of the Toronto Globe.

A story is told that Farrer once carried on a prolonged and acrimonious controversy in the Canadian press, writing a series of articles on one side of a question which were published in a certain journal, and another series of articles on the opposite side of the same question which were published in another paper. It was years afterwards before the public knew that the one man was the author of the two series of articles. Of late years Mr. Farrer has been a Free Lance, contributing many articles for leading newspapers and magazines, but retained his connection as Canadian correspondent of the London Economist.

Mr. Farrer was one of the few Canadians who believed that the future welfare of Canada would be best served by annexation with the United States.

Lieut. Ralph Burnett, of Montreal, who was recently reported wounded, is the youngest of three brothers, all of whom are at the front. Lieut. Burnett is the youngest son of the late J. Burnett, for many years president of the Montreal Stock Exchange. The young man was educated at the Royal Military College, Kingston, and at McGill. At the outbreak of hostilities he immediately went overseas and is now reported as being seriously wounded.

Bernard Partridge, the principal cartoonist of Punch, holds a warm place in the hearts of Canadians for the picture which appeared in Punch a year ago, showing Canada as the defender of the Empire. The picture was inspired by the heroic stand made by the Canadians at St. Julien, and the battle-scarred soldiers who holds the flag with one hand and his rifle with the other adorns many homes in the Dominion. Partridge was born in London in 1861 and early in life took up his work of decorative painting and illustrating books. He joined the staff of Punch in 1891, and for a number of years has been principal cartoonist of that famous English publication.

Major-Gen. Sir John Maxwell, who has just been given command of the British forces in Ireland entrusted with the task of putting down the rebellion there, was formerly in command of the British Army in Egypt. Like all British officers in the higher command Gen. Maxwell has seen service in a score or more wars and has served in many outlying parts of the Empire. He served in the Egyptian War, in the Nile Expedition, with the Egyptian Frontier Field Force, and in the South African War. He was born in 1859 and educated at Cheltenham College, joining the 42nd Highlanders as a young man of twenty.

The King of Siam is trying to get to the front page of the papers these days by announcing that he has had a nervous breakdown and must enter a sanitarium. The King of Siam, who is thirty-six years of age, has spent half his time in Europe, being educated at Eton, Oxford and at Sandhurst, with a polishing off in Berlin. In a measure, his education was an experiment, the effort being to graft Occidental ideas and civilization on an Oriental of a most reactionary type. On his return to Siam he introduced a lot of fantastic customs which were a sort of blend between the East and the West. As might be expected, this grafting of the Occidental on to the Oriental did not prove a success and it is not at all surprising that the King has had a nervous breakdown.

Mr. William Southam, who has resigned as a director of the Steel Company of Canada, is one of the best known publishers in the Dominion. As president of Southam's Limited, he controls the Hamilton Spectator, the Ottawa Citizen, and the Calgary Herald. Mr. Southam was born in Montreal in 1843, educated in London, Ont., and then commenced his business career as a practical printer, later purchasing and founding various newspapers. He is a director of several corporations such as the Hamilton Steel and Iron Company, the Mercantile Trust Company, the Dominion Power and Transmission Company, the Mercantile Trust Company, the Dominion Power and Transmission Company, and is president of the Hamilton and Fort William Navigation Company. He is a generous giver to all charitable work, especially anything in connection with the prevention of tuberculosis.

Lord Knutsford.—Everyone interested in hospital management, and since the outbreak of the war this number has been increased, will regret to learn that Lord Knutsford, known throughout Europe as the greatest expert on hospital finance and administration, has been seriously hurt through being run over by an automobile. He has probably raised more money for hospitals than any other man in the world, and as a matter of fact is known as the "Hospital Beggar." Lord Knutsford is a lawyer by profession, but a financier by preference. He is an exceedingly shrewd business man, as his record in connection with the East and West India Docks Company of London shows. When he joined the concern as a director it was in the hands of a receiver with one million dollars liabilities and no assets. To-day, as a result of his efforts, it is a prosperous concern. Every other activity, however, pales into insignificance in comparison with his work for hospitals.

A. J. Brown, K.C., who has just been elected to the board of Steel Company of Canada, is a good example of the corporation lawyer of modern times. Mr. Brown is not only an eminent lawyer and well known in legal circles throughout the Dominion, but is better known through his connection with various corporations. He is a director of the Royal Bank, of the Montreal Trust Company, of Tooke Bros., and now joins the board of the Steel Company of Canada. He was born at Windsor, Que., in 1861, and educated at McGill.

Mr. J. S. Ewart, of Ottawa, another of the legal lights associated with the Kyte shell charges, is best known to the people of the Dominion through his contributions to the press, although he is an eminent lawyer. Mr. Ewart sprang into fame through his "Kingdom Papers," in which he advocates Canadian sovereignty. He has also published a large number of legal works, and has written many essays dealing with Imperialistic and patriotic subjects. Mr. Ewart was born in Toronto in 1849, and educated at Ottawa. In recent years he has been practising his profession at the Capital.

Mr. Kenneth R. Macpherson, K.C., who died in Montreal a few days ago from an attack of pneumonia, was one of the best known lawyers in the Province of Quebec. He was born here in 1861 and educated at McGill University. Mr. Macpherson not only rose to the top of his profession, but had many outside interests which brought him in contact with the people. He was an artist of more than ordinary ability and was a regular exhibitor at the exhibitions of the Art Association and at the Royal Canadian Academy, and even exhibited at the Paris Salon. He was also an excellent musician. Mr. Macpherson was a member of the firm of Meredith, Macpherson, Hague, Holden, Shaughnessy and Heward.

Wallace Nesbitt, K.C., one of the battery of "quick firers," with which Sir Sam Hughes has surrounded himself, is one of the best known lawyers in the Dominion. Some years ago he was appointed a judge of the Supreme Court, but only held the job for two years when he decided that the salary paid and the lack of excitement connected with the office did not make the job worth while, and he quit, resuming his law practice. Mr. Nesbitt was born at Woodstock, Ont., in 1859, and practised first in Hamilton and later in Toronto. During recent years he has taken a very active part in matters connected with Imperialistic questions, and is one of the best known and most forceful speakers on matters connected with the well-being of the Empire.

Col. A. D. Davidson, Land Commissioner for the Canadian Northern Railway and generally regarded as the greatest land dealer on the continent, has just died at Rochester, Minn. Col. Davidson was born at Glencoe, Ont., in 1853 and after a public school education engaged in farming, later going into railroad work in the United States. Canadians know him best through his connection with the purchase of the Canadian Northern right of way into Montreal under Mount Royal, said to be the most costly undertaking in the Dominion of Canada. Several big deals were put through by Col. Davidson at Port Mann, B.C., and at Leaside, near Toronto. For many years he has been closely connected with the Mackenzie and Mann interests, being president of the Canadian Western Lumber Company, the Colonial River Lumber Company, and the Big River Lumber Company, and a director in several other corporations.

Mr. E. F. B. Johnston.—Lawyers are occupying a big place in the press of the Dominion at the present time. Not only are the law-makers known as the Dominion Parliament wrestling with various statutes, but a whole bevy of lawyers are seeking to bring order out of the chaos created by the Kyte shell charges. Mr. E. F. B. Johnston, one of the lawyers employed in this investigation, seems to be the particular storm centre—a controversy having arisen in regard to whom he represents and his status. Mr. Johnston is a Toronto lawyer, vice-president of the Royal Bank of Canada, President Title and Trust Co., and a director of the Standard Reliance Mortgage Corporation. In brief Mr. Johnston is a big business man as well as one of the outstanding lawyers in the Dominion. He is probably Canada's best known criminal lawyer, and it bodes ill for any evil-doer when this forensic investigator gets going. There has hardly been a big case in the history of the Dominion for the past score years in which he has not been prominently identified. Mr. Johnston was born in Scotland in 1859 and called to the Ontario Bar in 1880.

AMONG THE COMPANIES

STEEL COMPANY OF CANADA.

At the annual meeting of the Steel Company of Canada, held a few days ago in Hamilton, there were a number of changes made in the personnel of the board of directors.

Mr. C. S. Wilcox, the former president, is now chairman of the board, while Mr. Robert Hobson takes over the presidency. Mr. A. J. Brown, K.C., of Montreal, succeeds Mr. Wm. Southam, of Hamilton, as a director. Very little was said about dividends on the common stock, but the impression left with shareholders was that something would soon be done by the incoming board.

Mr. Wilcox said, in part:

"Last spring, owing to trade conditions at that time, we decided that it would be wise to renew the \$1,250,000 of convertible notes. The first instalment of these amounted to \$400,000, matured on July 1 of last year. We succeeded in extending these notes for three additional years. Last November we paid three and one-half per cent back dividends on preferred stock and will pay on the first of May next the balance of the unpaid dividends on the preferred. We have paid off all our indebtedness to the banks. The sinking fund provided by the trustees becomes operative July 1 next. We then have to pay to the trustees for that purpose 2 per cent of the amount of the bonds outstanding, and each subsequent year thereafter we will have to pay 2 per cent.

"As to the future, we must remember the directors and officers have serious problems to consider. The cost of manufacturing has materially increased, prices for war munitions have been reduced, and the Government has imposed a tax on our war profits, the amount of which cannot now be determined. This year we will have a steel production much larger than we have ever sold before, and it may be advisable for us to put in additional finishing plants at some points to take care of this extra tonnage."

Dealing with operations, Mr. Hobson said:

"Owing to increased business, we installed another open hearth furnace, in line with our old furnaces, and we thought at the time that this would be sufficient to meet our needs. The orders that came in on us showed, however, that we would have to increase our facilities still further. We decided, therefore, to install three new open hearth furnaces. When we get both these additions in full operation we will be turning out about twelve hundred tons of steel per day.

At Brantford and Montreal extensions were made for the manufacture of munitions, of which the company has plenty of orders to fill. We have shipped nearly four million forgings for shells and blanks for high explosive shells and would say that we are away ahead on delivery of everything asked of us by the Imperial Munitions Board."

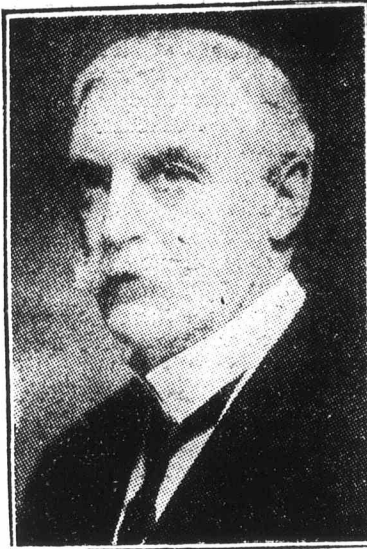
He pointed out that railways and agricultural implement manufacturers are now buying freely. In this connection he pointed out that the railway companies were again coming into the market, and were realizing that there would likely be a shortage of steel in 1917. They were already placing orders for rails for next year, a thing that had never happened in the past at such an early period. They were also looking up their future car supply.

All these factors would mean big business for the Steel Company, and the entire organization was ready to take care of it.

The sales of the Steel Company of Canada last year were distributed as follows: Domestic sales 55 per cent, export business and war munitions 45 per cent. Total output with extensions completed 1,200 tons of steel per day.

The following is the board of directors for the following year: Charles W. Alexander, Providence, R.I.; Cyrus A. Birge, Hamilton; A. J. Brown, K.C., Montreal; Lloyd Harris, Brantford; Robert Hobson, Hamilton; W. D. Matthews, Toronto; Ross H. McMaster, Montreal; Hon. John Milne, Hamilton; Sir Edmund B. Osler, M.P., Toronto; F. H. Whitton, Hamilton; C. S. Wilcox, Hamilton.

Following the meeting of shareholders, the directors met and chose the following officers: C. S. Wilcox, chairman board of directors; Robert Hobson, president; C. A. Birge, vice-president; F. H. Whitton, general manager; Ross H. McMaster, assistant general manager; H. H. Champ, secretary-treasurer; C. F. Whitton, assistant secretary; H. S. Alexander, assistant treasurer.



MR. ROBERT HOBSON,
Who has just been elected President of the Steel
Company of Canada.

PRICE BROS. & CO.

The financial report of Price Brothers and Company, Limited, for the fifteen months, ended February 29, 1916, presented to shareholders at the annual meeting to-day, shows profits amounting to \$1,032,185. After interest on bank loans, bond interest and sinking fund requirements, the net profits were \$383,538. Added to this is the balance at the credit of profit and loss account in November, 1914, of \$1,010,031, which brings the total net balance carried forward, \$1,403,569.

Net profits for the twelve months ended November 30, 1914, were \$303,779.

Sir William Price, in his report to the shareholders, points out that experience has shown that the date of closing accounts in the past, November 30, was unsatisfactory owing to the position of operations at that season of the year, and as a result it was decided to advance the date to the last of February. It is also pointed out that in the three months added, December, January and February, no profits accrued in the lumber department, but the overhead charges and salaries have to be met, the result being that the books do not show any increase in net profits for these months, so that the figures shown in the profit and loss account, which is practically 8 per cent on the common stock, are really less than the result of twelve months' operations.

The balance sheet shows current assets at \$2,524,920, against \$2,803,528 last year, while current liabilities are \$1,521,866, against \$2,247,007 a year ago. Total assets are \$17,023,872. Cash on hand has increased from \$19,498 to \$38,354.

A. MACDONALD CO.

Shareholders of the A. Macdonald Company recently held a meeting in Montreal and protested against the cutting down of the company's common stock capitalization from \$3,000,000 to \$1,000,000.

Shareholders of the company who are opposed to the stock reduction and wish to see that their objection is registered can accomplish this by securing from any member of the Montreal Stock Exchange the necessary proxy blank, all brokerage offices having supplies of them. Prompt action is necessary if the protest is to be made effective.

CANADIAN CHINA CLAY CO.

Alex. Osali has been made president of the recapitalized Canadian China Clay Co., the board remaining practically the same as old company. Besides Mr. Osali among those interested are: C. G. DeTonnancour, A. G. Gardner, J. C. Broderick, Andrew Shearer, Sir Wm. Mackenzie and Sir Donald Mann. Some recent experiments with the clay in the manufacture of coated paper are said to have had very satisfactory results.

UNITED STATES STEEL CO.

U. S. Steel earned in the first quarter of 1916 an income of \$60,713,624, after providing for repairs and maintenance to plants and interest on bonds of subsidiary companies. The report just issued showed the greatest quarter in the corporation's history, net earnings exceeding the previous record, established in the last quarter of 1915, by \$9,480,836.

Net earnings by months:

	1916.	1915.
January	\$18,794,912	\$1,687,150
February	19,196,396	3,638,578
March	22,722,316	7,132,081

Totals \$60,713,624 \$12,457,800

At last quarter's rate of earnings the corporation is piling up a revenue equivalent to 30.84 per cent a year on the \$508,400,000 common stock, after making allowances for all charges and reservations and the preferred stock dividend. In the preceding quarter the rate was equal to slightly less than 24 per cent per annum, and in the whole of 1915 a little less than 10 per cent was earned for the junior shares.

The regular dividends were declared.

United States Steel Corporation now employs about 43,000 more men than a year ago, with wages 10 per cent higher. Company will spend about \$84,000,000 in additions in next year. About one in five of employees or 50,000 in all are stockholders.

BETHLEHEM STEEL CORPN.

Net earnings in March approximated \$5,500,000, a new high record. This is at rate of \$66,000,000 a year, or nearly 4½ times the par value of the common stock outstanding.

Company now has sufficient business on the books to keep munitions and steel plants busy for the rest of the year.

Recently Bethlehem Steel sub-let contracts to a number of companies for shell parts on a new order from the allies. While no official statement has been issued as to extent of this order, the steel trade estimates its value between \$25,000,000 and \$35,000,000. The order means at least two months' additional work for Bethlehem shell plants, and should net the company an additional profit of between \$5,000,000 and \$10,000,000.

THE DULUTH-SUPERIOR TRACTION CO.

Comparative weekly statement of gross passenger earnings, for month of April, 1916:

	1915.			1916.		Per cent of Inc.	
	1915.	1915.	1915.	Incr. or Dec.			
1st week	\$25,727.40	\$21,462.90	\$4,264.50	19.9			
2nd week	23,995.62	20,108.17	3,887.45	16.3			
3rd week	24,487.30	20,316.06	4,171.24	20.5			
Month to date	\$74,210.32	\$61,887.13	\$12,323.19	19.9			
Year to date	\$396,024.59	\$348,224.37	\$47,800.22	13.7			

THE PORTO RICO RAILWAYS COMPANY, LIMITED.

Comparative statement of earnings for March, 1916:

For March:	1915.	1916.	Inc.	P.C.
Gross	\$68,593.62	\$76,491.31	\$7,897.69	11.51
Net	30,616.89	39,629.00	9,012.11	29.43
For Three Months:				
Gross	\$195,508.66	\$212,375.48	\$16,866.82	8.63
Net	94,136.03	109,703.56	15,567.53	16.54

LA ROSE MINE.

The La Rose quarterly statement as of March 31 shows a cash surplus of \$849,181 and ore in transit and ready for shipment, \$131,986. Current liabilities are \$40,435, leaving a balance of \$940,732. The dividend of one per cent just paid represents a disbursement of \$875,000.

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AMONG THE COMPANIES

THE HOLLINGER MERGER.

The activity in Hollinger stock, which was so marked during recent weeks has been explained. Hollinger Gold Mines, Limited, Acme Gold Mines, Limited, Millerton Gold Mines, Limited, and Claim 13,147 of Canadian Mining and Finance, Limited, all situated at Porcupine, two of them producers of yellow metal, are to be amalgamated with a nominal capital of \$25,000,000, of which \$24,000,000, in \$5 shares, will be issued, \$1,000,000 in shares remaining in the treasury for the purposes of Hollinger Consolidated Mines, Limited, which will be the title of the new corporation.

The calls for the annual meeting of the Hollinger Company, and the special meeting at which the proposal to merge these mining companies will be formally submitted, will be issued in a day or two. Accompanying the calls complete statements will be mailed, setting forth the basis of the amalgamation and the advantages to be gained by it, together with the allocation of the capital of Hollinger Consolidated, as follows:

	Shares.	Par Value.
In Treasury	200,000	\$ 1,000,000
To Hollinger	2,400,000	12,000,000
To Acme	2,100,000	10,500,000
To Millerton	200,000	1,000,000
To Can. Min. & Fin. Co..	100,000	500,000
	5,000,000	\$25,000,000

According to the arrangement, Hollinger holders will receive four shares of stock in the consolidated company in exchange for each share of their present holdings, the same rate of dividend as they are now getting, and besides "increased flexibility in a stock having a smaller market value."

C. P. R. EARNINGS.

Results for nine months of C.P.R.'s fiscal year, completed with the return for March, just issued, show that while the volume of gross business fell some \$10,000,000 below the high record of 1912-13, net profits for the period were \$2,260,000 ahead of the best in the history of the company.

Comparisons with a year ago continue spectacular, gross earnings revealing a gain of \$17,559,981, or 22.9 per cent, and net earnings a gain of \$11,664,429, or 45.3 per cent.

A tabulation of the company's record for nine months over a period of five years, showing the sharp upturn in earnings in the boom years of 1912 and 1913, the subsequent slump in the 1914 depression, and the new upturn which has carried net to a new high record level follows:

Nine months.	Gross.	Net.
1915-16	\$94,235,802	\$37,430,268
1914-15	76,635,820	25,765,838
1913-14	100,244,012	32,782,426
1912-13	104,065,377	35,169,012
1911-12	89,346,372	31,655,373

NATIONAL BRICK CO.

The annual meeting of the shareholders of National Brick Company has been called for May 17, and while there has been some improvement in the brick business within the past month or two this will not be reflected in the statement for the fiscal year which ended February 29, which was just about as dull as the preceding year.

SHERBROOKE RAILWAY & POWER CO.

Sherbrooke Railway and Power continues to show an improved position as earnings, the report for nine months, July to March 31, comparing as follows with the preceding year:

	1916.	1915.	Inc.
Gross	\$101,673	\$91,194	\$10,479
Operating	51,844	49,822	2,022
Net	\$49,828	\$41,371	\$8,457



SIR WM. PRICE,
President Price Bros., Limited, whose annual report has just been issued.

BRAZILIAN TRACTION CO.

The net earnings of the Brazilian Traction Company for the month of March are reported at 3,717,000 milreis, which, according to large interests in the company, is sufficient to meet the capital charges and dividend requirements for the period on the average rate of exchange during the month.

The gross earnings, which are reported at 6,711,000 milreis, show an increase of 416,090 milreis. Owing to the season, operating expenses were increased, however. They were for the month 2,994,000 milreis, the increase over last year being 287,660 milreis. The aggregate gross earnings from January 1 show an increase of 1,131,000 milreis, and aggregate net an increase of 608,100 milreis.

NATIONAL BRIDGE BONDS.

Although no definite figures are available as yet, it is understood that a very large proportion of the National Bridge bondholders have accepted the Dominion Bridge offer of 75 for their bonds, which expired at noon on Monday.

The bonds have been coming in steadily since Dominion Bridge made its offer about two months ago and it is said that an estimate of 70 per cent as the amount turned in would be quite conservative. Under the Dominion Bridge offer of 75, bonds were to be turned in with all unmatured coupons attached. This, of course, excluded coupon No. 10, payment for which is now to be made, with 3 per cent interest for the period of delay.

ONTARIO NATIONAL BRICK CO.

It is understood that plans are under consideration for the re-opening of the Ontario National Brick plant, which has been closed down since the late summer of 1914, and that an announcement to that effect may be expected shortly. Activity in the building trades is still considerably below normal, but the re-opening of the Ontario plant, together with the National Brick Co.'s larger operations here, are both indicative of some improvement over conditions this time a year ago.

A SEWING MACHINE MERGER.

The Canadian White Sewing Machine Company, a branch of the White Sewing Machine Co., of Cleveland, has acquired the plant and business of the Raymond Sewing Machine Co., which has been established in Guelph for forty years. The present plant will be used, and the capacity doubled while building operations for the new plant in St. Patrick's Ward are under way. The company has been deeded a site there by Mr. J. W. Lyon of twenty acres, and the new plant will cost in the neighborhood of a quarter of a million dollars. When completed it will give employment to about seven hundred men, nearly all skilled mechanics.

DETROIT UNITED RAILWAY.

Detroit United Railway stock has been placed on a 7 per cent dividend basis, being an increase of 1 per cent from the rate paid for the last three years.

Large earnings and more friendly relations between the company and the city will be accepted as the main influences in the action taken by the directors yesterday. Last year, before deducting reserve appropriation, come equal to 15.7 per cent on the stock, or more than 2½ times the dividend requirements. On the earning record by itself the company would have been justified in increasing the dividend a year ago, or sooner, but uncertainty as to the negotiations then pending between company and city for the purchase of part of the system by the latter was naturally a restraining influence. Agitation for civic ownership has been dying down and with earnings showing steady gains — the past quarter's gross receipts were nearly 24 per cent ahead of the same quarter in 1915 — the directors have evidently decided that there was no good reason why the shareholders should not have a larger share in the profits of the business.

The company has had a rather chequered dividend career. The sudden passing of the dividend in the autumn of 1907, after the rate had been increased from 4 to 5 per cent between 1904 and 1906, was followed by a market smash which has not yet been forgotten. From a high of 84½ that year the stock broke to as low as 28½ in October. The earnings of the company were not unsatisfactory, but its finances had weakened and surplus profits were required to strengthen the position. Hence the suspension of dividends from November, 1907, until March, 1911, when dividends were resumed at the rate of 5 per cent per annum. That action was followed by an increase to 6 per cent in March, 1913, a rate which now gives way to the 7 per cent basis on which the stock was placed yesterday.

High and low prices for the stock and dividends paid since 1904 are given in the following table:

Year.	High.	Low.	Div.
1916	99¼	69½	*6%
1915	73	62	6
1914	73½	62	6
1913	81	62½	6
1912	76½	55½	5
1911	76¼	63¾	5
1910	70	40½	0
1909	71¾	55	0
1908	55½	31¼	0
1907	84½	28½	2½
1906	102	79¼	5
1905	97	75½	4½
1904	80	60½	4

*Indicated.

Further details of Detroit United Railway's earnings since the opening of the new year show that net income after deduction of interest, taxes, etc., was approximately 100 per cent higher in the first three months than in the corresponding period a year ago. Net income for the three months amounted to \$679,508 against \$341,870 in the same period 1915, an increase of \$337,638, or exactly 99 per cent.

Before appropriations for depreciation reserve this would represent earnings at the rate of about 22 per cent per annum on the company's stock.

RAILWAY EARNINGS.

Gross railroad returns for the third week of April, completed with the C. N. R. statement just issued show a total of \$4,036,961 for the three big Canadian systems, an increase of \$1,101,889, or 37.5 per cent.

The increase falls about half way between the increase in the first week of the month — which was 33.5 per cent — and that of the second week — which was 40.9 per cent.

Gross earnings for the third week, and comparisons with the same week a year ago, follow:

Company.	Earnings.	Increase.	P.C.
C. P. R.	\$2,343,000	\$720,000	44.4
G. T. R.	1,059,661	189,889	21.9
C. N. R.	634,300	192,000	43.4
Totals	\$4,036,961	\$1,101,889	37.5

LETHBRIDGE RAILWAY.

Gross earnings for the Lethbridge Municipal Railway, from April 1st to 7th, amounted to \$975.05.

BANK OF MONTREAL

Established 1817

Capital Paid Up	- - - - -	\$ 16,000,000.00
Reserve Fund	- - - - -	16,000,000.00
Undivided Profits	- - - - -	1,293,952.00
Total Assets	- - - - -	302,980,554.00

BOARD OF DIRECTORS:

H. V. MEREDITH, Esq., President

R. B. ANGUS, Esq.	E. B. GREENSHIELDS, Esq.	SIR WILLIAM MACDONALD,
Hon. ROBERT MACKAY,	LORD SHAUGHNESSY, K.C.V.O.	C. R. HOSMER, Esq.
A. BAUMGARTEN, Esq.	C. B. GORDON, Esq.	H. R. DRUMMOND, Esq.
D. FORBES ANGUS, Esq.	WM. McMASTER, Esq.	

Head Office, MONTREAL

General Manager, SIR FREDERICK WILLIAMS-TAYLOR, LL.D.
Assistant General Manager, A. D. BRAITHWAITE, Esq.

Bankers in Canada and London, England, for the Government of the Dominion of Canada.

Branches established throughout Canada and Newfoundland; also in London, England, New York, Chicago, and Spokane.

Savings Department at all Canadian Branches. Deposits from \$1. upwards received and interest allowed at current rates.

A GENERAL BANKING BUSINESS TRANSACTED

6th Overseas Universities Company, C.E.F.

Reinforcements for the Princess Patricia's Canadian Light Infantry.

Canadians, of whatever nationality, thrill as they recall the wonderful record made by the Princess Patricia's Canadian Light Infantry at Festubert, at Ypres, and many other battlefields in Belgium; how, in the face of overwhelming odds, they held their positions by their courage, steadiness and dogged perseverance.

For nearly a year the P.P.C.L.I. (as the Princess Patricia's Canadian Light Infantry is known in Military Circles) has been reinforced by a steady flow of recruits of the very finest of our Canadian manhood. These recruits, many now veterans, are determined that this fine battalion shall not lose its high record, but with their help shall have added honor and prestige in the future.

The reinforcements have been drawn from all over Canada, and the Universities of Canada, have made this Battalion their care. Already 1,350 officers and men have gone forward under the title of the Universities Companies and are doing their "bit" at the front or at Shorncliffe. Five Universities Companies have left Canada.

The number of men volunteering from the West has been simply wonderful. So much so, that the authorities of the Western Canadian Universities decided to send overseas a battalion composed of students of the Western Universities and members of the teaching staff. This Battalion is now recruiting and is called the 196th Western Universities Battalion, C.E.F.

The object of the Western Universities Battalion and of the Universities Companies is the same in that it provides a means for men to get to the front in congenial company, but though their paths are parallel, they are not identical in this respect. The Western Universities Battalion is for Overseas Service as a Battalion, and the Universities Companies are reinforcing the Princess Patricia's Canadian Light Infantry.

The P.P.C.L.I. is now composed mainly of men from the Universities Companies and the steady flow of reinforcements for this Battalion must not be allowed to stop, and further the standard of the recruits must always be the "best that Canada can offer."

There are many men of the University type whose hearts grow warm as they read and hear the name of the Princess Pat's, for they have brothers, relatives and friends in it, and they wish they could have an opportunity of joining it. To these men the news that a Sixth Company is being recruited under Major McKergow, at McGill University in Montreal, will be welcome.

The Sixth Company is in comfortable quarters at McGill University and has all the advantages of the

use of the McGill Campus and the University Building, including the McGill Students Union.

The Universities Companies have been almost overwhelmed with the hospitality of the residents of Montreal and its suburbs.

The training of the Companies has been of an exceptionally efficient character, and has been of a nature to develop specialists, some at Musketry, others at Signalling, others at Tactical Exercises, and again others in Physical Training, Bayonet Fighting and Bombing.

The great advantage of these Companies is that men of the same social status go forward together, and join a Battalion in which they will find a large number of congenial spirits. Another advantage is the rapidity with which they go forward to the front. The training in Montreal usually takes about three months, and after two months further training in England they take their place in the firing line without unnecessary delay. The reason for this is the fact that these Companies reinforce a Battalion already at the front.

A considerable number of the men who have joined the Universities Companies have, upon reaching England, obtained commissions in the British and Canadian units. It is, of course, impossible to make any guarantee, as to promotion of this character, but the nature of the training received and the reputation of the Universities Companies make the chances of promotion excellent for the type of men that the Universities Companies accept.

Intending recruits are examined locally by an Army Medical Officer, receive their transportation to Montreal, and immediately obtain their uniform, and start their training without delay. Readers are invited to make known to their friends this opportunity. The Officer Commanding, 6th Overseas Universities Company, McGill University, Montreal, will be glad to supply any further information that may be required.

BRITAIN'S REVENUE.

Estimated revenue for the year, based on proposals in the budget, is \$2,545,000,000. Actual revenue for the year (based on old system of taxation) is \$1,685,000,000, which exceeds by \$160,000,000 the estimate by Mr. McKenna in September.

Total indebtedness March 31 was \$10,570,000,000 of which \$1,844,000,000 had been advanced to allies. The deficit was placed at \$6,110,000. Total financial assistance given allies is \$1,565,000,000, against estimate of \$1,772,500,000.

ASK ANY SUCCESSFUL MAN.

I should like to have this carved on my tombstone: Here lies a man who edited a magazine; he made many mistakes, but we forgive him for them, because years after year he preached Thrift to his readers, he encouraged several million people to save money.

We are not a thrifty people, as compared with other nations.

Belgium before the war was known as a "country without paupers"; of France's 10,000,000 voters, nine-tenths are owners of government bonds. There are 12,500,000 savings accounts in France, and half of them little ones — less than \$4.

But only one in ten of us have saving accounts; the rest of us are "good fellows."

I attended the funeral of a "good fellow" recently. He had always "lived up to his income." When the company for which he worked was reorganized ten years ago, the president said to him: "Have you a thousand dollars?"

A thousand dollars put into that business ten years ago would be earnings a competence for his widow to-day. But the "good fellow" didn't have it; he had never learned to save. And now we are raising a fund to buy his daughter a piano, so that she can give music lessons.

I came away from the funeral with another man whose salary had never been as large as the "good fellow's. We rode in his automobile."

"Do you know how I paid for this automobile?" he asked. "Out of the dividends that came to me last year from my savings. When I was getting eighteen dollars a week, my wife took two of it every week and put it into the savings bank, where he couldn't touch it. When I was raised to twenty-five, she raised the savings fund to five a week; and so on. I'm forty-seven years old now. I've never had a big salary, as you know; but I could retire to-morrow, if I wanted to, and have more than thirty dollars a week in dividends from the money I've saved. I tell you, I don't know anything that makes a man face the world with so much confidence as the knowledge that he has made himself independent of it."

There you have them side by side — the "good fellow" and the "wise fellow." All of us belong in one class or the other. Which class are you in?

"If you want to know whether you are going to be a success or a failure in life," says James J. Hill, "you can easily find out. The test is simple and infallible. Are you able to save money? If not, drop out. You will lose. You may not think it, but you will lose as sure as you live. The seed of success is not in you."

There is not a single man, woman or child in America who cannot save money in 1916, if he or she will set out determinedly to do it.

"Ah," you object. "How can you say that? You do not know my circumstances."

No, I do not. But if circumstances dictate your life, this editorial is not for you. You won't succeed anyway; you do not count.

"Circumstances!" exclaimed Napoleon. "I make circumstances."—(Bruce Barton in Every Week).

CHILI'S NITRATE INDUSTRY.

Production and exportation of nitrate of soda in northern Chili continue to show substantial increases. For purposes of comparison, the figures below give production and exports for January, 1916, compared with the same period in the three preceding years. The quantities are given in Spanish quintals of 101.41 pounds:

	Production. Quintals.	Exports. Quintals.
1916	5,641,671	6,247,402
1915	2,082,549	1,897,895
1914	4,584,495	4,779,862
1913	5,163,925	6,015,312

The figures above show the great recovery in the nitrate industry from the depression following the opening of the war. Shipments would have exceeded the amount stated had more vessel room been available.

A CRIME AGAINST CIVILIZATION.

The time is coming when neutrals will rise up in a body and demand that torpedoing of ships be stopped. It is a crime against civilization, not only in the inhumanity of it, but in the destruction of the agencies of commerce upon which the world must rely for commercial interchange. It is indefensible from every point of view save the ruthless subordination of everything in war to the demands of success.

—St. Louis Star.

IMPERIAL BANK OF CANADA

HEAD OFFICE, TORONTO

Capital Paid up, \$7,000,000 Reserve Fund, \$7,000,000
 PELEG HOWLAND, President E. HAY, General Manager

DRAFTS, Money Orders and Letters of Credit issued available throughout the World.

Dealers in Government and Municipal Securities.

Dealers in Foreign and Domestic Exchange.

Savings Department at all Branches.

Interest Credited Half-Yearly at Current Rates.

GENERAL BANKING BUSINESS TRANSACTED

THE DOMINION BANK

HEAD OFFICE - TORONTO

SIR EDMUND B. OSLER M.P., President
 W. D. MATTHEWS, Vice-president

C. A. BOGERT, General Manager

The London, England, Branch

of THE DOMINION BANK

at 73 CORNHILL, E.C.

Conducts a General Banking and Foreign Exchange Business, and has ample facilities for handling collections and remittances from Canada.

THE HOME BANK OF CANADA

ORIGINAL CHARTER 1854

Head Office, Toronto. James Mason, General Manager

Branches and Connections Throughout Canada.

General Banking Business Transacted MONTREAL OFFICES

Main Office, Transportation Bldg., St. James St.
 Bonaventure Branch, 523 St. James St.
 Hochelaga Branch, Cr. Cuvillier and Ontario Sts.
 Mt. Royal Branch, Cr. Mt. Royal and Papineau Ave.

ESTABLISHED 1872

BANK OF HAMILTON

Head Office: HAMILTON

CAPITAL AUTHORIZED..... \$5,000,000
 CAPITAL PAID UP..... 3,000,000
 SURPLUS..... 3,475,000

The March Bank Statement

More than ordinary interest attaches to the March bank statement as that marks the close of Canada's fiscal year. Call loans in Canada increased \$13,501,000 during the year, while the gain in March alone was \$653,000. These gains are probably due to the activity of the Canadian stock markets during that period. Current loans show a gain of \$9,000,000 in March as against a shrinkage of \$2,500,000 in March of last year.

The statement for March is complicated by the advances to the Munitions Board made by the banks jointly and also by the payment into one bank of the proceeds of the \$75,000,000 loan floated in New York recently. There is no evidence, however, as to under what head the last-named transaction appears in the statement.

The principal items for the month of March, the changes in the month and the year ending with March are:—

	March 31, 1916.	Changes During March, 1916.	Changes During Year Ending March 31, 1916.	Changes During March, 1915.
Note circulation	\$ 114,804,604	+\$ 1,276,367	+\$ 18,238,060	—\$ 1,122,846
Reserve fund	113,022,936	+ 565,600	— 204,721	+ 750,818
Demand deposits	389,165,388	— 660,279	+ 49,651,102	+ 3,099,107
Notice deposits	738,169,212	— 9,926,603	+ 61,293,422	+ 5,737,177
Total deposits in Canada	1,127,334,600	— 10,586,882	+ 110,944,524	+ 13,886,234
Deposits elsewhere	120,678,959	+ 4,003,931	+ 22,940,961	+ 5,645,964
Current coin	66,372,906	— 1,804,441	+ 701,631	— 453,756
Dominion notes	151,203,493	— 2,227,512	+ 13,796,472	— 1,314,850
Deposits central gold reserve	12,010,000	+ 1,550,000	+ 6,460,000	+ 300,000
Call loans in Canada	81,747,512	— 201,613	+ 13,501,251	+ 653,492
Call loans outside	141,889,989	+ 2,751,338	+ 39,951,302	+ 12,047,703
Current loans in Canada	770,139,526	+ 9,266,345	+ 1,000,643	— 2,496,324
Current loans outside	52,705,827	— 3,393,892	+ 10,960,090	— 1,915,642
Total liabilities	1,462,825,516	— 10,174,584	+ 161,961,879	+ 19,734,192
Total assets	1,705,836,892	— 9,487,811	+ 160,113,323	+ 20,671,479

GOOD-NIGHT FOR HIM.

There is an officer in one of the Eastern banks whose journey from one institution to another was for some years more rapid than his progress toward preferment, honors and a big salary in any one institution. At last he thought he was very comfortably settled in a bank having a fine new building, with plenty of marble and bronze fittings, easy and luxurious furniture and appointments, and a president of the old-fashioned, dignified side-whiskers type. A spirit of courtesy pervaded the establishment, and it was the custom of the employees before leaving the bank after their day's work was done to file through the officers' rooms and say "good-night" to whoever might be remaining on duty there. "This always seemed a useless proceeding to me," says the banker who tells this story on himself. "In fact, there was a big solemn-looking clock in one corner of the main banking room, and I was always so busy watching for the hour of three to arrive that I never could see any point in wasting time in saying 'good-night' to anybody.

"One afternoon, just before the stroke of the magical hour, when I was shaping my desk up for closing, the venerable president passed my window, and bowing with more than even his wonted courtesy, said 'good-night' to me, placing as I thought an altogether unnecessary stress on the 'night.'

"A few minutes later I was called in before the cashier and dismissed from the bank's service.

"What's the matter?" I asked. "Nothing," said the cashier; "you're as regular as the clock; but this bank is more than a fine piece of mechanism. It's all that plus human personality. You haven't time to say 'good-night' to your associates, so the bank says 'good-night' to you."

"I've learned a few things since those days," said the banker. "And now don't watch the clock any more. Besides, all our employees and officers say 'good-night' to each other before leaving the bank." —The Bankers Magazine.

PERSONALS.

Lieut. C. M. Horsey, who was killed in action a few days ago was the son of the London manager of the Dominion Bank. He had been severely wounded at Festubert and was only back at the front a few days when he met death.

J. M. Davidson, who has been acting as manager of the Saskatoon branch, of the Bank of British North America, for the past six months, has been appointed manager at Selkirk, Man. G. H. Crimes has been moved from Semans to manage the Saskatoon branch.

R. S. Cutbill, manager of the Upper Bridge branch of the Imperial Bank, Niagara Falls, died this week of typhoid fever; after an illness of several weeks' duration.

William T. Shannon, manager of the local branch of the Standard Bank, Chatham, has died after a short illness.

THE APRIL STOCK EXCHANGE.

The stock market during the past week did not sustain the activity of the previous week, although it remained strong and some further advances were made by a few specialties.

The month of April was one of the most active months in the history of the Montreal stock exchange; Steel Company of Canada being a leader with a total turnover of over 122,500 shares. Other active issues during the month were: Dominion Steel Corporation, 32,500 shares; Canada Cement, 22,800; Canada Steamship Lines, 16,000; Detroit United, 15,300; Quebec Railway, 26,000, and Dominion Bridge with 10,000 shares.

Comparisons of the volume of business transacted month by month through the current year are presented in the following detailed table:

Month.	Shares	Mines	Bonds
January	131,714	10,117	\$524,150
February	116,211	6,000	1,333,200
March	209,249	1,876	789,900
April	333,902	6,750	866,150

Unlisted Department.

Month.	Shares.	Bonds.
January	10,683	\$16,900
February	3,361	30,480
March	3,408	166,515
April	6,604	88,000

THE LONDON STOCK EXCHANGE.

War effects are vividly shown in the annual report of the London Stock Exchange, reflecting a pronounced decrease in revenues and membership. Gross receipts dropped from £296,800 in 1914-15 to £169,900, the chief decrease being in members' and clerks' subscriptions from £223,600 to £132,100. This was mainly due to concession totalling £55,400 allowed to those on military service. Principal items compare the year ended March 25:

	Net rev.	Div. %	Sub. fees	Mem'b's	Cl'ks
1916 ..	£ 33,600	15%	£132,100	4,293	2,330
1915 ..	159,700	53%	223,600	4,884	2,383
1914 ..	194,700	77	231,500	5,032	2,366
1913 ..	218,900	80%	235,600	5,104	2,305
1912 ..	211,600	77	234,800	5,146	2,189
1911 ..	240,600	91 2/3	236,100	5,203	2,094

DISTANCE OF MARKET.

From a study of 650 farms in Johnson county of that state the Missouri Experiment station concludes that location is more important than crop yield as a factor in land values. Here are the figures: Seventy-nine farms within two miles of market averaged in value \$78.70 per acre; 183 farms, two to four miles from market, \$70.20 per acre; 126 farms, four to six miles from market, \$60.90; 113 farms, six to eight miles from market, averaged \$58.20 per acre. An unmentioned but important factor is condition of the roads. Were these farms located on hard roads or on dirt roads inclined to be heavy in wet seasons? Most folks would rather live six miles out on a permanent hard road than only half as far on a muddy road. Let us have more light on this interesting question.—(Farmer's Review).

The Canadian Bank of Commerce

ESTABLISHED 1867

PAID UP CAPITAL - \$15,000,000 RESERVE FUND - - \$13,500,000
HEAD OFFICE --- TORONTO

BOARD OF DIRECTORS

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E. R. WOOD, Esq. JOHN AIRD, General Manager. H. V. F. JONES, Assistant General Manager.

BRANCHES IN CANADA

44 in British Columbia and Yukon. 88 in Ontario. 81 in Quebec. 129 in Central Western Provinces. 23 in Maritime Provinces.

BRANCHES AND AGENCIES ELSEWHERE THAN IN CANADA

St. John's, Nfld. London, Eng. New York. San Francisco. Portland, Oregon. Seattle, Wash. Mexico City.

The large number of branches of this Bank enables it to place at the disposal of its customers and correspondents unexcelled facilities for every kind of banking business, and especially for collections.

SAVINGS DEPARTMENT

Connected with each Canadian branch, Yukon Territory excepted, and interest allowed at current rates.

BANK OF ENGLAND STATEMENT.

The Bank of England reports the proportion of reserve to liabilities at 29.40 per cent against 29.10 per cent a week ago. The institution reports an increase in gold holding for the week of \$4,797,000 and an expansion in loans of \$2,455,000. The official discount rate remains 5 per cent.

The weekly statement of the Bank of England shows the following changes:

Total reserve increased £888,000, circulation increased £71,000, bullion increased £959,404, other securities increased £491,000, other deposits increased £1,174,000, public deposits increased £2,543,000, notes reserve increased £883,000, Government securities unchanged.

The detailed return compares as follows:

	1916.	1915.	1914.
Gold	£58,924,183	£55,314,389	£36,765,422
Reserve	43,272,000	39,078,829	26,338,387
Notes reserve	43,200,000	146,693,662	42,463,243
Reserve to lia.	29.40%	17%	42%
Circulation	34,101,000	34,685,560	28,877,035
Public deposits	61,721,000	132,067,216	19,020,326
Other deposits	85,472,000	87,030,100	43,126,915
Gov't securities	33,187,000	51,063,491	11,046,570
Other securities	88,396,000	146,693,662	42,463,242

The principle items compares as follows:

	Gold.	Reserve.	securities
1916	£58,924,183	£43,272,000	£88,396,000
1915	55,314,389	39,078,829	146,693,662
1914	36,765,422	26,338,387	42,463,242
1913	37,769,218	27,230,698	32,985,190
1912	39,670,715	29,061,115	33,977,455
1911	36,805,055	26,914,450	32,067,572
1910	36,140,963	26,355,378	29,526,659

The proportion of reserve to liabilities compare as follows:

	P.C.		P.C.
1916	29.40	1910	50%
1915	17%	1909	50%
1914	42%	1908	51
1913	49½	1907	45½
1912	48%	1906	38%
1911	47%	1905	47½

Captain J. H. Irving, serving with the 201st Battalion, was in the head office of the Dominion Bank before joining his unit. He is a grandson of the late Sir Aemilius Irving.

BANK OF FRANCE REPORT.

The weekly statement of the Bank of France shows the following changes in francs:

Gold in hand decreased 95,851,000; silver in hand decreased 756,000; notes in circulation increased 38,576,000; treasury deposits decreased 34,868,000; general deposits increased 55,313,000; bills discounted decreased 15,768,000; advances decreased 5,075,000.

The detailed return compares as follows in francs (000 omitted):

	1916.	1915.	1914.
Gold	4,803,526	4,169,010	3,646,350
Silver	358,930	376,677	629,625
Circulation	15,277,961	11,585,706	6,038,141
General deposits	2,337,503	2,307,147	631,068
Bills discounted	3,145,246	135,147	1,647,736
Treasury deposits	25,198,000	43,084	123,310

The total gold holdings compare as follows, in francs (000 omitted):

	1916.	1915.	1914.
Apr. 27	4,803,526	4,169,010	3,646,350
Apr. 20	4,899,377	4,191,896	3,644,880
Apr. 13	4,893,258	4,228,025	3,638,325
Apr. 6	4,986,357	4,253,375	3,377,300

Mar. 30	5,006,244	4,250,975	3,615,625
Mar. 23	5,011,277	4,248,725	3,624,175
Mar. 16	5,023,088	4,244,350	3,624,475
Mar. 9	5,018,889	4,241,975	3,610,000
Mar. 2	5,014,985	4,240,375	3,602,950
Feb. 24	5,035,824	4,238,900	3,598,325
Feb. 17	5,031,055	4,249,200	3,588,375
Feb. 10	5,024,474	4,241,600	3,474,421
Feb. 3	5,019,500	4,234,050	3,458,840

The circulation compares as follows, in francs (000 omitted):

	1916.	1915.	1914.
Apr. 27	15,277,961	11,585,706	6,038,141
Apr. 20	15,239,385	11,539,898	5,805,063
Apr. 13	15,183,921	11,500,572	5,921,925
Apr. 6	15,154,592	11,422,475	5,943,250
Mar. 30	14,952,078	11,272,775	5,950,375
Mar. 23	14,847,116	11,176,000	5,743,150
Mar. 16	14,719,661	11,109,475	5,803,200
Mar. 9	14,649,611	11,092,525	5,813,225
Mar. 2	14,460,098	11,072,500	5,946,800
Feb. 24	14,295,251	10,961,975	5,763,450
Feb. 17	14,203,427	10,831,550	5,799,750
Feb. 10	14,144,325	10,749,650	5,845,047
Feb. 3	14,034,000	10,646,225	6,028,809

ESTABLISHED 1832

Paid-Up Capital
\$6,500,000



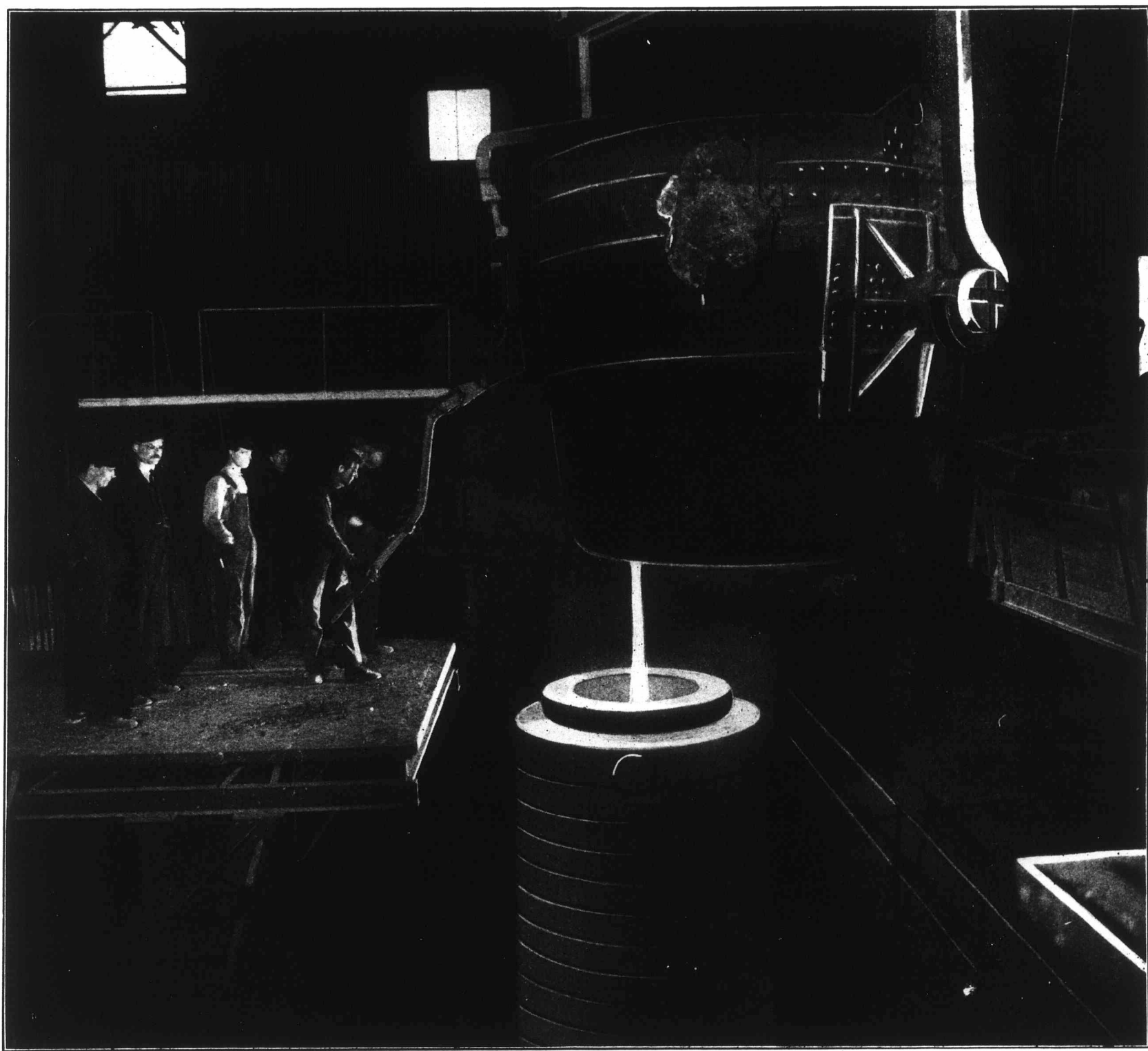
Reserve Fund
\$12,000,000

TOTAL ASSETS OVER \$100,000,000

The strong position of the Bank of Nova Scotia not only assures the safety of funds left on deposit with the Bank but also places it in a position where it can readily care for any legitimate business needs of its customers. We invite banking business of every description.

THE BANK OF NOVA SCOTIA

—THE—
**Mining and Metallurgical
Industries**
OF
Canada



POURING A 30-TON INGOT OF STEEL

The Eight Hour Day

By Prof. W. W. SWANSON.

The Canadian Government has recently made an inquiry into the conditions under which workmen are being employed in munition plants, with special reference to hours of work and wages. The questions now raised are bound to present themselves with even greater insistence after the war, and demand, therefore, the most careful examination and consideration. In the United Kingdom Lloyd George has found his greatest difficulty, in the way of securing an increased output of munitions, in the labor problem, and this not so much in the absence of a sufficient number of skilled mechanics—although his difficulties there have been formidable enough—as in the apparent obstinacy with which the workers declined, without adequate safeguards, to consider any proposals to alter the working day and week. The question of wages is comparatively simple as compared with hours of labor; as the former is one largely determined by market conditions while the latter depends upon custom and practice. And, as everyone knows, it is one of the most difficult of tasks to change habit, tradition and custom, especially where self-interest comes powerfully to their support. It is only in very recent years that the tradition of long hours for the working classes has been broken down, and the labor element is fearful of its being re-established. When it is realized how hard has been the struggle to shorten the working day, and how precious has been the victory to the workers, it may be possible to sympathize the more readily with their demand that, at all costs, the future position of the laboring classes shall, in this respect, be adequately protected. It will not be possible, in this article, to consider all the phases of this problem, but the chief points will be touched upon in a rapid view of the events that have led up to the present situation.

Regulation of Hours of work in Past Century.

It must be admitted that the past century has seen a steady diminution of the number of hours in the working day, and that, in this regard, factory operatives have greatly improved their position. In the United States, where war conditions have improved the position of the workers in many directions, there has been a decided advance in this direction. For example, in September, 1915, 25,000 employes of the Standard Oil Company of New Jersey were given an eight-hour day. With respect to this change a representative of the company said: "This reduction in hours, from ten to eight, is not the result of recent troubles, but is adopted as part of the welfare work that the company has always been interested in. "This is significant of a change in workmen's conditions that is making rapid headway in the United States, and holds more of promise, even, than a general increase of wages, as experience has abundantly proved; for an increase in wages may be more than offset by an advance in the cost of living. On the other hand, a decrease in the working day provides leisure to the laborer for a life outside of, and beyond, his humdrum daily work.

Workmen do not forget, although others may, that at the beginning of the nineteenth century men worked from sun to sun; and when the factory system had been firmly established in England, and factories were equipped with costly machinery and artificial lighting was introduced, the hours of labor were extended far into the night. Since that time, however, the ten-hour day has become general, and in some instances the eight-hour day has been adopted. Nevertheless, the twelve-hour day has not become extinct; and although the hours have been greatly reduced in many trades yet, taking the field of labor in general, it may be said that, during the last twenty-five years, the average reduction in the hours of work has not been more than one hour.

It is disheartening to observe that employers as a class have always opposed, and still oppose, the shortening of the hours of work, even although it has been clearly established that they have gained as much as the workers, through the increased efficiency of labor. It should be noted, moreover, that the sixteen hour day, or even the fourteen or twelve, was not an ancient custom of the race from which it escaped, but a product of the factory system of the eighteenth and nineteenth centuries. Employers imagined that expensive machine equipment had to be run to its utmost capacity to take up the yearly depreciation; and hence men and women were required to yield up the last ounce of energy in long and exhausting days of work. In Manchester, during

the year 1830-40, the textile mills ran from five in the morning to nine in the evening, with only an hour's rest in the middle of the day for dinner. This, he it noted, took place fifteen years after Robert Owen proved by his experiments in the cotton mills at New Lanark, that the sixteen-hour day could be reduced to ten to the immense benefit of both the employer and employe. Nevertheless, the majority of the masters continued to oppose a reduction of the hours of labor, perhaps through instinct, and certainly—in the face of the facts—through prejudice. At the same time there have been many employers who, through self-interest as well as the dictates of conscience, have shortened for their workers the hours of labor, and have gained enormously through the added zest and efficiency with which their employes set to work. They, like Owen, have advocated an eight-hour day not only because no loss in industrial results would obtain but because "it is to the real interest of every human being that every other human being should be healthy, intelligent, contented and wealthy"—not an impossible ideal if we substitute for "wealthy" the words "relieved from the menace of want." And if all workers cannot hope to be brilliantly endowed they at least have the right to demand leisure for training and cultural improvement.

It unfortunately remains true that enlightened and philanthropic employers are still too few; and recourse must yet be had to wasteful strikes and unsettling agitations to achieve the desired results. Here and there a Henry Ford may appear, who recognizes that his business is not entirely his own since the well-being, the interest and the very existence of thousands of thinking and feeling men may depend upon it. But for the most part, labor will have to depend on its own efforts, and upon State action, to usher in a reasonable and adequate working day for the mass of the nation's toilers.

Action by the State.

In the past, however, the State has done comparatively little to shorten the work day. It is true that the State has set limits to the hours of work of women and children in industry, with the result that, notably in the textile industries, there has come about also an almost automatic reduction in the working day for men as well; but on the whole the reduction has come about rather because of union organization and the employers' recognition of the wastefulness of the twelve-hour day. In certain dangerous or exhausting occupations, however, as in mines and smelters, the State has restricted the hours of labor to eight or nine. Where Governments have been direct employers of labor—as the British and the French—the hours of work have been reduced to an average of eight for each day of the week. And both for religious and humanitarian reasons the State has restricted within narrow limits Sunday labor, especially in Canada. On the whole, however, as already pointed out, labor has had to depend largely upon its own efforts to obtain a reasonable working day.

What of the Future?

In the light of what has been said it will be realized why the trade unions of the United Kingdom have so jealously guarded the position they have won with respect to the ten-hour, and in some instances, the eight-hour day. For this they have been bitterly assailed for class and political purposes. They are charged with having taken advantage of the war to gain illegitimate and party ends. Notwithstanding the slackers—who, unfortunately, are always present in every country, war or no war—the working classes of the United Kingdom have risen nobly to the occasion, and are courageously and willingly subjecting themselves to a terrific physical and mental strain. The men in the trenches are scarcely more patriotic. History cannot show the equal of this voluntary response, whether for duty on the field of battle or in the factory, in the case of any other great nation. The factories of the Motherland are working day and night, and British men and women intend to keep them going until the enemy is crushed. At the same time they want it distinctly understood, and rightly so, that the present long hours and overtime work are to last during the war, and during the war only.

There are not wanting pessimists in England who maintain that the world will be a harder one to live in after the war and because of the war. They argue that hours of labor will be longer and wages smaller

in Germany; and that English workmen will, therefore, be compelled to share with their masters the burden of increased competition. Germany will, without doubt, be a poorer Germany and a chastened Germany; but not a more efficient Germany. War taxes will crush her industries; frightful losses of men will lessen her labor power. England, no doubt, will have suffered; but capital will be ample for her needs and her labor power will not be sensibly diminished. Relatively, Britain's place in the markets of the world will be higher and more secure than before the war. Finally—and for the purpose of our argument it will suffice—it can be proved that the United Kingdom will best meet German competition by raising wages and shortening the working day, rather than by following the reverse methods. The United States, the world's greatest manufacturing nation, has already demonstrated the soundness of this contention. In that country wages are higher than elsewhere, and the hours of work per day fewer; and yet—with the possible exception of England the United States is the most formidable of competitors in the neutral markets of the world. Surely the pauper labor argument at this late day needs no refutation. Once more, let us emphasize the fact that long hours and low wages for workers in Germany will not make them more effective in the competitive struggle, but will diminish their country's industrial power. Germany will not willingly adopt these conditions for her laboring population; rather, they will be thrust upon her as a vanquished nation.

The Position of Women Workers.

A brief reference in closing may be made to the future position of women workers in the field of industry in the United Kingdom, with respect to their probable attitude to this particular problem. A few extreme feminists—Miss Sylvia Pankhurst among others—have objected to State regulation of the hours of work for women. They have obviously, however, in this regard, been more intent on securing formal rather than real rights when they have demanded absolute equality with men and protested against special State regulations for the protection of those of their own sex. The common-sense of the world, however, proves that hard facts whether of nature or limited experience, must be considered in dealing with the position of women in industry. For these reasons, women are forbidden to work in the mines, in Great Britain; and night work is also either forbidden or greatly curtailed. In the same way they are protected they are given special protection with respect to hours of work—nine or ten per day being the maximum usually allowed, a maximum which also generally becomes the minimum.

Most enlightened men will welcome women to a broader field of industry; as the work of the world will provide scope for the energies of all. Here again the old "lump of labor" theory is being gradually abandoned. It is no longer felt that work is limited in amount, and that it must not be shared by too many. It is recognized that only by setting a limit to human desires and needs can the world's work be curtailed. However, that is another story. The point we wish to make here is that men will be glad to admit women to the ranks of the workers provided that they will not thereby be subjected to "sweated" conditions. That means, again, the acceptance of equal conditions for both men and women with respect to hours of work and wages. Here the advanced feminists are on safe ground. Women in industry should neither ask for, nor accept, favors. Neither should men be compelled longer to subsidize them while they go out and cut wages by means of that subsidy. The war may, and probably has, done more towards advancing the cause of both women and men in industry than all the agitation of the past fifty years has accomplished. We may hope, therefore, not without reason, that women workers will stand firm with the men in demanding that, in the Anglo-Saxon world, labor shall not only get the means of life, but the opportunity to learn how to live nobly.

THE BRIQUET INDUSTRY.

Over a million dollars worth of briquets were made in the United States out of waste coal dust in 1915, the exact production being 221,537 short tons, valued at \$1,035,716. This was the largest output in the United States for any year with the exception of 1914. The manufacture of this type of fuel is, however, still in its infancy, and according to C. E. Losher, of the United States Geological Survey, a good many years will probably elapse before the briquet industry assumes very large proportions.

There were fifteen briquetting plants in operation in the United States in 1915, one less than in 1914.

Possibilities of Agricultural Development in Canada

By ERNEST H. GODFREY, F.S.S.

In a previous article the writer showed what were the average yields of wheat per acre in the principal wheat-growing countries of the world, how these had steadily increased in certain countries and in the province of Ontario, and how the evidence of the past pointed to the possibility of increased yields per acre in Canada as a whole in the not distant future. It is now proposed to assemble what evidence there may be of the extent of land unoccupied in Canada, with a view especially of showing what areas are available for the growth of wheat.

Proportion of Total Area Under Cultivation.

In the first place let us examine into the proportion of the vast Canadian demesne that is at present either occupied or cultivated. The total area of Canada is 3,729,665 square miles, of which 3,603,910 square miles are land and 125,755 square miles are water. The land mileage represents an acreage of 2,306,502,400. Of this vast area, only 109,948,988 acres were returned as in occupation as farm land at the census of 1911; so that less than 5 per cent of the land area of Canada is as yet occupied for agricultural purposes. From the total land acreage above named we may deduct the whole of the vast areas in the Northwest and Yukon territories, for no question of their agricultural development is likely to arise before the uncultivated lands now within the boundaries of the nine provinces have been completely surveyed and thrown open to settlement. These territories comprise a land area of 905,186,000 acres (Northwest Territories 773,073,000 acres, and the Yukon Territory 132,113,000 acres); so that the total land area within the present provincial boundaries is 1,401,316,400 acres. The first table given in the introduction to the Report on the Agricultural Census of 1911 showed for each province the total land area, the acreage and percentage of the total that was in occupation as farm land at the date of the census, and the acreage and percentage of the total estimated to be possible of cultivation as farm land in the future. The estimates of land capable of future occupation were based partly upon the amount of farm land occupied at the date of census in 1911, and partly upon a percentage of the total area, fixed arbitrarily, but having reference to the more or less definitely ascertained facts as to the character of the lands in each province and the increases both in land occupied as farms and of the area of improved land. Since the census of 1911 was taken, large areas have been added to the provinces of Manitoba, Ontario and Quebec under the Boundary Extension Act, passed by the Dominion Parliament in 1912, and consequently the data in the census table have been altered, and in its revised form the statement stands as follows:

Provinces.	Total land. Acres.	Occupied as farm land, 1911.		Estimate of pos- sible farm land.	
		Acres.	p.c.	p.c.	Acres.
Prince Edward Island	1,397,991	1,202,354	86.01	90	1,258,000
Nova Scotia	13,483,671	5,260,455	38.01	60	8,090,000
New Brunswick	17,863,266	4,537,999	25.44	60	10,718,000
Quebec	442,153,287	15,613,267	3.53	10	44,215,000
Ontario	234,163,030	22,171,785	9.47	25	58,541,000
Manitoba	148,432,698	12,228,233	8.24	50	74,216,000
Saskatchewan	155,764,100	28,642,985	18.39	60	93,459,000
Alberta	161,872,000	17,751,899	10.96	65	105,217,000
British Columbia	226,186,370	2,540,011	1.12	20	45,237,000
Total	1,401,316,413	109,948,988	7.84	31	440,951,000

This table shows that of the total land area within the provinces only about 8 per cent, or nearly 110 million acres, were under cultivation. The estimate of possible farm land is 31 per cent of the total, or 440,951,000 acres. This is a very moderate proportion, and it does not take into account forests and swamp lands, which may ultimately be tilled, nor does it include northern areas within the provinces the agricultural possibilities of which are at present unknown, because the lands are unexplored and unsurveyed.

Areas Available for Immediate Settlement.

Thus far we have looked at the matter from the standpoint of acres alone, without regard to exploration, surveys, railway development or accessi-

bility to markets. It will be well, therefore, to ascertain as far as possible what areas in each province are more or less immediately available for agricultural settlements. The public lands of Canada come under two categories, viz., those belonging to the Dominion Government and those under the control of the Provincial Governments. The Dominion lands are situated all within the three Northwest Provinces, and in what is known as the Railway Belt of British Columbia. The provincial public lands comprise those of the Maritime provinces, of Quebec, of Ontario, and of British Columbia (excepting those of the Dominion Government).

Dominion Public Lands.

Taking first the Dominion lands in Manitoba, Saskatchewan and Alberta, the records of the Department of the Interior show that up to January 1, 1915, the total number of acres surveyed was 195,341,726. Of this area, 133,157,726 acres have been alienated from the Crown, leaving 62,184,000 acres for disposal. Of this area 4,099,000 acres were under timber licenses, 4,394,500 acres were under grazing leases, 25,615,500 acres were under forest reserves and parks, and 28,075,000 acres were available for homestead entry. In addition to the surveyed area there are large tracts of land in the northern parts of the three provinces, which have as yet been explored only in a very partial way. The total area of this unsurveyed tract is 290,300,972 acres, of which over 23 million acres are water-covered. No estimate of the area in this tract that may be suitable for agriculture can yet be made with any degree of accuracy:

Provincial Public Lands.

The same can be said, probably, of the Crown lands of the Provincial Governments, especially as regards the two large provinces of Ontario and Quebec. These, since the enlargement of their boundaries in 1912, contain vast areas of land the agricultural possibilities of which are at present quite unknown. The new district of Patricia in Ontario and the Ungava territory in Quebec are both outside the range of present calculations so far as agriculture is concerned.

Nevertheless it is possible to form some idea of the extent of the Provincial Crown lands which are available for agriculture. All the land in Prince Edward Island is settled. In Nova Scotia the area of the Crown lands exceeds 900,000 acres, and grants of 150 acres each for agricultural or grazing purposes may be obtained at the rate of \$1 per acre. Most of the land is, however, suitable only for forestry or mining, and no estimate is available of the extent of the areas suitable for agriculture.

In New Brunswick the Crown lands extend to about 7¼ million acres, a survey of which has been

commenced. This survey will provide for the separation of agricultural lands from those suitable only for the growth of timber. It has been stated officially that probably about 1-3 or ¼ of the total area of the Crown lands in New Brunswick are suitable for agriculture. Out of the extensive lands and forests administered by the Provincial Government of Quebec, new territory is annually taken for division into farm lots, the area so divided in 1914-15 amounting to 286,621 acres. On June 30, 1915, the total area of land subdivided and available for sale or other disposition was 7,022,254 acres. Upwards of 6½ million acres of agricultural lands are available for settlement in Timiskaming, Abitibi and Beauce, the lands in Timiskaming comprising 3½ million acres, those in Abitibi 3 million acres,

and those in Beauce between 50,000 and 60,000 acres.

Of the Province of Ontario, as enlarged by the Extension of Boundaries Act, 1912, it is difficult to realize the dimensions, and still more difficult to compute the extent of land capable of agricultural development. The Province includes, however, 230 million acres of land, of which only 13½ million acres are under cultivation. More than 20 million acres of the very finest arable land await the plough. Ontario is stated to be 3½ times the size of the British Isles, and 1½ times as large as the State of Texas. From east to west its borders are 1,000 miles apart, and the distance from north to south is 1,075 miles. The vacant public lands of British Columbia are approximately 200 million acres; but up to the present only about 90 million acres have been placed in reserve for settlement by pre-emption. In this area surveys are being made from year to year by the Provincial Government; and at the close of the year 1915 there were vacant and available 2,400,000 acres which had been surveyed for settlement.

Total Areas Available.

Leaving out of account the huge unsurveyed areas of Canada, such as the northern part of Quebec, including Ungava, of Ontario, including Patricia, of the Northwest Provinces, and of British Columbia, we get the following rough approximation of the areas which are available for immediate settlement and devotion to agriculture:

Public Lands of	Acres.
Dominion	28,075,000
Provinces:—	
New Brunswick	2,400,000
Quebec	7,000,000
Ontario	20,000,000
British Columbia	2,400,000
Total	59,875,000

There are therefore nearly 60 million acres of land which can be allotted to settlers either by sale at nominal prices or by free grant.

Cultivation of Unimproved Areas.

But there is another direction in which expansion is possible, and that is in the cultivation of the unimproved areas of farm lands in occupation. According to the last census the total area of occupied farm lands in Canada was 109,948,988 acres, of which 48,733,823 acres were improved and 61,215,165 acres were unimproved. Consequently we may count that there are approximately 120 million acres of land in Canada capable of devotion to agriculture as fast as the necessary increase of population can be secured.

Probabilities of Wheat Cultivation in the Immediate Future.

In considering this question a number of different factors must be taken into account. Last year represented probably the most that Canada could do in the matter of wheat cultivation under the exceptionally favourable circumstances which then prevailed. One cannot anticipate a large immediate expansion of the wheat acreage when the flower of the Canadian manhood is fighting in the Imperial cause on the battlefields of France and Belgium, and for the same cause the stream of immigration which was flowing so strongly into Canada up to the year 1914 has now all but stopped. When the war is over it will be reasonable to expect a resumption of Canadian immigration on a large scale. The continuance of high prices for agricultural produce, and especially for wheat is probable, and should attract large numbers to the land. The general conditions in Canada point to the absolute necessity for greater agricultural production and increased exports for the restoration and preservation of a sound economic equilibrium. With regard, however, to the production of wheat, Canada will probably have serious competitors. After the conclusion of the war the agricultural development of the Russian Empire will proceed with accelerated pace, both in Europe and Asia, and there is room in various other countries for considerable expansion in the growth of wheat. It is important, therefore, that in Canada undue dependence should not be placed upon wheat growing, and as the demand for meat is good and the prices for it are high, greater benefit will ensue whenever simultaneous attention can be given to the production of grain and live stock than where grain only is cultivated.

During the ante-bellum period, from the beginning of the century to 1914, when the total immigra-

(Continued on page 51.)

The Growth of the Banks Loan Fund Progress in Prince Edward Island

H. M. P. ECKARDT

Between February 28th, 1915, and February 29th, 1916, the deposits held by Canada's chartered banks show an increase of roundly \$181,000,000—the total rising from \$1,142,900,000 to \$1,324,300,000. This has seemed to us a rapid growth, the ration of increase for the year being about 16 per cent. The increase of resources necessarily enhances the power of the banks in regard to making loans to their industrial and mercantile customers; but in this connection it is to be remembered that as much of the new deposit money is of a temporary nature, the banks are compelled to carry on extraordinarily large percentage in the form of cash and its equivalent. Thus only a relatively small proportion of the newly-acquired funds can be used in commercial discounts.

Notwithstanding the substantial gains just mentioned, the indications point to further heavy increases during the spring months. A few days ago the Toronto Globe drew attention in its financial page to the large credit transactions completed in the first week of April, and suggested that in consequence thereof the footings of the April bank statement would probably show a phenomenal rise. The transactions mentioned were the placing of \$50,000,000 to credit of the Imperial Munitions Board, and the payment of \$70,000,000 (proceeds of Canada's last loan in New York), by J. P. Morgan and Co., to the Bank of Montreal. Even when allowances are made for heavy withdrawals, by the Munitions Board and by the Finance Minister, these two operations would, in the natural order of things, exert a profound effect on the Canadian bank statement next published. In case of the munitions loan the procedure would be as follows: The banks would either discount paper for the Board to the extent of \$50,000,000 or they would buy outright the British Government bonds to that amount as offered by the Board — thus either the loans of the banks or their holdings of securities would show an increase of \$50,000,000. On the other hand the proceeds of the loan would go to credit of the Board in current account, thus swelling the deposits.

Now let us see how withdrawals would affect the totals. The Munitions Board gives cheques to the manufacturers who have supplied shells, etc.; and these manufacturers use the funds in part to pay off loans which they had obtained from the banks. So all withdrawals applied directly or indirectly in this way to the liquidation of loans would have the effect of cutting down both deposits and loans, and thus go to nullify the effect of the original credit transaction. Also any withdrawals made by the Munitions Board, or by manufacturers to whom the Board transferred the funds, for the purpose of making remittance to the United States or another foreign country would cut down the deposits of our banks while leaving the balance of their loans unchanged. In case of the other large transaction the process would be somewhat similar. At the outset the \$70,000,000 would appear as a new deposit, owned by the Dominion Government, in the books of the New York agents of the Bank of Montreal. On the other hand the Bank of Montreal would show an increase of a like amount in cash or its equivalent — the money perhaps figuring first as balances in New York banks and subsequently a part might possibly go into Wall Street call loans and part into gold coin held by or subject to the order of the New York Agents. Of these proceeds a considerable amount must be held to meet the unconverted portion of the \$25,000,000 note issue maturing 1st August. So, in case of withdrawals by the Finance Minister, any representing payments outside the country and any representing liquidation of bank loans in Canada, would cut down the total of deposits. Most of the other withdrawals, consisting of transfers of funds to the accounts of individuals in the same or another Canadian bank, would not affect the deposit totals in the bank returns.

The foreign paragraphs indicate clearly that as at the end of April there will be in evidence a further large growth of the deposits of Canadian banks. By virtue of its close connection with the Dominion Government the Bank of Montreal, naturally, will be expected to account for a considerable part of the increase. It is decidedly interesting to compare the gains in deposits of our leading banks with the gains reported by the leading national banks of the United States during the same period. The latest abstract of national bank reports issued by the Comptroller of the Currency is that for March 7th, 1916; and as the Canadian return for February 29th, 1916, is nearest in point of date, comparison will be

made with that return. The following table, compiled from a list published by the New York Financier, shows the gains made by each of the 12 United States national banks with deposits of more than \$100,000,000 (Thousands omitted):

Bank	Deposits, Mar. 7, '16	Increase for year	% of inc.
City, N.Y.	\$584,827	\$256,361	78
Commerce, N.Y.	265,309	100,697	61
Cont. & Com'l, Chicago	243,633	48,032	61
Chase, N.Y.	235,830	89,746	61
Mech. and Metals, N.Y.	179,360	61,225	52
Hanover, N.Y.	169,995	53,501	46
First, N.Y.	165,170	46,970	40
Park, N.Y.	163,178	51,143	46
First, C'go.	167,925	36,139	30
Shawmut, Boston	125,293	47,491	61
First, Boston	112,090	34,426	44
Amer. Exch., N.Y.	107,746	35,972	50

We have but three banks able to show deposits in excess of \$100,000,000. Their figures compare as follows with the record of the preceding year (Thousands omitted):

Bank	Deposits Feb. 29, '16	Increase for year	% of inc.
Montreal	\$256,179	\$44,782	21
Commerce	195,915	21,273	12
Royal	173,917	37,132	27

A short time before the war the Bank of Montreal was not so very far behind the National City Bank of New York in the matters of total assets and total deposits, but now the National City has more than double the amount of deposits held by our largest institution. The increase shown by the big New York bank during the past year is almost exactly equal to the total deposits held by the Bank of Montreal as at the end of February this year. Also in ratio of increase our banks are far behind the leading national banks. However, this is what was to be expected from New York's activity in financing the abnormal export trade of North America and in financing the numerous loans to belligerent and neutral nations. The National City Bank has taken a prominent part in this work and naturally the footings of its balance sheet show great expansion. This bank is fiscal agent for the Anglo-French loan commissioners, and it is clear that the big \$500,000,000 loan to Britain and France had a potent effect in increasing its deposits. After the loan was floated the proceeds lay with the hundreds of banks throughout the United States which had subscribed for the bonds. They were called up in portions of from 15 to 30 P.C. at intervals, the last call having been made a few weeks ago. Whenever a call was made the depository banks were required to pay the funds into the National City Bank at New York to credit of the commissioners. Altogether the City Bank received something like \$480,000,000 in this connection. The balances of the commissioners has always been high and even when they drew heavily on the funds, some of the money would stick in the central depository owing to its close connections with the big American industrial concerns to whom the payments were made.

The effects of the Anglo-French loan have been supplemented by numerous other credit transactions of smaller dimensions. There were the loans to Canada, South American countries, Italy and other European countries — all of which would tend to expand credits in New York. It is to be noted that the American banks in the above list are all national institutions. There are some very large state banks also — the Guaranty Trust Co., of New York, being the most conspicuous. What was said about our Canadian deposits applies with equal force to these great American gains — much of the increase represents temporary balances. One can easily imagine a change of circumstances which would perhaps effect very sharp reductions in the imposing totals of deposits. Being fully alive to this contingency the bankers on both sides of the boundary line are carrying abnormally heavy reserves of immediately available assets. Any other course would be almost suicidal.

DIVIDEND DISBURSEMENTS.

Interests and dividend disbursements in April, according to New York Journal of Commerce will reach \$136,696,750, against \$127,093,844 in May a year ago. Stockholders will receive \$52,696,750, against \$47,593,844, while interests payments will approximate \$84,000,000, against \$79,500,000 in the corresponding month a year ago.

The Prince Edward Island Development Commission.

(From Our Charlottetown Correspondent.)

As the first fruits of a non-political conference held on March 7th, in this city, and composed of representative men from all parts of the Island, a body known as the "Prince Edward Island Development Commission," has been organized.

The object of this commission is to inquire into, discuss, and make recommendations regarding matters pertaining to the welfare and development of this Province.

One of its functions is to gather information on various matters and act as an Advisory Board to the Government.

The commission consists of twenty members representing all sections of the Province.

At a meeting recently held a number of sub-committees were appointed to deal with the following: Agriculture, Education, Fisheries, New Industries, Immigration, Transportation, and Undeveloped Resources.

The matter of Technical Education is one which will receive special attention, and the committee will avail themselves of the services of two experts in connection with the Department of Agriculture, namely, Professor Reek, Director of Agricultural Instruction, and Professor McCready, Director of Rural Science. Professor McCready in addressing the committee, spoke of the illustrated supplements which are being issued in connection with the Montreal Journal of Commerce, recommending the use of these for the schools.

Under the head of "New Industries" the following branches are being taken up and will be reported on later: Manufacture of Glass, the utilization of our seaweeds and our mosses, and the possibilities of toy making on the Island.

The committee on Transportation are at present working on the following: Closer connection with through trains from Halifax to the West, when the car ferry begins running, cold storage for various products, special rates for distributing centres, better transportation facilities with Newfoundland, steamboat transportation and development of trade with the West Indies, and the appointment of a Prince Edward Islander by the Government to investigate trade and commerce with the West Indies.

The committee on fisheries will make a thorough inquiry into that subject, devoting special attention to the advisability of securing from the European countries, or from Newfoundland, and the other Maritime Provinces, men accustomed to deep sea fishing, especially of cod and mackerel.

DEVELOPMENT OF CANNING INDUSTRY.

When the canning industry was first established in Ontario corn for canning was cut from the cob by hand with a knife. It was then considered good work to put up 800 cans a day. A modern factory will put up 100,000 cans in a day with equal ease.

34 years ago. There are about 120 factories in operation at present, and these give employment to 14,000 people.

The total output of these factories is between three and four million cases, with 24 tins to a case.

This is sufficient to provide a trainload of 20 cars for each working day of the year.

The average yield of tomatoes is around 250 bushels per acre, and canners expect to pay 25 cents per bushel this year.

The average yield of corn runs at four tons of cobs per acre. This brings \$7 to \$8 per ton, and the corn fodder left is worth nearly as much.

The straw from which peas are taken for canning makes excellent feed. In some cases it is hauled back from the factories, dried and utilized as dry fodder. In some other cases it is put in a silo at the factories and sold back to farmers by the ton for winter feeding. In a few cases it is fed direct from the silo to stock owned by the canning companies.

Some 57 steamers have departed from Fort William since the opening, all loaded to capacity. Coal stocks were about depleted when navigation opened, but now there are hundreds of tons in shore, some twelve steamers now unloading.

Captains state that moving ice is making navigation difficult.

Coal Mining in Pictou County, N.S.

The Companies Vountarily Increase Wages.—Strike at the Acadia.

(From Our New Glasgow Correspondent.)

How to cope with the ever-increasing cost of living has been a serious problem in the coal mining districts of Pictou County, Nova Scotia, for a considerable time. Owing to the prevailing prosperity at all the munition plants of New Glasgow, Trenton and Stellarton, the pinch had been ameliorated to a large extent in the case of all munition workers, but conditions at the collieries were entirely different. The miners fully recognized the difficulties of their employers, and continued to bear their pinch with patience and fortitude. The Intercolonial Coal Mining Co., Ltd., who own the Drummond Colliery, were the first to publish the result of their consideration of the problem. After a consultation with a committee of the company's employes, consisting of Frank White (chairman), James Chabassol, F. Smith, Wallie Graham and Howard Salter, Mr. President Fergie wrote the following letter:

Westville, Nova Scotia, April 12, 1916.

To the Committee of Workmen,
Drummond Colliery:
Dear Sirs:—

Referring to our conversation this evening, I now confirm the proposition I then laid before you.

First—There shall be a general advance on all day labor at the rate of 6 per cent, with a minimum advance of 10 cents per day.

Second—There shall be a general advance at all mines of 6 per cent on all cutting and yardage rates, the minimum cutting rate to be 50 cents.

The above rates to become effective 16th April.

Yours faithfully,

CHARLES FERGIE,

President.

The effect of accepting these proposals is to give men who were getting \$1.60 per day \$1.70, while to miners in the No. 4 Mine are guaranteed a tonnage rate of 50c. per ton. In both cases, it will be noted, the effect slightly exceeds the specified 6 per cent. During the interview referred to, Mr. Fergie is reported to have said that he realized the increased cost of living demanded increased wages, but the company had had such hard sledding during the past few years that they were not in a position to deal as generously with the men as he would like to do. The matter had been carefully worked out, and he was prepared to submit a proposition which he trusted the men would approve of. Mr. Fergie further stated that if the men worked steadily, maintaining a good average daily output, which would gradually increase as the work developed, later on he would make another small advance if he saw his way clear to do so. The company was up against the necessity of putting up a new bankhead which would entail a heavy expenditure, and had not recovered by any means from the effects of the fire and other adverse conditions encountered in the course of last year and the year before that as well.

At a mass meeting of the employes hurriedly convened in the Muir's Hall, Westville, their committee reported, with the happy result that it was promptly resolved that the employers' propositions be accepted. As regarded the promise of further increase, the men readily acknowledged their share of the responsibility for fulfilling the conditions on which alone the company can be put in a position enabling it to realize their mutually cherished hopes. Taking into consideration the reduced profits as the result of the enhanced cost of production during recent years as compared with those halcyon times when big business was the order, the advance now granted must be considered a fairly substantial one, while the willing service assured by the happy relationship between employers and employes is an asset of incalculable value.

A former employe of the company, commenting editorially in "The Evening News" (New Glasgow), of April 13th, writes:

The announcement that the employes of the Intercolonial Coal Co., at Westville, have been granted a general advance in wages naturally opens up the question as to what the employes of the Acadia Coal Co. are going to do about it, particularly the low-paid men. It also puts the issue up to the company fairly as well.

Conditions are more favorable with the Acadia than was the case at the Drummond. The Acadia has not had any serious trouble for some considerable time, has been securing a big daily output at a lower production cost than the

Drummond, and has undoubtedly been making money for the past few months. Whilst the Board of Arbitration went out of its way to suggest that no further advances be asked for during the continuance of the war, it lost sight of the increase, the tremendous increase in the cost of living, on the one hand, and the increase in the selling price of coal on the other.

Under the circumstances the Acadia Coal Co. should be prepared not only to duplicate the action of the Intercolonial Coal Co., but to go one better. If the Acadia Coal Co. were to grant a general increase of ten per cent their men would rise up and call them blessed. If they could see their way clear to do even better than ten per cent for the laboring men and low-paid labor generally they would earn a reputation for liberality and consideration for their workmen which would go far to discount labor troubles in the future.

It is a point worthy of emphasis in passing, especially in view of later developments, that before the penning of the foregoing comments of an aspirant to a nomination as one of the County's candidates for a seat in the Provincial Legislature at the forthcoming election, the management of the Acadia Collieries had already taken the important initiative. And the very next day—Friday, 14th of April—there was posted at their collieries the following:

NOTICE!

Stellarton, April 14th, 1916.

To the Employes of the Acadia Coal Co., Ltd.

Owing to the increased price at present prevailing for coal, I am pleased to advise the employes of the Acadia Coal Co., Ltd., that the question of a general advance in wages has been submitted to our Board of Directors, and I expect at an early date to be in a position to announce the amount of such advance. In the meantime, I can assure all our employes that such advance shall take effect on and after April 16th.

(Sgd.) HECTOR PRUDHOMME,

Vice President and General Manager.

The same newspaper is authority for the statement that the foregoing notice "was read with decided pleasure by the men and boys employed there"; it also stated, what seemed to be at the time the view of everybody else concerned, that,

Whilst it is premature to comment on the advance until it is definitely known just what it amounts to, we feel it is only fair to commend the company for the step which has already been taken. The old proverb has it, "A stitch in time saves nine," and the Acadia and Intercolonial Companies have shown good judgment in readily recognizing the claims of their men for increased wages.

The cost of living has advanced to such a degree that increased earnings were absolutely necessary if people were to make ends meet, let alone save money for future needs. If the companies had held back until the men practically forced their hands, they would have to grant larger increases, and the chances are that friction would have developed, where all is harmony and good will to-day.

Admittedly, therefore, "all was harmony and good will" until "The Evening News" had quite a talk on Saturday with some of the workmen of the Acadia Coal Co., Ltd:

"I suppose the Acadia men are much pleased with the announcement that they are to get a general increase," said the News. "Yes," replied one of them, "we are, but we don't want to be staved off with any 6 per cent increase. We should have at least 10 per cent." "How do you make that out?" said the News' man.

"The case is not the same here as it is at the Drummond," was his answer. "The Drummond has been up against it for a long time now, and the men don't want to put the company out of business. That would be bad every way, but the Acadia Company is getting out a lot of cheap coal. They have the best coal on the market for house use, and that is the trade that they make their money on. I claim that the Acadia Coal Co. can better afford to give its men 10 per cent than the Drummond 6 per cent. Besides the Drummond have promised to come up a little later on." The others endorsed

his remarks, and the News practically concurred in what was said.

Thus we see that the man who, on Thursday, wrote that "it is highly gratifying to find such good feeling manifested on both sides," and, "if they exercise patience things will probably work out to their satisfaction," on the Monday following wrote that he "practically concurred" in the hostile attitude of the men's spokesman, and he even volunteered the advice that,—

If the company do not take kindly to the idea of giving 10 per cent, whilst a competing concern is only giving 6 per cent, the men might reasonably put up a counter proposition to the company. They might express their willingness to accept the same proportion of profits from the Acadia Coal Co., which the proposed increase will represent as far as the Drummond is concerned. Say for argument's sake that the increase in wages at the Drummond represents one-third of the company's profits. The Acadia men would be quite safe in agreeing to take the same percentage. There is not much doubt that as between the two propositions, the company would prefer to grant the 10 per cent.

In view of the enormous increase in the cost of living, and in view of the large increase in the cost of coal to the public the men have a good case.

The company have had more than their share of hard luck and the shareholders a long, weary wait for dividends. The men recognize these facts, and want to be reasonable. They got such raw hand-out, however, from the Board of Conciliation some time ago that they feel they are justified in asking for at least 10 per cent, and in so doing are not unreasonable in view of all the facts of the case.

We have quoted this so copiously on account of the effect which manifested itself on the next day, when (to quote the same authority again)—

THE ALBION MINERS ARE NOW OUT ON STRIKE.

The Albion Colliery of the Acadia Coal Co., Ltd., is idle to-day, owing to the fact that the men and boys refused to work this morning, and from no more reasonable a cause than that the said men and boys can see no good reason for withholding from them an announcement as to what the promised advance really amounts to. They have therefore dropped their tools and want a clear cut statement from their employers. When they know just what advance is to be obtained they will decide whether the Company's proposition is satisfactory or not.

Was there ever a strike upon a flimsier ground? They did not even know whether the promised announcement would be "satisfactory or not!" The little formality of a legal notice of warning is not worthy of consideration. Consequently, is it any wonder that the question is asked—why should the man who counselled the "exercise of patience" one day, so harshly incite a strike on the next? He has only himself to thank if people will think that the fact of his having conceived the notion of becoming a candidate for nomination for the Provincial Legislature has all to do with it. In fact, the Editor of the "Eastern Chronicle" (another New Glasgow newspaper), boldly asserts that—

"To ingratiate himself with these men he (The Editor of 'The News,') has lately published long articles showing why coal miners should get more pay. The plea was founded on the fact that coal was bringing more money. But was not the article made in his factory bringing more money when he refused the employes more pay? The money of coal companies is not his, so he could be generous with it. All he wanted was to be in a position, providing he secured the nomination, to read his editorials to the coal workers when he was asking them for their votes."

As stated in our issue of April 1st, we believe in helping and protecting to the utmost of our ability the miner when he is engaged in the dangerous occupation of producing one of our most indispensable raw materials, and that never more so than at the present moment, when the supply of coal is so essential a factor in the successful prosecution of this terrible war. But on the face of this evidence, the men and boys of the Albion Colliery were ill-advised in taking so extremely a drastic step for so flimsy a reason. And any would-be politician, who could descend to such a depth of political depravity in his greed for votes as to exploit his country's necessity by encouraging, if not inciting, any body of

(Continued on page 32).

Mentioned in Despatches

Hetty Green, generally regarded as the world's wealthiest woman, is ill at her home in New York. Mrs. Green, despite her eighty-one years, has managed her immense property in a way to excite the admiration and envy of the biggest business men associated with her. In many respects Mrs. Green is very much like the late Russell Sage, both being enormously wealthy and abnormally close-fisted. Mrs. Green was born in Massachusetts in 1835, the daughter of E. M. Robinson, who died leaving her his large fortune when she was thirty years of age. Mrs. Green married and has one son, but never entrusted her immense holdings to anyone's management, and until she received her stroke a few days ago personally superintended her large interests in stocks, bonds real estate and industrial corporations.

Lord Chelmsford.—"Uneasy lies the head that wears a crown," is being found true by Lord Chelmsford, the new Viceroy of India, even if his is only a vice-regal crown. The new head of the Indian Government reached Bombay a few days ago only to learn that his eldest son and heir had been severely wounded while serving under General Townsend at Kut-el-Amara on the Tigris. The ship on which Lord Chelmsford and his wife and three daughters traveled barely escaped a torpedo fired by a German submarine, the torpedo passing but a few feet from the boat. Lord Chelmsford is especially worried about his son as the difficulties of attending the wounded are very great and are apt to become worse unless the British are soon relieved. The new Viceroy, who is the third Baron Chelmsford, was born in England in 1863 and educated at Oxford, graduating as a lawyer. He later served as Governor of Queensland and of New South Wales.

John T. McCutcheon.—Cartoonists are playing an unusually large and important part in the titanic struggle now being waged in Europe. On the continent Raemaekers has become famous through his pictures depicting German atrocities. In England Partridge, of Punch, has added to his already enviable reputation. In the United States several men are doing remarkably able work, but probably the best known cartoonist is John McCutcheon, who is not only a cartoonist but a writer, a war correspondent, and a man who looks out on life from a philosopher's viewpoint. He went through the Spanish-American War, through the Boer War, saw the Russians and Japanese battling for supremacy in the far East, has dodged bullets in Mexico, hunted lions in Africa, and has been all over the battlefields in Europe in the present war. McCutcheon was born on a farm in Indiana in 1870, and was educated in Chicago. In addition to his cartoons he is the author of a score or more books. His cartoons have been described as a combination of editorials, sermons, humor and pictures all in one.

Edward Farrer, popularly known among newspaper men as "Ned," has just written "30" on his life. Farrer, who was 66 years of age, was probably the best known journalist in the Dominion, certainly to the men of the past generation. He has been described as a walking encyclopedia, as he had a most intimate acquaintanceship with both political parties and was thoroughly conversant with the economic and industrial movements which have taken place in Canada during the past half century. Mr. Farrer was born in England, of Irish parentage, and educated in Stoneyhurst, and at the Jesuit College in Rome. He came to Canada in 1870 when a lad of 15, and entered upon his journalistic career, serving on many of the leading papers in the Dominion, at one time being chief editorial writer of the Toronto Globe.

A story is told that Farrer once carried on a prolonged and acrimonious controversy in the Canadian press, writing a series of articles on one side of a question which were published in a certain journal, and another series of articles on the opposite side of the same question which were published in another paper. It was years afterwards before the public knew that the one man was the author of the two series of articles. Of late years Mr. Farrer has been a Free Lance, contributing many articles for leading newspapers and magazines, but retained his connection as Canadian correspondent of the London Economist.

Mr. Farrer was one of the few Canadians who believed that the future welfare of Canada would be best served by annexation with the United States.

Lieut. Ralph Burnett, of Montreal, who was recently reported wounded, is the youngest of three brothers, all of whom are at the front. Lieut. Burnett is the youngest son of the late J. Burnett, for many years president of the Montreal Stock Exchange. The young man was educated at the Royal Military College, Kingston, and at McGill. At the outbreak of hostilities he immediately went overseas and is now reported as being seriously wounded.

Bernard Partridge, the principal cartoonist of Punch, holds a warm place in the hearts of Canadians for the picture which appeared in Punch a year ago, showing Canada as the defender of the Empire. The picture was inspired by the heroic stand made by the Canadians at St. Julien, and the battle-scarred soldiers who holds the flag with one hand and his rifle with the other adorns many homes in the Dominion. Partridge was born in London in 1861 and early in life took up his work of decorative painting and illustrating books. He joined the staff of Punch in 1891, and for a number of years has been principal cartoonist of that famous English publication.

Major-Gen. Sir John Maxwell, who has just been given command of the British forces in Ireland entrusted with the task of putting down the rebellion there, was formerly in command of the British Army in Egypt. Like all British officers in the higher command Gen. Maxwell has seen service in a score or more wars and has served in many outlying parts of the Empire. He served in the Egyptian War, in the Nile Expedition, with the Egyptian Frontier Field Force, and in the South African War. He was born in 1859 and educated at Cheltenham College, joining the 42nd Highlanders as a young man of twenty.

The King of Siam is trying to get to the front page of the papers these days by announcing that he has had a nervous breakdown and must enter a sanitarium. The King of Siam, who is thirty-six years of age, has spent half his time in Europe, being educated at Eton, Oxford and at Sandhurst, with a polishing off in Berlin. In a measure, his education was an experiment, the effort being to graft Occidental ideas and civilization on an Oriental of a most reactionary type. On his return to Siam he introduced a lot of fantastic customs which were a sort of blend between the East and the West. As might be expected, this grafting of the Occidental on to the Oriental did not prove a success and it is not at all surprising that the King has had a nervous breakdown.

Mr. William Southam, who has resigned as a director of the Steel Company of Canada, is one of the best known publishers in the Dominion. As president of Southam's Limited, he controls the Hamilton Spectator, the Ottawa Citizen, and the Calgary Herald. Mr. Southam was born in Montreal in 1843, educated in London, Ont., and then commenced his business career as a practical printer, later purchasing and founding various newspapers. He is a director of several corporations such as the Hamilton Steel and Iron Company, the Mercantile Trust Company, the Dominion Power and Transmission Company, the Mercantile Trust Company, the Dominion Power and Transmission Company, and is president of the Hamilton and Fort William Navigation Company. He is a generous giver to all charitable work, especially anything in connection with the prevention of tuberculosis.

Lord Knutsford.—Everyone interested in hospital management, and since the outbreak of the war this number has been increased, will regret to learn that Lord Knutsford, known throughout Europe as the greatest expert on hospital finance and administration, has been seriously hurt through being run over by an automobile. He has probably raised more money for hospitals than any other man in the world, and as a matter of fact is known as the "Hospital Beggar." Lord Knutsford is a lawyer by profession, but a financier by preference. He is an exceedingly shrewd business man, as his record in connection with the East and West India Docks Company of London shows. When he joined the concern as a director it was in the hands of a receiver with one million dollars liabilities and no assets. To-day, as a result of his efforts, it is a prosperous concern. Every other activity, however, pales into insignificance in comparison with his work for hospitals.

A. J. Brown, K.C., who has just been elected to the board of Steel Company of Canada, is a good example of the corporation lawyer of modern times. Mr. Brown is not only an eminent lawyer and well known in legal circles throughout the Dominion, but is better known through his connection with various corporations. He is a director of the Royal Bank, of the Montreal Trust Company, of Tooke Bros., and now joins the board of the Steel Company of Canada. He was born at Windsor, Que., in 1861, and educated at McGill.

Mr. J. S. Ewart, of Ottawa, another of the legal lights associated with the Kyté shell charges, is best known to the people of the Dominion through his contributions to the press, although he is an eminent lawyer. Mr. Ewart sprang into fame through his "Kingdom Papers," in which he advocates Canadian sovereignty. He has also published a large number of legal works, and has written many essays dealing with Imperialistic and patriotic subjects. Mr. Ewart was born in Toronto in 1849, and educated at Ottawa. In recent years he has been practising his profession at the Capital.

Mr. Kenneth R. Macpherson, K.C., who died in Montreal a few days ago from an attack of pneumonia, was one of the best known lawyers in the Province of Quebec. He was born here in 1861 and educated at McGill University. Mr. Macpherson not only rose to the top of his profession, but had many outside interests which brought him in contact with the people. He was an artist of more than ordinary ability and was a regular exhibitor at the exhibitions of the Art Association and at the Royal Canadian Academy, and even exhibited at the Paris Salon. He was also an excellent musician. Mr. Macpherson was a member of the firm of Meredith, Macpherson, Hague, Holden, Shaughnessy and Heward.

Wallace Nesbitt, K.C., one of the battery of "quick firers," with which Sir Sam Hughes has surrounded himself, is one of the best known lawyers in the Dominion. Some years ago he was appointed a judge of the Supreme Court, but only held the job for two years when he decided that the salary paid and the lack of excitement connected with the office did not make the job worth while, and he quit, resuming his law practice. Mr. Nesbitt was born at Woodstock, Ont., in 1859, and practised first in Hamilton and later in Toronto. During recent years he has taken a very active part in matters connected with Imperialistic questions, and is one of the best known and most forceful speakers on matters connected with the well-being of the Empire.

Col. A. D. Davidson, Land Commissioner for the Canadian Northern Railway and generally regarded as the greatest land dealer on the continent, has just died at Rochester, Minn. Col. Davidson was born at Glencoe, Ont., in 1853 and after a public school education engaged in farming, later going into railroad work in the United States. Canadians know him best through his connection with the purchase of the Canadian Northern right of way into Montreal under Mount Royal, said to be the most costly undertaking in the Dominion of Canada. Several big deals were put through by Col. Davidson at Port Mann, B.C., and at Leaside, near Toronto. For many years he has been closely connected with the Mackenzie and Mann interests, being president of the Canadian Western Lumber Company, the Colonial River Lumber Company, and the Big River Lumber Company, and a director in several other corporations.

Mr. E. F. B. Johnston.—Lawyers are occupying a big place in the press of the Dominion at the present time. Not only are the law-makers known as the Dominion Parliament wrestling with various statutes, but a whole bevy of lawyers are seeking to bring order out of the chaos created by the Kyté shell charges. Mr. E. F. B. Johnston, one of the lawyers employed in this investigation, seems to be the particular storm centre—a controversy having arisen in regard to whom he represents and his status. Mr. Johnston is a Toronto lawyer, vice-president of the Royal Bank of Canada, President Title and Trust Co., and a director of the Standard Reliance Mortgage Corporation. In brief Mr. Johnston is a big business man as well as one of the outstanding lawyers in the Dominion. He is probably Canada's best known criminal lawyer, and it bodes ill for any evil-doer when this forensic investigator gets going. There has hardly been a big case in the history of the Dominion for the past score years in which he has not been prominently identified. Mr. Johnston was born in Scotland in 1859 and called to the Ontario Bar in 1880.

AMONG THE COMPANIES

STEEL COMPANY OF CANADA.

At the annual meeting of the Steel Company of Canada, held a few days ago in Hamilton, there were a number of changes made in the personnel of the board of directors.

Mr. C. S. Wilcox, the former president, is now chairman of the board, while Mr. Robert Hobson takes over the presidency. Mr. A. J. Brown, K.C., of Montreal, succeeds Mr. Wm. Southam, of Hamilton, as a director. Very little was said about dividends on the common stock, but the impression left with shareholders was that something would soon be done by the incoming board.

Mr. Wilcox said, in part:

"Last spring, owing to trade conditions at that time, we decided that it would be wise to renew the \$1,250,000 of convertible notes. The first instalment of these amounted to \$400,000, matured on July 1 of last year. We succeeded in extending these notes for three additional years. Last November we paid three and one-half per cent back dividends on preferred stock and will pay on the first of May next the balance of the unpaid dividends on the preferred. We have paid off all our indebtedness to the banks. The sinking fund provided by the trustees becomes operative July 1 next. We then have to pay to the trustees for that purpose 2 per cent of the amount of the bonds outstanding, and each subsequent year thereafter we will have to pay 2 per cent.

"As to the future, we must remember the directors and officers have serious problems to consider. The cost of manufacturing has materially increased, prices for war munitions have been reduced, and the Government has imposed a tax on our war profits, the amount of which cannot now be determined. This year we will have a steel production much larger than we have ever sold before, and it may be advisable for us to put in additional finishing plants at some points to take care of this extra tonnage."

Dealing with operations, Mr. Hobson said:

"Owing to increased business, we installed another open hearth furnace, in line with our old furnaces, and we thought at the time that this would be sufficient to meet our needs. The orders that came in on us showed, however, that we would have to increase our facilities still further. We decided, therefore, to install three new open hearth furnaces. When we get both these additions in full operation we will be turning out about twelve hundred tons of steel per day.

At Brantford and Montreal extensions were made for the manufacture of munitions, of which the company has plenty of orders to fill. We have shipped nearly four million forgings for shells and blanks for high explosive shells and would say that we are away ahead on delivery of everything asked of us by the Imperial Munitions Board."

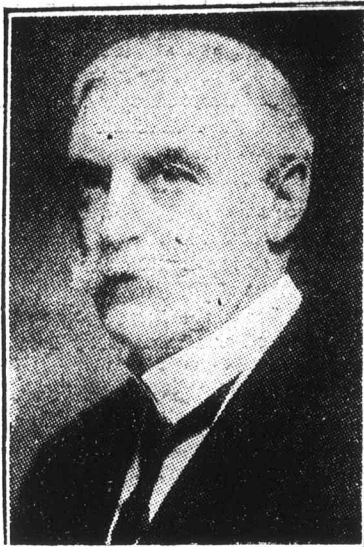
He pointed out that railways and agricultural implement manufacturers are now buying freely. In this connection he pointed out that the railway companies were again coming into the market, and were realizing that there would likely be a shortage of steel in 1917. They were already placing orders for rails for next year, a thing that had never happened in the past at such an early period. They were also looking up their future car supply.

All these factors would mean big business for the Steel Company, and the entire organization was ready to take care of it.

The sales of the Steel Company of Canada last year were distributed as follows: Domestic sales 55 per cent, export business and war munitions 45 per cent. Total output with extensions completed 1,200 tons of steel per day.

The following is the board of directors for the following year: Charles W. Alexander, Providence, R.I.; Cyrus A. Birge, Hamilton; A. J. Brown, K.C., Montreal; Lloyd Harris, Brantford; Robert Hobson, Hamilton; W. D. Matthews, Toronto; Ross H. McMaster, Montreal; Hon. John Milne, Hamilton; Sir Edmund B. Osler, M.P., Toronto; F. H. Whitton, Hamilton; C. S. Wilcox, Hamilton.

Following the meeting of shareholders, the directors met and chose the following officers: C. S. Wilcox, chairman board of directors; Robert Hobson, president; C. A. Birge, vice-president; F. H. Whitton, general manager; Ross H. McMaster, assistant general manager; H. H. Champ, secretary-treasurer; C. F. Whitton, assistant secretary; H. S. Alexander, assistant treasurer.



MR. ROBERT HOBSON,
Who has just been elected President of the Steel Company of Canada.

PRICE BROS. & CO.

The financial report of Price Brothers and Company, Limited, for the fifteen months, ended February 29, 1916, presented to shareholders at the annual meeting to-day, shows profits amounting to \$1,032,185. After interest on bank loans, bond interest and sinking fund requirements, the net profits were \$383,538. Added to this is the balance at the credit of profit and loss account in November, 1914, of \$1,010,031, which brings the total net balance carried forward, \$1,403,569.

Net profits for the twelve months ended November 30, 1914, were \$303,779.

Sir William Price, in his report to the shareholders, points out that experience has shown that the date of closing accounts in the past, November 30, was unsatisfactory owing to the position of operations at that season of the year, and as a result it was decided to advance the date to the last of February. It is also pointed out that in the three months added, December, January and February, no profits accrued in the lumber department, but the overhead charges and salaries have to be met, the result being that the books do not show any increase in net profits for these months, so that the figures shown in the profit and loss account, which is practically 8 per cent on the common stock, are really less than the result of twelve months' operations.

The balance sheet shows current assets at \$2,524,920, against \$2,803,528 last year, while current liabilities are \$1,521,866, against \$2,247,007 a year ago. Total assets are \$17,023,872. Cash on hand has increased from \$19,498 to \$38,354.

A. MACDONALD CO.

Shareholders of the A. Macdonald Company recently held a meeting in Montreal and protested against the cutting down of the company's common stock capitalization from \$3,000,000 to \$1,000,000.

Shareholders of the company who are opposed to the stock reduction and wish to see that their objection is registered can accomplish this by securing from any member of the Montreal Stock Exchange the necessary proxy blank, all brokerage offices having supplies of them. Prompt action is necessary if the protest is to be made effective.

CANADIAN CHINA CLAY CO.

Alex. Osali has been made president of the recapitalized Canadian China Clay Co., the board remaining practically the same as old company. Besides Mr. Osali among those interested are: C. G. DeTonancour, A. G. Gardner, J. C. Broderick, Andrew Shearer, Sir Wm. Mackenzie and Sir Donald Mann. Some recent experiments with the clay in the manufacture of coated paper are said to have had very satisfactory results.

UNITED STATES STEEL CO.

U. S. Steel earned in the first quarter of 1916 an income of \$60,713,624, after providing for repairs and maintenance to plants and interest on bonds of subsidiary companies. The report just issued showed the greatest quarter in the corporation's history, net earnings exceeding the previous record, established in the last quarter of 1915, by \$9,480,836.

Net earnings by months:

	1916.	1915.
January	\$18,794,912	\$1,687,150
February	19,196,396	3,638,578
March	22,722,316	7,132,081

Totals \$60,713,624 \$12,457,800

At last quarter's rate of earnings the corporation is piling up a revenue equivalent to 30.84 per cent a year on the \$508,400,000 common stock, after making allowances for all charges and reservations and the preferred stock dividend. In the preceding quarter the rate was equal to slightly less than 24 per cent per annum, and in the whole of 1915 a little less than 10 per cent was earned for the junior shares.

The regular dividends were declared.

United States Steel Corporation now employs about 43,000 more men than a year ago, with wages 10 per cent higher. Company will spend about \$84,000,000 in additions in next year. About one in five of employees or 50,000 in all are stockholders.

BETHLEHEM STEEL CORPN.

Net earnings in March approximated \$5,500,000, a new high record. This is at rate of \$66,000,000 a year, or nearly 4½ times the par value of the common stock outstanding.

Company now has sufficient business on the books to keep munitions and steel plants busy for the rest of the year.

Recently Bethlehem Steel sub-let contracts to a number of companies for shell parts on a new order from the allies. While no official statement has been issued as to extent of this order, the steel trade estimates its value between \$25,000,000 and \$35,000,000. The order means at least two months' additional work for Bethlehem shell plants, and should net the company an additional profit of between \$5,000,000 and \$10,000,000.

THE DULUTH-SUPERIOR TRACTION CO.

Comparative weekly statement of gross passenger earnings, for month of April, 1916:

	1915.	1915.	Per cent of Inc.
			Incr. or Dec.
1st week	\$25,727.40	\$21,462.90	\$4,264.50 19.9
2nd week	23,995.62	20,108.17	3,887.45 16.3
3rd week	24,487.30	20,316.06	4,171.24 20.5
Month to date	\$74,210.32	\$61,887.13	\$12,323.19 19.9
Year to date	\$396,024.59	\$348,224.37	\$47,800.22 13.7

THE PORTO RICO RAILWAYS COMPANY, LIMITED.

Comparative statement of earnings for March, 1916:

	1915.	1916.	Inc.	P.C.
Gross	\$68,593.62	\$76,491.31	\$7,897.69	11.51
Net	30,616.89	39,629.00	9,012.11	29.43
For Three Months:				
Gross	\$195,508.66	\$212,375.48	\$16,866.82	8.63
Net	94,136.03	109,703.56	15,567.53	16.54

LA ROSE MINE.

The La Rose quarterly statement as of March 31 shows a cash surplus of \$849,181 and ore in transit and ready for shipment, \$131,986. Current liabilities are \$40,435, leaving a balance of \$940,752. The dividend of one per cent just paid represents a disbursement of \$875,000.

AMONG THE COMPANIES

THE HOLLINGER MERGER.

The activity in Hollinger stock, which was so marked during recent weeks has been explained.

Hollinger Gold Mines, Limited, Acme Gold Mines, Limited, Millerton Gold Mines, Limited, and Claim 13,147 of Canadian Mining and Finance, Limited, all situated at Porcupine, two of them producers of yellow metal, are to be amalgamated with a nominal capital of \$25,000,000, of which \$24,000,000, in \$5 shares, will be issued, \$1,000,000 in shares remaining in the treasury for the purposes of Hollinger Consolidated Mines, Limited, which will be the title of the new corporation.

The calls for the annual meeting of the Hollinger Company, and the special meeting at which the proposal to merge these mining companies will be formally submitted, will be issued in a day or two. Accompanying the calls complete statements will be mailed, setting forth the basis of the amalgamation and the advantages to be gained by it, together with the allocation of the capital of Hollinger Consolidated, as follows:

	Shares.	Par Value.
In Treasury	200,000	\$ 1,000,000
To Hollinger	2,400,000	12,000,000
To Acme	2,100,000	10,500,000
To Millerton	200,000	1,000,000
To Can. Min. & Fin. Co.	100,000	500,000
	5,000,000	\$25,000,000

According to the arrangement, Hollinger holders will receive four shares of stock in the consolidated company in exchange for each share of their present holdings, the same rate of dividend as they are now getting, and besides "increased flexibility in a stock having a smaller market value."

C. P. R. EARNINGS.

Results for nine months of C.P.R.'s fiscal year, completed with the return for March, just issued, show that while the volume of gross business fell some \$10,000,000 below the high record of 1912-13, net profits for the period were \$2,260,000 ahead of the best in the history of the company.

Comparisons with a year ago continue spectacular, gross earnings revealing a gain of \$17,559,981, or 22.9 per cent, and net earnings a gain of \$11,664,429, or 45.3 per cent.

A tabulation of the company's record for nine months over a period of five years, showing the sharp upturn in earnings in the boom years of 1912 and 1913, the subsequent slump in the 1914 depression, and the new upturn which has carried net to a new high record level follows:

Nine months.	Gross.	Net.
1915-16	\$94,235,802	\$37,430,268
1914-15	76,635,820	25,765,838
1913-14	100,244,012	32,782,426
1912-13	104,065,377	35,169,012
1911-12	89,346,372	31,655,373

NATIONAL BRICK CO.

The annual meeting of the shareholders of National Brick Company has been called for May 17, and while there has been some improvement in the brick business within the past month or two this will not be reflected in the statement for the fiscal year which ended February 29, which was just about as dull as the preceding year.

SHERBROOKE RAILWAY & POWER CO.

Sherbrooke Railway and Power continues to show an improved position as earnings, the report for nine months, July to March 31, comparing as follows with the preceding year:

	1916.	1915.	Inc.
Gross	\$101,673	\$91,194	\$10,479
Operating	51,844	49,822	2,022
Net	\$49,828	\$41,371	\$8,457



SIR WM. PRICE,
President Price Bros., Limited, whose annual report has just been issued.

BRAZILIAN TRACTION CO.

The net earnings of the Brazilian Traction Company for the month of March are reported at 3,717,000 milreis, which, according to large interests in the company, is sufficient to meet the capital charges and dividend requirements for the period on the average rate of exchange during the month.

The gross earnings, which are reported at 6,711,000 milreis, show an increase of 416,090 milreis. Owing to the season, operating expenses were increased, however. They were for the month 2,994,000 milreis, the increase over last year being 287,660 milreis. The aggregate gross earnings from January 1 show an increase of 1,131,000 milreis, and aggregate net an increase of 608,100 milreis.

NATIONAL BRIDGE BONDS.

Although no definite figures are available as yet, it is understood that a very large proportion of the National Bridge bondholders have accepted the Dominion Bridge offer of 75 for their bonds, which expired at noon on Monday.

The bonds have been coming in steadily since Dominion Bridge made its offer about two months ago and it is said that an estimate of 70 per cent as the amount turned in would be quite conservative. Under the Dominion Bridge offer of 75, bonds were to be turned in with all unmatured coupons attached. This, of course, excluded coupon No. 10, payment for which is now to be made, with 3 per cent interest for the period of delay.

ONTARIO NATIONAL BRICK CO.

It is understood that plans are under consideration for the re-opening of the Ontario National Brick plant, which has been closed down since the late summer of 1914, and that an announcement to that effect may be expected shortly. Activity in the building trades is still considerably below normal, but the re-opening of the Ontario plant, together with the National Brick Co.'s larger operations here, are both indicative of some improvement over conditions this time a year ago.

A SEWING MACHINE MERGER.

The Canadian White Sewing Machine Company, a branch of the White Sewing Machine Co., of Cleveland, has acquired the plant and business of the Raymond Sewing Machine Co., which has been established in Guelph for forty years. The present plant will be used, and the capacity doubled while building operations for the new plant in St. Patrick's Ward are under way. The company has been deeded a site there by Mr. J. W. Lyon of twenty acres, and the new plant will cost in the neighborhood of a quarter of a million dollars. When completed it will give employment to about seven hundred men, nearly all skilled mechanics.

DETROIT UNITED RAILWAY.

Detroit United Railway stock has been placed on a 7 per cent dividend basis, being an increase of 1 per cent from the rate paid for the last three years.

Large earnings and more friendly relations between the company and the city will be accepted as the main influences in the action taken by the directors yesterday. Last year, before deducting reserve appropriation, come equal to 15.7 per cent on the stock, or more than 2½ times the dividend requirements. On the earning record by itself the company would have been justified in increasing the dividend a year ago, or sooner, but uncertainty as to the negotiations then pending between company and city for the purchase of part of the system by the latter was naturally a restraining influence. Agitation for civic ownership has been dying down and with earnings showing steady gains — the past quarter's gross receipts were nearly 24 per cent ahead of the same quarter in 1915 — the directors have evidently decided that there was no good reason why the shareholders should not have a larger share in the profits of the business.

The company has had a rather chequered dividend career. The sudden passing of the dividend in the autumn of 1907, after the rate had been increased from 4 to 5 per cent between 1904 and 1906, was followed by a market smash which has not yet been forgotten. From a high of 84½ that year the stock broke to as low as 23½ in October. The earnings of the company were not unsatisfactory, but its finances had weakened and surplus profits were required to strengthen the position. Hence the suspension of dividends from November, 1907, until March, 1911, when dividends were resumed at the rate of 5 per cent per annum. That action was followed by an increase to 6 per cent in March, 1913, a rate which now gives way to the 7 per cent basis on which the stock was placed yesterday.

High and low prices for the stock and dividends paid since 1904 are given in the following table:

Year.	High.	Low.	Div.
1916	99½	69½	*6%
1915	73	62	6
1914	73½	62	6
1913	81	62½	6
1912	76½	55½	5
1911	76½	63½	5
1910	70	40½	0
1909	71½	55	0
1908	55½	31½	0
1907	84½	28½	2%
1906	102	79½	5
1905	97	75½	4½
1904	80	60½	4

*Indicated.

Further details of Detroit United Railway's earnings since the opening of the new year show that net income after deduction of interest, taxes, etc., was approximately 100 per cent higher in the first three months than in the corresponding period a year ago. Net income for the three months amounted to \$679,508 against \$341,870 in the same period 1915, an increase of \$337,638, or exactly 99 per cent.

Before appropriations for depreciation reserve this would represent earnings at the rate of about 22 per cent per annum on the company's stock.

RAILWAY EARNINGS.

Gross railroad returns for the third week of April, completed with the C. N. R. statement just issued show a total of \$4,036,961 for the three big Canadian systems, an increase of \$1,101,889, or 37.5 per cent.

The increase falls about half way between the increase in the first week of the month — which was 33.5 per cent — and that of the second week — which was 40.9 per cent.

Gross earnings for the third week, and comparisons with the same week a year ago, follow:

Company.	Earnings.	Increase.	P.C.
C. P. R.	\$2,343,000	\$720,000	44.4
G. T. R.	1,059,661	189,889	21.9
C. N. R.	634,300	192,000	43.4
Totals	\$4,036,961	\$1,101,889	37.5

LETHBRIDGE RAILWAY.

Gross earnings for the Lethbridge Municipal Railway, from April 1st to 7th, amounted to \$975.05.

BANK OF MONTREAL

Established 1817

Capital Paid Up	- - - - -	\$ 16,000,000.00
Reserve Fund	- - - - -	16,000,000.00
Undivided Profits	- - - - -	1,293,952.00
Total Assets	- - - - -	302,980,554.00

BOARD OF DIRECTORS:

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Head Office, MONTREAL

General Manager, SIR FREDERICK WILLIAMS-TAYLOR, LL.D.
Assistant General Manager, - - A. D. BRAITHWAITE, Esq.

Bankers in Canada and London, England, for the Government of the Dominion of Canada.

Branches established throughout Canada and Newfoundland; also in London, England, New York, Chicago, and Spokane.

Savings Department at all Canadian Branches. Deposits from \$1. upwards received and interest allowed at current rates.

A GENERAL BANKING BUSINESS TRANSACTED

6th Overseas Universities Company, C.E.F.

Reinforcements for the Princess Patricia's Canadian Light Infantry.

Canadians, of whatever nationality, thrill as they recall the wonderful record made by the Princess Patricia's Canadian Light Infantry at Festubert, at Ypres, and many other battlefields in Belgium; how, in the face of overwhelming odds, they held their positions by their courage, steadiness and dogged perseverance.

For nearly a year the P.P.C.L.I. (as the Princess Patricia's Canadian Light Infantry is known in Military Circles) has been reinforced by a steady flow of recruits of the very finest of our Canadian manhood. These recruits, many now veterans, are determined that this fine battalion shall not lose its high record, but with their help shall have added honor and prestige in the future.

The reinforcements have been drawn from all over Canada, and the Universities of Canada, have made this Battalion their care. Already 1,350 officers and men have gone forward under the title of the Universities Companies and are doing their "bit" at the front or at Shorncliffe. Five Universities Companies have left Canada.

The number of men volunteering from the West has been simply wonderful. So much so, that the authorities of the Western Canadian Universities decided to send overseas a battalion composed of students of the Western Universities and members of the teaching staff. This Battalion is now recruiting and is called the 196th Western Universities Battalion, C.E.F.

The object of the Western Universities Battalion and of the Universities Companies is the same in that it provides a means for men to get to the front in congenial company, but though their paths are parallel, they are not identical in this respect. The Western Universities Battalion is for Overseas Service as a Battalion, and the Universities Companies are reinforcing the Princess Patricia's Canadian Light Infantry.

The P.P.C.L.I. is now composed mainly of men from the Universities Companies and the steady flow of reinforcements for this Battalion must not be allowed to stop, and further the standard of the recruits must always be the "best that Canada can offer."

There are many men of the University type whose heart's grow warm as they read and hear the name of the Princess Pat's, for they have brothers, relatives and friends in it, and they wish they could have an opportunity of joining it. To these men the news that a Sixth Company is being recruited under Major McKergow, at McGill University in Montreal, will be welcome.

The Sixth Company is in comfortable quarters at McGill University and has all the advantages of the

use of the McGill Campus and the University Building, including the McGill Students Union.

The Universities Companies have been almost overwhelmed with the hospitality of the residents of Montreal and its suburbs.

The training of the Companies has been of an exceptionally efficient character, and has been of a nature to develop specialists, some at Musketry, others at Signalling, others at Tactical Exercises, and again others in Physical Training, Bayonet Fighting and Bombing.

The great advantage of these Companies is that men of the same social status go forward together, and join a Battalion in which they will find a large number of congenial spirits. Another advantage is the rapidity with which they go forward to the front. The training in Montreal usually takes about three months, and after two months further training in England they take their place in the firing line without unnecessary delay. The reason for this is the fact that these Companies reinforce a Battalion already at the front.

A considerable number of the men who have joined the Universities Companies have, upon reaching England, obtained commissions in the British and Canadian units. It is, of course, impossible to make any guarantee, as to promotion of this character, but the nature of the training received and the reputation of the Universities Companies make the chances of promotion excellent for the type of men that the Universities Companies accept.

Intending recruits are examined locally by an Army Medical Officer, receive their transportation to Montreal, and immediately obtain their uniform, and start their training without delay. Readers are invited to make known to their friends this opportunity. The Officer Commanding, 6th Overseas Universities Company, McGill University, Montreal, will be glad to supply any further information that may be required.

BRITAIN'S REVENUE.

Estimated revenue for the year, based on proposals in the budget, is \$2,545,000,000. Actual revenue for the year (based on old system of taxation) is \$1,685,000,000, which exceeds by \$160,000,000 the estimate by Mr. McKenna in September.

Total indebtedness March 31 was \$10,570,000,000 of which \$1,844,000,000 had been advanced to allies. The deficit was placed at \$6,110,000. Total financial assistance given allies is \$1,565,000,000, against estimate of \$1,772,500,000.

ASK ANY SUCCESSFUL MAN.

I should like to have this carved on my tombstone: Here lies a man who edited a magazine; he made many mistakes, but we forgive him for them, because years after year he preached Thrift to his readers, he encouraged several million people to save money.

We are not a thrifty people, as compared with other nations.

Belgium before the war was known as a "country without paupers"; of France's 10,000,000 voters, nine-tenths are owners of government bonds. There are 12,500,000 savings accounts in France, and half of them little ones — less than \$4.

But only one in ten of us have saving accounts; the rest of us are "good fellows."

I attended the funeral of a "good fellow" recently. He had always "lived up to his income." When the company for which he worked was reorganized ten years ago, the president said to him: "Have you a thousand dollars?"

A thousand dollars put into that business ten years ago would be earnings a competence for his widow to-day. But the "good fellow" didn't have it; he had never learned to save. And now we are raising a fund to buy his daughter a piano, so that she can give music lessons.

I came away from the funeral with another man whose salary had never been as large as the "good fellow's. We rode in his automobile."

"Do you know how I paid for this automobile?" he asked. "Out of the dividends that came to me last year from my savings. When I was getting eighteen dollars a week, my wife took two of it every week and put it into the savings bank, where he couldn't touch it. When I was raised to twenty-five, she raised the savings fund to five a week; and so on. I'm forty-seven years old now. I've never had a big salary, as you know; but I could retire to-morrow, if I wanted to, and have more than thirty dollars a week in dividends from the money I've saved. I tell you, I don't know anything that makes a man face the world with so much confidence as the knowledge that he has made himself independent of it."

There you have them side by side — the "good fellow" and the "wise fellow." All of us belong in one class or the other. Which class are you in?

"If you want to know whether you are going to be a success or a failure in life," says James J. Hill, "you can easily find out. The test is simple and infallible. Are you able to save money? If not, drop out. You will lose. You may not think it, but you will lose as sure as you live. The seed of success is not in you."

There is not a single man, woman or child in America who cannot save money in 1916, if he or she will set out determinedly to do it.

"Ah," you object. "How can you say that? You do not know my circumstances."

No, I do not. But if circumstances dictate your life, this editorial is not for you. You won't succeed anyway; you do not count.

"Circumstances!" exclaimed Napoleon. "I make circumstances."—(Bruce Barton in Every Week).

CHILI'S NITRATE INDUSTRY.

Production and exportation of nitrate of soda in northern Chili continue to show substantial increases. For purposes of comparison, the figures below give production and exports for January, 1916, compared with the same period in the three preceding years. The quantities are given in Spanish quintals of 101.41 pounds:

	Production. Quintals.	Exports. Quintals.
1916	5,641,671	6,247,402
1915	2,082,549	1,897,895
1914	4,584,495	4,779,862
1913	5,163,925	6,015,312

The figures above show the great recovery in the nitrate industry from the depression following the opening of the war. Shipments would have exceeded the amount stated had more vessel room been available.

A CRIME AGAINST CIVILIZATION.

The time is coming when neutrals will rise up in a body and demand that torpedoing of ships be stopped. It is a crime against civilization, not only in the inhumanity of it, but in the destruction of the agencies of commerce upon which the world must rely for commercial interchange. It is indefensible from every point of view save the ruthless subordination of everything in war to the demands of success.

—St. Louis Star.

IMPERIAL BANK OF CANADA

HEAD OFFICE, TORONTO

Capital Paid up, \$7,000,000 Reserve Fund, \$7,000,000
 PELEG HOWLAND, President E. HAY, General Manager

DRAFTS, Money Orders and Letters of Credit issued available throughout the World.

Dealers in Government and Municipal Securities.

Dealers in Foreign and Domestic Exchange.

Savings Department at all Branches.

Interest Credited Half-Yearly at Current Rates.

GENERAL BANKING BUSINESS TRANSACTED

The March Bank Statement

More than ordinary interest attaches to the March bank statement as that marks the close of Canada's fiscal year. Call loans in Canada increased \$13,501,000 during the year, while the gain in March alone was \$653,000. These gains are probably due to the activity of the Canadian stock markets during that period. Current loans show a gain of \$9,000,000 in March as against a shrinkage of \$2,500,000 in March of last year.

The statement for March is complicated by the advances to the Munitions Board made by the banks jointly and also by the payment into one bank of the proceeds of the \$75,000,000 loan floated in New York recently. There is no evidence, however, as to under what head the last-named transaction appears in the statement.

The principal items for the month of March, the changes in the month and the year ending with March are:—

	March 31, 1916.	Changes During March, 1916.	Changes Dur. Year Ending March 31, 1916.	Changes During March, 1915.
Note circulation	\$ 114,804,604	+\$ 1,276,867	+\$ 18,238,060	—\$ 1,122,846
Reserve fund	113,022,936	+ 565,600	— 204,721	+ 750,818
Demand deposits	389,165,388	— 660,279	+ 49,651,102	+ 3,099,107
Notice deposits	738,169,212	— 9,926,603	+ 61,293,422	+ 5,787,177
Total deposits in Canada	1,127,334,600	— 10,586,882	+ 110,944,524	+ 13,886,284
Deposits elsewhere	120,678,959	+ 4,003,931	+ 22,940,961	+ 5,645,964
Current coin	66,372,906	— 1,804,441	+ 701,631	— 453,756
Dominion notes	151,203,493	— 2,227,512	+ 13,796,472	— 1,314,850
Deposits central gold reserve	12,010,000	+ 1,550,000	+ 6,460,000	+ 300,000
Call loans in Canada	81,747,512	— 201,613	+ 13,501,251	+ 653,492
Call loans outside	141,889,989	+ 2,751,338	+ 39,951,302	+ 12,047,703
Current loans in Canada	770,139,526	+ 9,266,345	+ 1,000,643	— 2,496,324
Current loans outside	52,705,827	— 3,393,892	+ 10,960,090	— 1,915,642
Total liabilities	1,462,825,516	— 10,174,584	+ 161,961,879	+ 19,734,192
Total assets	1,705,836,892	— 9,487,811	+ 160,113,328	+ 20,671,479

GOOD-NIGHT FOR HIM.

There is an officer in one of the Eastern banks whose journey from one institution to another was for some years more rapid than his progress toward preferment, honors and a big salary in any one institution. At last he thought he was very comfortably settled in a bank having a fine new building, with plenty of marble and bronze fittings, easy and luxurious furniture and appointments, and a president of the old-fashioned, dignified side-whiskers type. A spirit of courtesy pervaded the establishment, and it was the custom of the employees before leaving the bank after their day's work was done to file through the officers' rooms and say "good-night" to whoever might be remaining on duty there. "This always seemed a useless proceeding to me," says the banker who tells this story on himself. "In fact, there was a big solemn-looking clock in one corner of the main banking room, and I was always so busy watching for the hour of three to arrive that I never could see any point in wasting time in saying 'good-night' to anybody.

"One afternoon, just before the stroke of the magical hour, when I was shaping my desk up for closing, the venerable president passed my window, and bowing with more than even his wonted courtesy, said 'good-night' to me, placing as I thought an altogether unnecessary stress on the 'night.'

"A few minutes later I was called in before the cashier and dismissed from the bank's service.

"What's the matter?" I asked.

"Nothing," said the cashier; "you're as regular as the clock; but this bank is more than a fine piece of mechanism. It's all that plus human personality. You haven't time to say 'good-night' to your associates, so the bank says 'good-night' to you."

"I've learned a few things since those days," said the banker. "And now don't watch the clock any more. Besides, all our employees and officers say 'good-night' to each other before leaving the bank." —The Bankers Magazine.

PERSONALS.

Lieut. C. M. Horsey, who was killed in action a few days ago was the son of the London manager of the Dominion Bank. He had been severely wounded at Festubert and was only back at the front a few days when he met death.

J. M. Davidson, who has been acting as manager of the Saskatoon branch, of the Bank of British North America, for the past six months, has been appointed manager at Selkirk, Man. G. H. Crimes has been moved from Semans to manage the Saskatoon branch.

R. S. Cutbill, manager of the Upper Bridge branch of the Imperial Bank, Niagara Falls, died this week of typhoid fever, after an illness of several weeks' duration.

William T. Shannon, manager of the local branch of the Standard Bank, Chatham, has died after a short illness.

THE APRIL STOCK EXCHANGE.

The stock market during the past week did not sustain the activity of the previous week, although it remained strong and some further advances were made by a few specialties.

The month of April was one of the most active months in the history of the Montreal stock exchange; Steel Company of Canada being a leader with a total turnover of over 122,500 shares. Other active issues during the month were: Dominion Steel Corporation, 32,500 shares; Canada Cement, 22,800; Canada Steamship Lines, 16,000; Detroit United, 15,300; Quebec Railway, 26,000, and Dominion Bridge with 10,000 shares.

Comparisons of the volume of business transacted month by month through the current year are presented in the following detailed table:

Month.	Shares	Mines	Bonds
January	131,714	10,117	\$524,150
February	116,211	6,000	1,333,200
March	209,249	1,876	789,900
April	333,902	6,750	866,150

Month.	Shares.	Bonds.
January	10,683	\$16,900
February	3,361	30,480
March	3,408	166,515
April	6,604	88,000

THE LONDON STOCK EXCHANGE.

War effects are vividly shown in the annual report of the London Stock Exchange, reflecting a pronounced decrease in revenues and membership. Gross receipts dropped from £296,800 in 1914-15 to £169,900, the chief decrease being in members' and clerks' subscriptions from £223,600 to £152,100. This was mainly due to concession totalling £55,400 allowed to those on military service. Principal items compare the year ended March 25:

	Net rev.	Div. %	Sub. fees	Memb's	Cl'ks
1916	£ 33,600	15%	£132,100	4,293	2,350
1915	159,700	53%	223,600	4,884	2,383
1914	194,700	77	231,500	5,032	2,366
1913	218,900	80%	235,600	5,104	2,305
1912	211,600	77	234,800	5,146	2,189
1911	240,600	91.2.3	236,100	5,203	2,094

DISTANCE OF MARKET.

From a study of 650 farms in Johnson county of that state the Missouri Experiment station concludes that location is more important than crop yield as a factor in land values. Here are the figures: Seventy-nine farms within two miles of market averaged in value \$78.70 per acre; 183 farms, two to four miles from market, \$70.20 per acre; 126 farms, four to six miles from market, \$60.90; 113 farms, six to eight miles from market, averaged \$58.20 per acre. An unmentioned but important factor is condition of the roads. Were these farms located on hard roads or on dirt roads inclined to be heavy in wet seasons? Most folks would rather live six miles out on a permanent hard road than only half as far on a muddy road. Let us have more light on this interesting question.—(Farmer's Review).

THE DOMINION BANK

HEAD OFFICE - TORONTO

SIR EDMUND B. OSLER M.P., President
 W. D. MATTHEWS, Vice-president

C. A. BOGERT, General Manager

The London, England, Branch

of THE DOMINION BANK

at 73 CORNHILL, E.C.

Conducts a General Banking and Foreign Exchange Business, and has ample facilities for handling collections and remittances from Canada.

THE HOME BANK OF CANADA

ORIGINAL CHARTER 1854

Head Office, Toronto. James Mason, General Manager

Branches and Connections Throughout Canada.

General Banking Business Transacted MONTREAL OFFICES

Main Office, Transportation Bldg., St. James St.
 Bonaventure Branch, 523 St. James St.
 Hochelaga Branch, Cr. Cuvillier and Ontario Sts.
 Mt. Royal Branch, Cr. Mt. Royal and Papineau Ave.

BANK OF HAMILTON

ESTABLISHED 1872

Head Office: HAMILTON

CAPITAL AUTHORIZED..... \$5,000,000
 CAPITAL PAID UP..... 3,000,000
 SURPLUS..... 3,475,000

The Canadian Bank of Commerce

ESTABLISHED 1867

PAID UP CAPITAL - \$15,000,000 RESERVE FUND - - \$13,500,000

HEAD OFFICE --- TORONTO

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 E. R. WOOD, Esq. H. V. F. JONES, Assistant General Manager.

JOHN AIRD, General Manager.

BRANCHES IN CANADA

44 in British Columbia and Yukon. 88 in Ontario. 81 in Quebec. 129 in Central Western Provinces. 23 in Maritime Provinces.

BRANCHES AND AGENCIES ELSEWHERE THAN IN CANADA

St. John's, Nfld. London, Eng. New York. San Francisco. Portland, Oregon. Seattle, Wash. Mexico City.

The large number of branches of this Bank enables it to place at the disposal of its customers and correspondents unexcelled facilities for every kind of banking business, and especially for collections.

SAVINGS DEPARTMENT

Connected with each Canadian branch, Yukon Territory excepted, and interest allowed at current rates.

BANK OF ENGLAND STATEMENT.

The Bank of England reports the proportion of reserve to liabilities at 29.40 per cent against 29.10 per cent a week ago. The institution reports an increase in gold holding for the week of \$4,797,000 and an expansion in loans of \$2,455,000. The official discount rate remains 5 per cent.

The weekly statement of the Bank of England shows the following changes:

Total reserve increased £888,000, circulation increased £71,000, bullion increased £959,404, other securities increased £491,000, other deposits increased £1,174,000, public deposits increased £2,543,000, notes reserve increased £883,000, Government securities unchanged.

The detailed return compares as follows:

	1916.	1915.	1914.
Gold	£58,924,183	£55,314,389	£36,765,422
Reserve	43,272,000	39,078,829	26,338,387
Notes reserve	43,200,000	146,693,662	42,463,243
Reserve to lia.	29.40%	17%	42%
Circulation	34,101,000	34,685,560	28,877,035
Public deposits	61,721,000	132,067,216	19,020,326
Other deposits	85,472,000	87,030,100	43,126,915
Gov't securities	33,187,000	51,063,491	11,046,570
Other securities	88,396,000	146,693,662	42,463,242

The principle items compares as follows:

	Gold.	Reserve.	securities
1916	£58,924,183	£43,272,000	£88,396,000
1915	55,314,389	39,078,829	146,693,662
1914	36,765,422	26,338,387	42,463,242
1913	37,769,218	27,230,698	32,985,190
1912	39,670,715	29,061,115	33,977,455
1911	36,805,055	26,914,450	32,067,572
1910	36,140,963	26,355,378	29,526,659

The proportion of reserve to liabilities compare as follows:

	P.C.		P.C.
1916	29.40	1910	50%
1915	17%	1909	50%
1914	42%	1908	51
1913	49%	1907	45½
1912	48%	1906	38%
1911	47%	1905	47½

Captain J. H. Irving, serving with the 201st Battalion, was in the head office of the Dominion Bank before joining his unit. He is a grandson of the late Sir Aemilius Irving.

BANK OF FRANCE REPORT.

The weekly statement of the Bank of France shows the following changes in francs:

Gold in hand decreased 95,851,000; silver in hand decreased 756,000; notes in circulation increased 38,576,000; treasury deposits decreased 34,868,000; general deposits increased 55,313,000; bills discounted decreased 15,768,000; advances decreased 5,075,000.

The detailed return compares as follows in francs (000 omitted):

	1916.	1915.	1914.
Gold	4,803,526	4,169,010	3,646,350
Silver	358,930	376,677	629,625
Circulation	15,277,961	11,585,706	6,038,141
General deposits	2,337,503	2,307,147	631,068
Bills discounted	3,145,246	135,147	1,647,736
Treasury deposits	25,198,000	43,084	123,310

The total gold holdings compare as follows, in francs (000 omitted):

	1916.	1915.	1914.
Apr. 27	4,803,526	4,169,010	3,646,350
Apr. 20	4,899,377	4,191,896	3,644,880
Apr. 13	4,893,258	4,228,025	3,638,325
Apr. 6	4,986,357	4,253,375	3,377,300

Mar. 30	5,006,244	4,250,975	3,615,625
Mar. 23	5,011,277	4,248,725	3,624,175
Mar. 16	5,023,088	4,244,350	3,624,475
Mar. 9	5,018,889	4,241,975	3,610,000
Mar. 2	5,014,985	4,240,375	3,602,950
Feb. 24	5,035,824	4,238,900	3,598,325
Feb. 17	5,031,055	4,249,200	3,588,375
Feb. 10	5,024,474	4,241,600	3,474,421
Feb. 3	5,019,500	4,234,050	3,458,840

The circulation compares as follows, in francs (000 omitted):

	1916.	1915.	1914.
Apr. 27	15,277,961	11,585,706	6,038,141
Apr. 20	15,239,385	11,539,898	5,805,063
Apr. 13	15,183,921	11,500,572	5,921,925
Apr. 6	15,154,592	11,422,475	5,943,250
Mar. 30	14,952,078	11,272,775	5,950,375
Mar. 23	14,847,116	11,176,000	5,743,150
Mar. 16	14,719,661	11,109,475	5,803,200
Mar. 9	14,649,611	11,092,525	5,813,225
Mar. 2	14,460,098	11,072,500	5,946,800
Feb. 24	14,295,251	10,961,975	5,763,450
Feb. 17	14,203,427	10,831,550	5,799,750
Feb. 10	14,144,325	10,749,650	5,845,047
Feb. 3	14,034,000	10,646,225	6,028,809

ESTABLISHED 1832

Paid-Up Capital
\$6,500,000



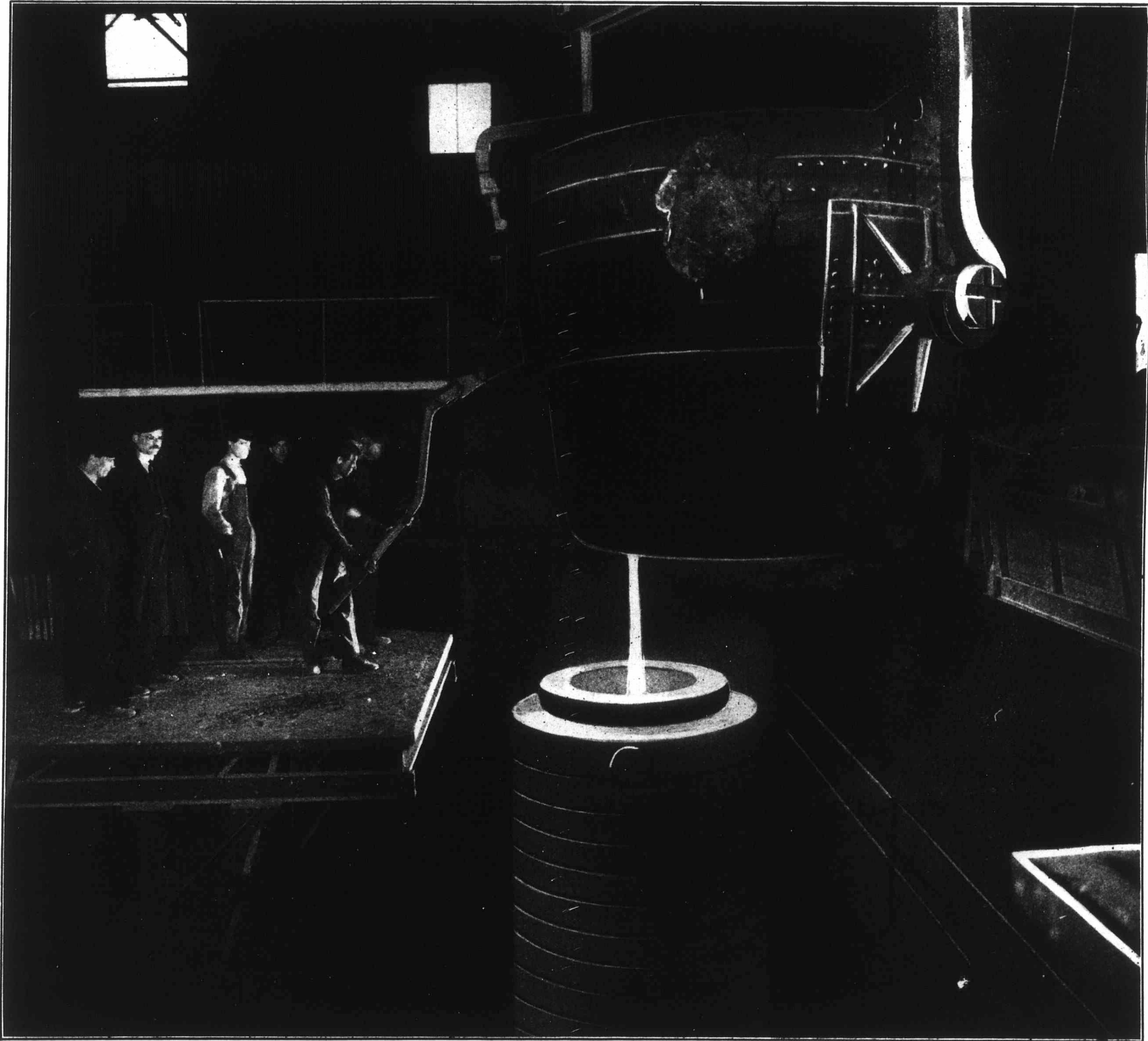
Reserve Fund
\$12,000,000

TOTAL ASSETS OVER \$100,000,000

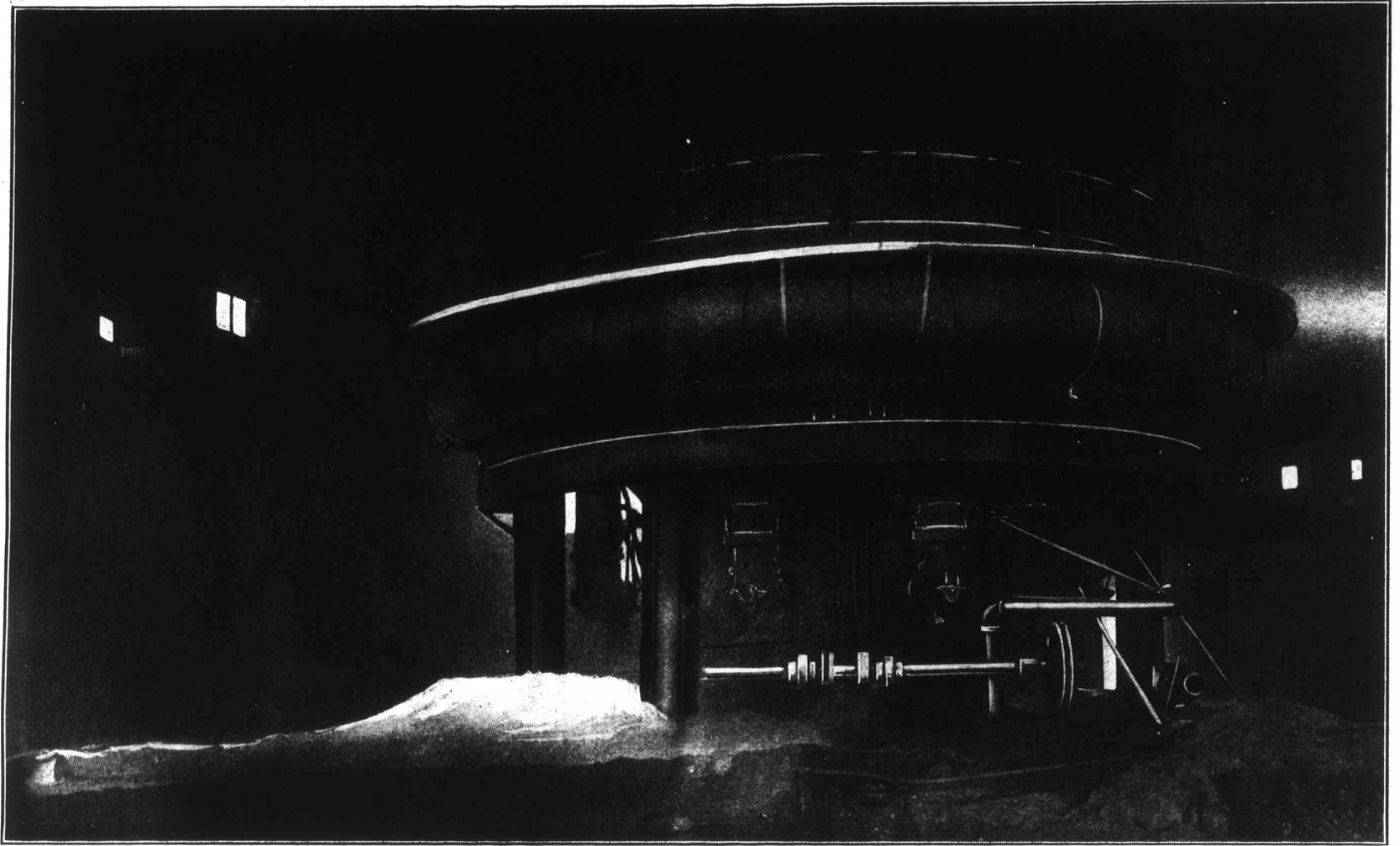
The strong position of the Bank of Nova Scotia not only assures the safety of funds left on deposit with the Bank but also places it in a position where it can readily care for any legitimate business needs of its customers. We invite banking business of every description.

THE BANK OF NOVA SCOTIA

— THE —
**Mining and Metallurgical
Industries**
OF
Canada



POURING A 30-TON INGOT OF STEEL

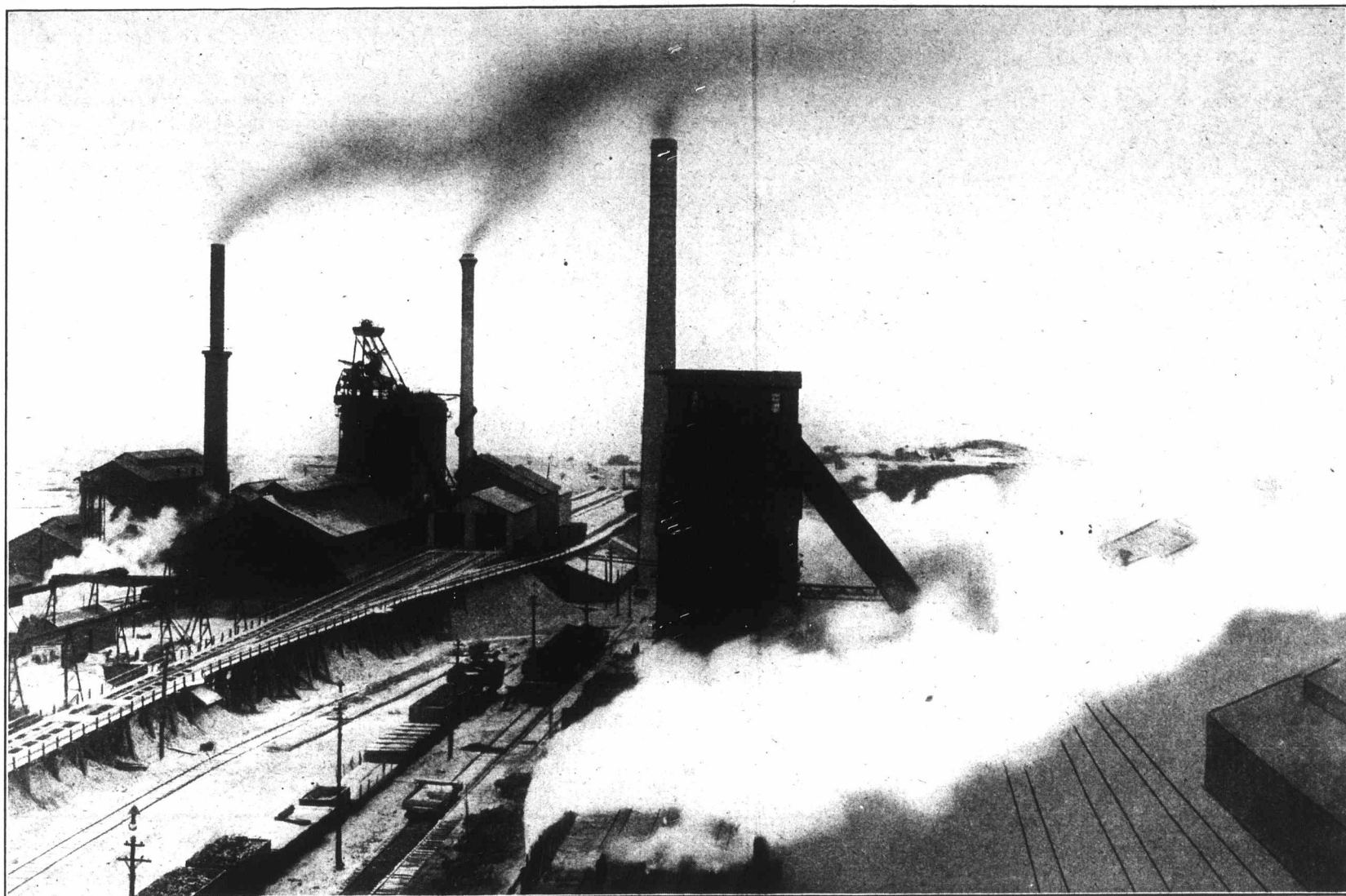


THE BASE OF A BLAST FURNACE,

Showing three pipes which convey the blast to the furnace. To the left is a quantity of red-hot slag that has just been drawn from the furnace.



NO. 2 COLLIERY, DOMINION COAL COMPANY, GLACE BAY, N.S.



BLAST FURNACE AND COKE OVENS OF THE NOVA SCOTIA STEEL & COAL CO., LTD., SYDNEY MINES, N.S.

The tracks in the centre of the picture run over the top of the coke ovens. When red hot coke has been drawn from the ovens it is cooled by streams of water from hose. The clouds of steam seen in the foreground have been caused by this operation.

The Mining and Metallurgical Industries of Canada

Some General Observations

IN area, Canada is exceeded only by the Empires of China and Russia. Her boundaries include a space of 3,730,000 square miles, which is 703,000 square miles more than the area of the United States, and only 20,000 square miles less than the whole of the Continent of Europe. Canada supplies more than a fourth of the area of the British Empire, and occupies more than one-fifteenth of the land area of the globe.

Such a consideration more accurately delimits the mineral possibilities of any country than it does the possibilities of any other natural resource. Agriculture is more dependent upon the existence of fertile lands and a climate congenial to vegetable growth than it is upon extent of area. To a slightly less degree the same is true of forest resources and resulting industries. Likewise, the fisheries of any country are more dependent upon the length of the open season and the existence of suitable feeding grounds than upon the extent of area.

It does not necessarily follow that the mineral wealth of any country is directly proportionate to its size. Wide stretches of rock formation, more or less overlaid with soils, are known to exist in which mineral deposits may not be looked for, because the rock is not of the proper geological character. There are such areas in Canada, as in most other countries. But the extent of the known mineral bearing areas in the small part of the Dominion that has been examined by geologists, is sufficiently great to profitably employ prospectors for generations yet to come, not to speak of

the new mineral bearing areas which in all likelihood exist in the unexplored regions. Apart from the immediate vicinity of deposits that have been stumbled upon by railroad builders, little systematic prospecting has been done in any part of Canada, and yet what a variety of useful mineral has been discovered, and what a vast amount of wealth unearthed. The value of Canada's mineral output during the year 1915 will be found on page 28 of this issue.

There are a few countries with a monopoly of one mineral, but none that control the markets of the world for more than one so completely as Canada does in the case of three, viz., nickel, asbestos and cobalt. Of silver, she is the third largest producer. Among the gold producing countries she stands sixth and is rapidly climbing to a more prominent place. In 1913, the last year for which we have complete returns from all countries, Canada was the seventh largest producer of copper. But since that year her rapidly increasing production has won for her a much more prominent position among the world's largest copper producers. Her per capita production of pig-iron and steel is much larger than that of any other of the newer countries. It is equal to the per capita production of Sweden and France, and exceeded only by that of Great Britain, the United States, Belgium and Germany.

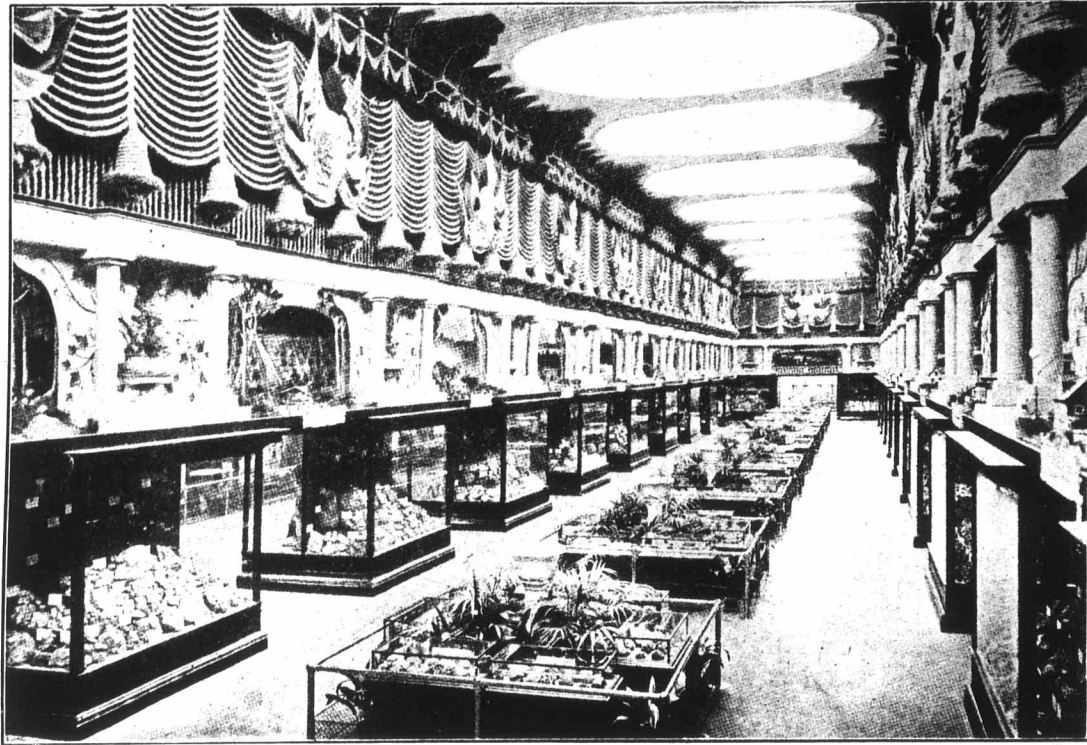


A PROSPECTOR'S CAMP IN NORTHERN ONTARIO

In the reduction of ores, and the working up of mine products into marketable commodities, nothing counts for so much as do fuel and power. The great blast furnaces of the United States are situated in Pittsburgh, Cleveland and other places in close proximity to the coal fields of Pennsylvania, and the iron ores of Minnesota and Michigan, are brought to them. In like manner the coal fields of Northern Cape Breton are responsible for the existence of the blast furnaces at Sydney and Sydney Mines, where the iron ores of Newfoundland are smelted. The cheap electric power at Shawinigan, Quebec, is, in like manner, responsible for the reduction works of that place, where the aluminium is being extracted from the bauxite, brought there from France, Germany (in times of peace) and the United States. The use of electricity in the reduction of ores and the refining of metals is of comparatively recent date, and as it develops, which it assuredly will, the excellent water powers of Canada will play a greater and greater part.

A mineral is a substance formed by nature alone, and no process known to man can augment the quantity of mineral in the earth's crust. When a quantity of any mineral has been taken from the ground, the mine from which it is taken is poorer by that amount, and when a deposit has been depleted of all its extractable mineral, the mining industry in that district ceases and the mining camp disappears. In the light of the consideration the miner belongs to the same class as the hunter and trapper. But, while hunting and trapping continue, as it has always been an industry demanding but a primitive knowledge, the location of mineral areas and the extraction of minerals from their ores requires a well-trained mind and a considerable knowledge of geology, mineralogy and chemistry.

The science of the Geologist, or Geology, treats of the history of the earth's crust, and of the changes it has undergone, the different kinds of rocks and how they have been formed as well as of the minerals that naturally go together and the kind of geological formation in which each group is most likely to occur. The main business of the geologist, therefore, is to map out the country into geological



MINERAL SECTION, CANADIAN EXHIBIT, PANAMA-PACIFIC EXPOSITION.

areas. In Canada this work is undertaken by the Dominion Government, which, every summer, sends out to unexamined and unexplored sections of the country, several parties, each under the guidance and supervision of a competent geologist. On their return in the Autumn, a complete report of the findings of these parties is filed with the Director of the Geological Survey at Ottawa, and a copy may be had by any person for the asking. Most of the Provincial Governments also send out parties from time to time. These sometimes report upon the character of some particular district, or upon the known deposits and possibilities of a particular mineral. The Mines Branch, Ottawa, also publish from time to time valuable information. Other sources of information concerning Canadian mines and minerals are the files of the Canadian Mining Journal, Toronto, Ont., and the transactions of the Canadian Mining Institute, Montreal, Que.

The science of the **Mineralogist**, or Mineralogy, has to do with minerals, their characteristics, how they occur and how best they can be extracted from their ores. The work of the Mineralogist or Mining Engineer is concerned more with specific deposits of economic minerals and requires a knowledge of what has been learned by patient observation and study, both in the field and the laboratory. This knowledge serves to determine the value of a deposit, to guide the work of developing a mine, the taking out of the ore, and the extracting of the mineral from the ore after it has been taken from the mine. The Mining Engineer generally acts in a consulting or advisory capacity with the owner or superintendent. If the services of competent Mining Engineers were sought more than has been the custom in the past, there would be less money lost by mine investors. Very frequently a mining engineer is also a Geologist.

Until recently the problem of treating ores and extracting minerals from them had to be solved entirely at the expense of the individual miner and mining company. Of late the Dominion Government has interested itself in this work, and a start has been made in the direction of establishing an experimental and research laboratory under the supervision of competent specialists. This experimental and research work is similar to what is being done for the producers of forest products by the Forest Products Laboratory at Montreal, or for the farmers by the Agricultural Colleges and experimental farms.

The **Chemist** is also necessary to any mining undertaking, and most companies of any size have one or more in their employ. There are also a number of reliable chemists or assayers who do custom work. The duty of the chemist is to ascertain the amount of mineral in a given quantity of ore as it comes from the mine or from a new discovery, the quantity of mineral that has been left in the ore after treatment and the impurities in the mineral extracted.

Another very necessary personage in mining is the **Prospector**, who goes into known geological areas to look for new deposits of minerals. He is the

forerunner of the industry, and every effort should be made, in a country such as Canada, to develop and encourage this class of individual. Much might be accomplished along this line by giving the youth of the country some knowledge of minerals, how they occur and their uses and values. If nothing else, elementary books and other suitable literature on mines and minerals might be placed in public libraries and in the libraries of elementary and secondary schools. Most prospecting for minerals is a very simple business, but it requires, at least, a knowledge of the minerals and how they occur as well as a special endowment of patience. Some kinds of prospecting, it is true, require investment, particularly that done with the diamond drill and other equipment. This work, however, is used more to test the extent of a deposit after it has been discovered.

It is only the exceptional discovery that develops into a mine and the still less frequent one that amounts to a mining camp. It would require a large volume* to chronicle the known mineral deposits of Canada, and yet only a fringe of this great country has been prospected; and even this fringe has been looked over only in a very haphazard and indifferent manner. A list of the producing mines occupies much less space, and may be had in the "Canadian Mining Manual," a small volume published annually by the "Canadian Mining Journal," 263, Adelaide Street, W., Toronto.

Considering the value of output, the capital invested and the number of workmen employed, the ten leading mining and metallurgical centres or camps

*A volume giving the location of all known mineral deposits in Canada has recently been published by the Department of Mines, Ottawa.

of Canada, approximating the order of their importance, are as follows:

Cape Breton District, in the Eastern part of Nova Scotia, particularly in the vicinity of the towns of Sydney, Sydney Mines and Glace Bay. This district produces coal, coke, iron and steel.

Sudbury District, in Northern Ontario, in which are situated the town of Sudbury, Copper Cliff, and Coneston. This district produces nickel and copper.

The Cobalt District, in Northern Ontario, in which are the towns of Cobalt and Haileybury. This is the great silver district of Canada. The ores from this district also carry cobalt, arsenic and some nickel.

The Boundary District, in Southern British Columbia, in which are situated the towns of Trail, Grand Forks and Greenwood. This district produces copper, lead, zinc, gold and silver.

Crow's Nest Pass District, of southeastern British Columbia, and southwestern Alberta, in which are situated the towns of Crow's Nest Pass, Fernie, Hosmer, Michel, Coleman, Blairmore, Frank, Lethbridge. This district produces coal and coke.

Porcupine District, in northern Ontario, in which are situated the towns of Porcupine and Timmins. This district produces gold.

Klondike District, Yukon, with the town of Dawson as its principal centre. This district produces gold and some silver and copper.

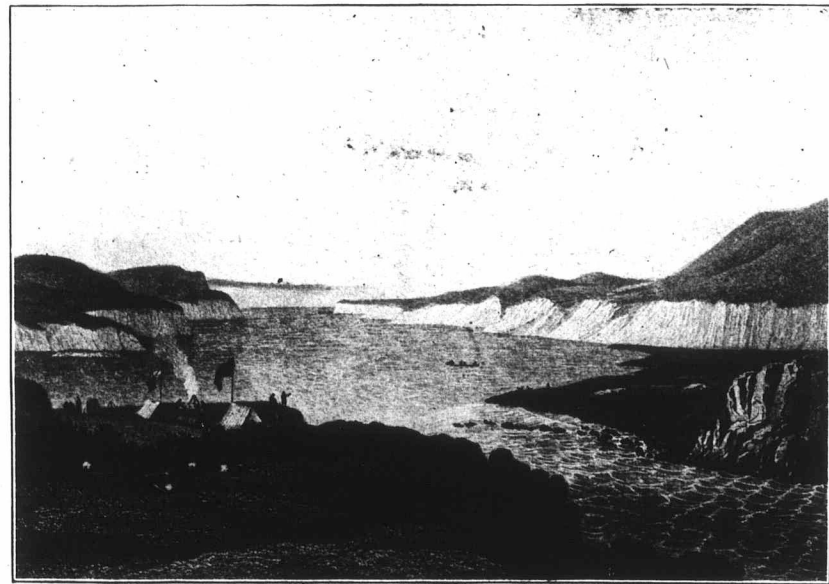
Pictou County District, Nova Scotia, in which are situated the towns of New Glasgow, Westville, and Stellerton. This district produces coal and is an important foundry centre.

Nanaimo District, Vancouver Island, B.C., in which are situated the towns of Nanaimo, Wellington and Ladysmith. This district produces coal and copper.

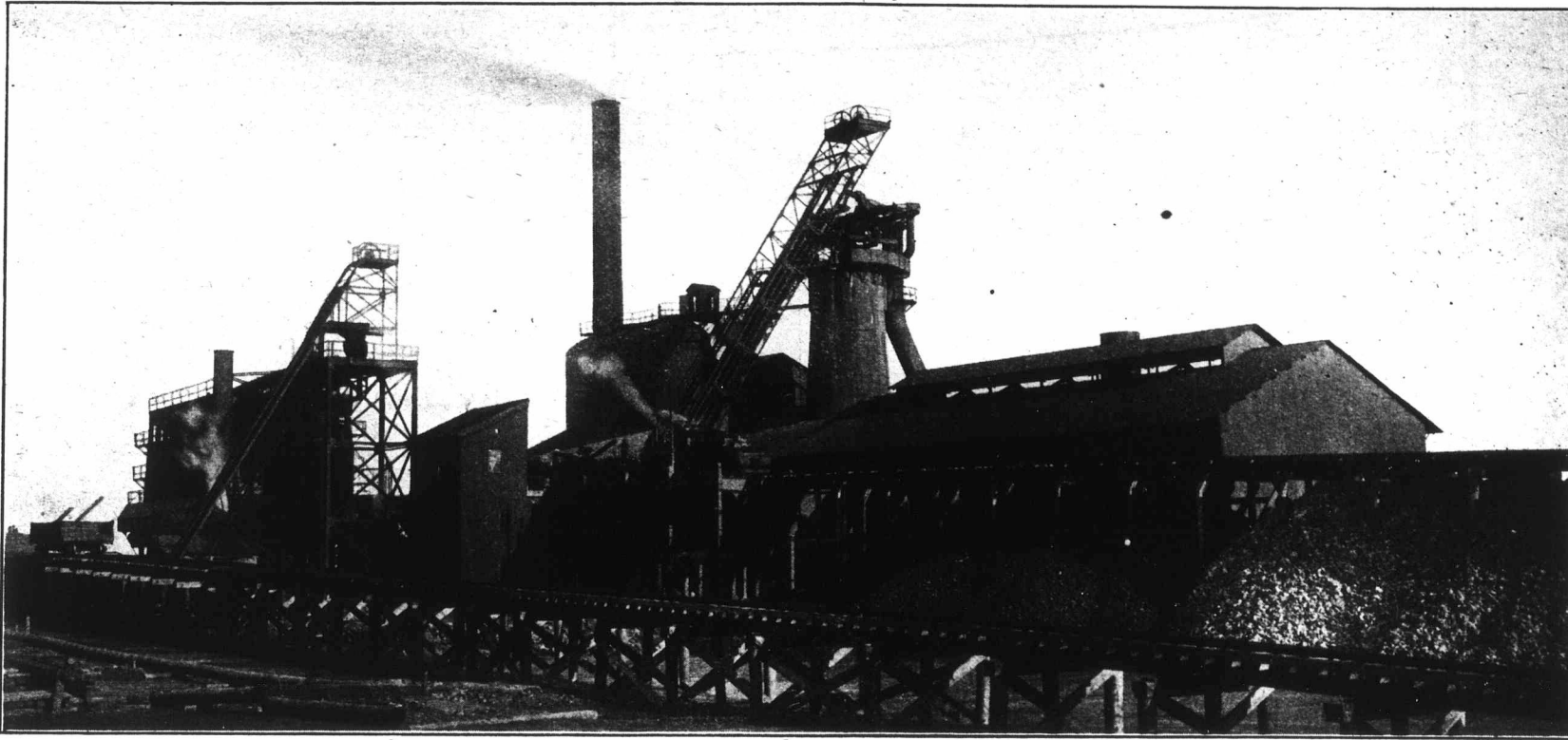
Asbestos District, Quebec Province, in which are situated the towns of Thetford Mines, Black Lake and Asbestos. This district produces asbestos.

The mining industry of Canada gives employment to about 70,000 people, and the value of the annual output is in the neighborhood of \$150,000,000.

In the extent of her known mineral bearing areas and possibilities of her vast unexplored regions; in the variety and richness of her deposits that have already rewarded the haphazard efforts of prospectors; in the excellence of her facilities for metallurgical industries, in the number and efficiency of her mining schools and in the directions and assistance afforded by her Federal and Provincial Governments; no country presents a finer field than does Canada for the youth who will prepare himself for a life work of mining and metallurgy. No studies are more interesting and few, if any, less difficult. An elementary knowledge of rocks and soils may be acquired by any one, even by those with a limited education. Information concerning the areas in which prospectors may profitably work, and their rights as regards the minerals they may discover can always be had from the Department of Mines, Ottawa, or from the Government of the Province in which the prospector desires to work. With a knowledge of rocks sufficient only to enable the prospector to know when he has discovered a valuable mineral, some directions as regards the area in which he should hunt, and a pick, shovel and a miner's hammer, one may begin at any age an occupation which con-



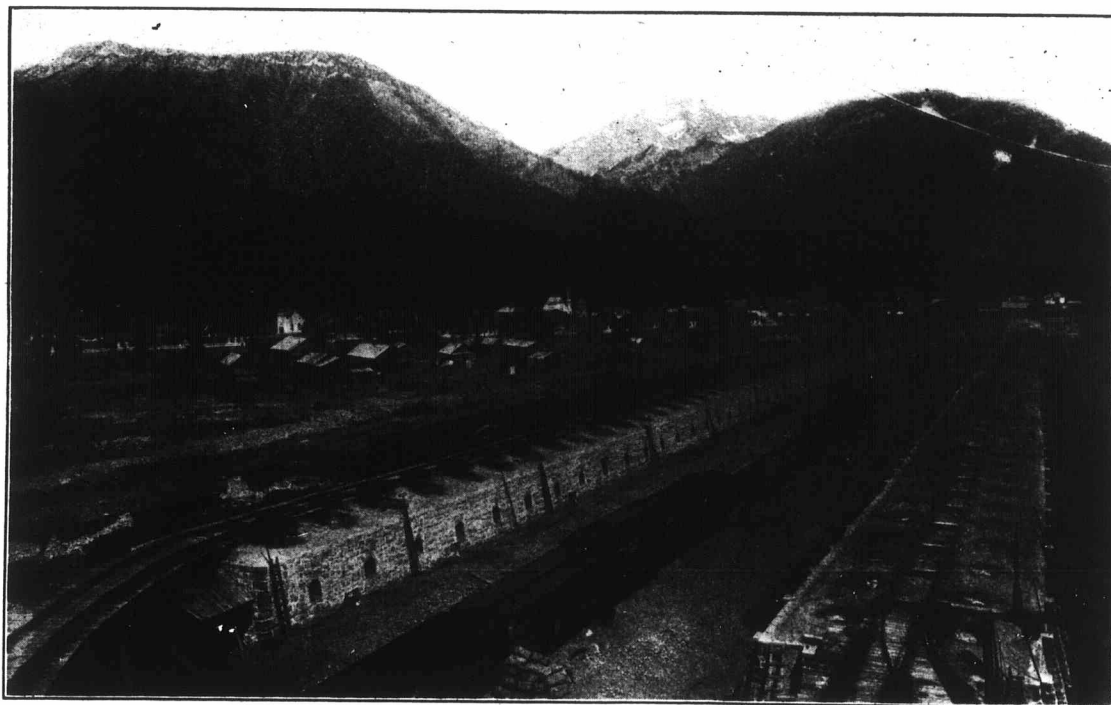
A SCENE FROM THE COPPER MINE COUNTRY, AT THE MOUTH OF THE COPPER MINE RIVER.



BLAST FURNACE OF ATIKOKAN IRON CO. AT PORT ARTHUR, ONT.

stantly holds out the prospect of a discovery worth a fortune. Canada has millions of wealth in rich deposits of minerals, which any one may have for the finding, and the wonder is that more do not look for them.

The work of prospecting fits in very nicely with that of agriculture. A boy's work on the farm brings him more in contact with rocks and soils than does the work of the boy in the city. Moreover, the knowledge acquired in the study of rocks and soils is of greater value in farming than in any other occupation outside of mining. A knowledge of rocks and soils is necessary to the farmer, who desires to keep up the fertility of his fields by the use of a fertilizer that will give them the ingredients they need. The three important ingredients supplied by artificial fertilizers are—phosphoric acid, potassium and nitrogen. Canada possesses large deposits of phosphates, which at one time were extensively mined and exported. She also possesses deposits of feldspar rich in potassium, and she has abundant facilities for the development of the electrical power necessary for the separation of these ingredients from their ores and, by means of which nitrogen may be extracted from the atmosphere, as is already being done in several European countries. Canada thus possesses known sources of supplies, which undoubtedly will be resorted to when the constant cropping of her fields makes the use of mechanical or artificial fertilizers necessary.

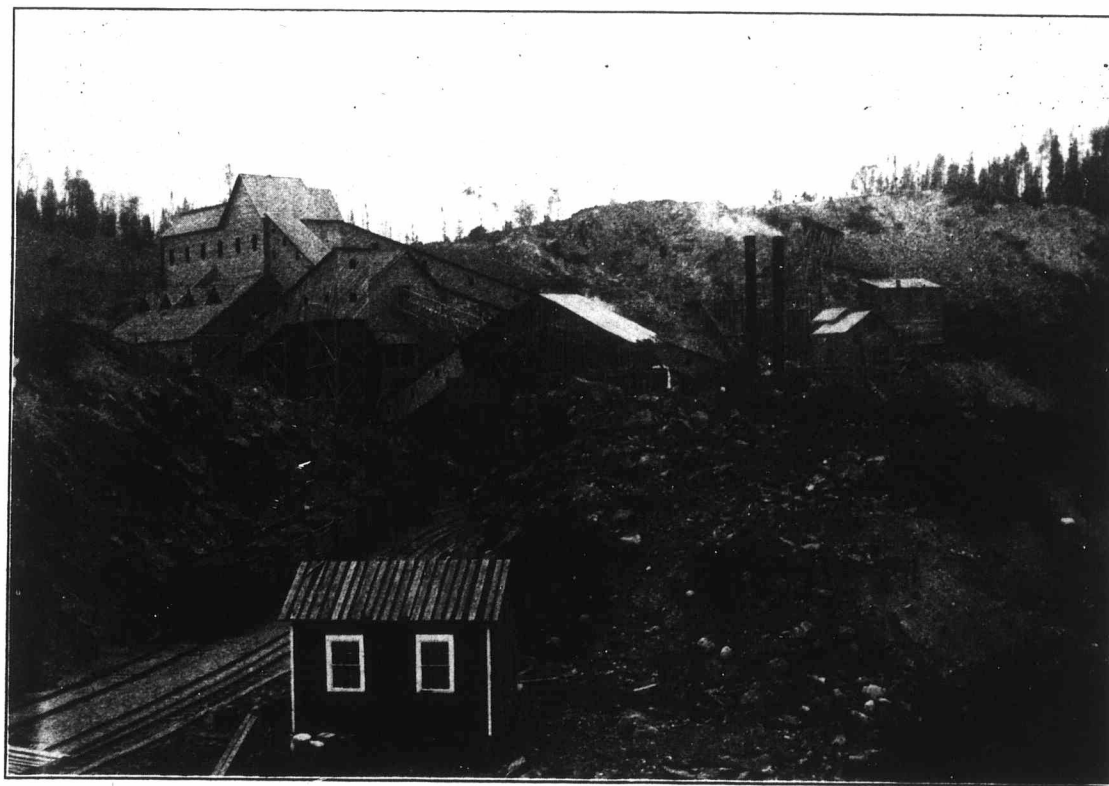


BEE-HIVE COKE OVENS AT FERNIE, B.C.

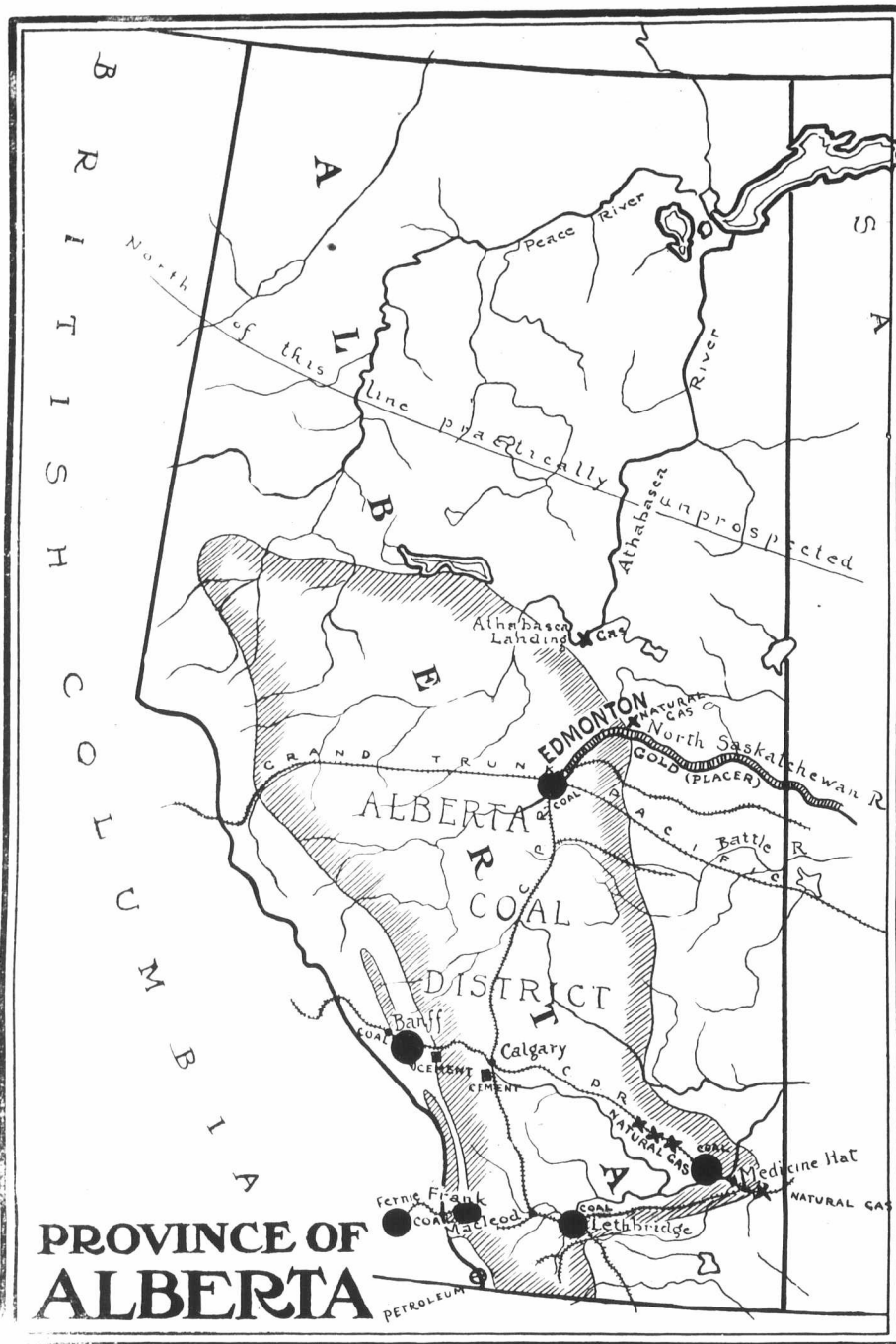
Coal, Coke, Iron and Steel

WHEN entering Sydney Harbour at night from the Atlantic Ocean, your attention is attracted by a magnificent glow in the sky. As you approach the harbour this glow becomes brighter and brighter, until finally your suspense is released by the appearance on the horizon, of an array of blast furnaces with lurid flames shooting from their cupolas and smokestacks and bright penetrating gleams emanating from the masses of molten metal which, every few minutes, are intensified as a pot of molten slag is poured down the side of the dump or a coke-oven is relieved of its load of red hot coke.

These furnaces, together with the great coal fields that lie directly in the rear and the allied works, such as the open hearth converters, where the pig or crude iron from the blast furnaces are converted into steel, the mills where the steel blocks or ingots are rolled, and compressed into rails, sheets, rods, wires etc., the coke ovens, in which the gases are driven off from the raw coal, leaving only the carbon or coke, the distillation plants where these gases are made to yield up the tar and sulphate of ammonia they contain, and the works of the Dominion Tar and Chemical Co., which manufactures from this coal tar such articles as pitch of various grades, benzol, creosote, carbolic acid, and



MOOSE MOUNTAIN IRON MINE, MOOSE MOUNTAIN, ONT.



COAL AREA OF THE PROVINCE OF ALBERTA.

many other far products—all these go to make up Canada's greatest mining and metallurgical centre or camp, both as regards numbers employed and value of output.

At Sydney, N.S., are situated the six blast furnaces of the Dominion Iron and Steel Company, with a capacity of 280 tons each per day; and a few miles away, at Sydney Mines, is a 200 ton furnace of the Nova Scotia Steel and Coal Co. Into these furnaces are charged annually about one million tons of iron ore brought from the Wabana Mines on Belle Island, situated off the east coast of Newfoundland, about 700,000 tons of coke, which is made from coal-mined in the district, and about 350,000 tons of limestone, heretofore mined in the district, but which hereafter will be brought from Newfoundland. There is also consumed annually for power and heat about 500,000 tons of coal, in addition to what is required for cooking. The limestone is used as a flux to assist in separating the iron from the ore and to carry off the dross, which amounts to about half the volume of the ore. Much of the coke used in the blast furnace is burned up and goes off into the air as gas and smoke after passing through the heaters where the air required for the blast of the furnace is heated. A year's operation of these blast furnaces results in about 650,000 tons of crude iron, commonly known as pig iron, and a considerable extension of the dump heap, where the discarded dross has been poured.

If these blast furnaces were engaged in making pig-iron for sale to the foundries and molding shops throughout the country that are equipped with small furnaces for re-melting pig-iron and scrap iron for the purpose of making castings, the molten metal would be poured from the blast furnaces into hollows shaped in sand, where it would be allowed to cool into those long slim blocks or pigs so frequently seen about foundries. But the Dominion Iron and Steel Co., and the Nova Scotia Steel and Coal Co., manufacture most of the iron they make,

while they are still red hot, and are rolled into rails, plates, bars, wires, etc. The rolling mills and shops of the Nova Scotia Steel and Coal Co. are situated about 100 miles distant at New Glasgow, N.S., and the ingots require to be re-heated for rolling and shaping after reaching the shops.

It may be well to explain just here that there are practically but three processes of steel making:

(1) Crucible—Still in use, but, because of its high cost, restricted to the making of high grade steels for cutlery, tools, intricate parts of machinery, etc.

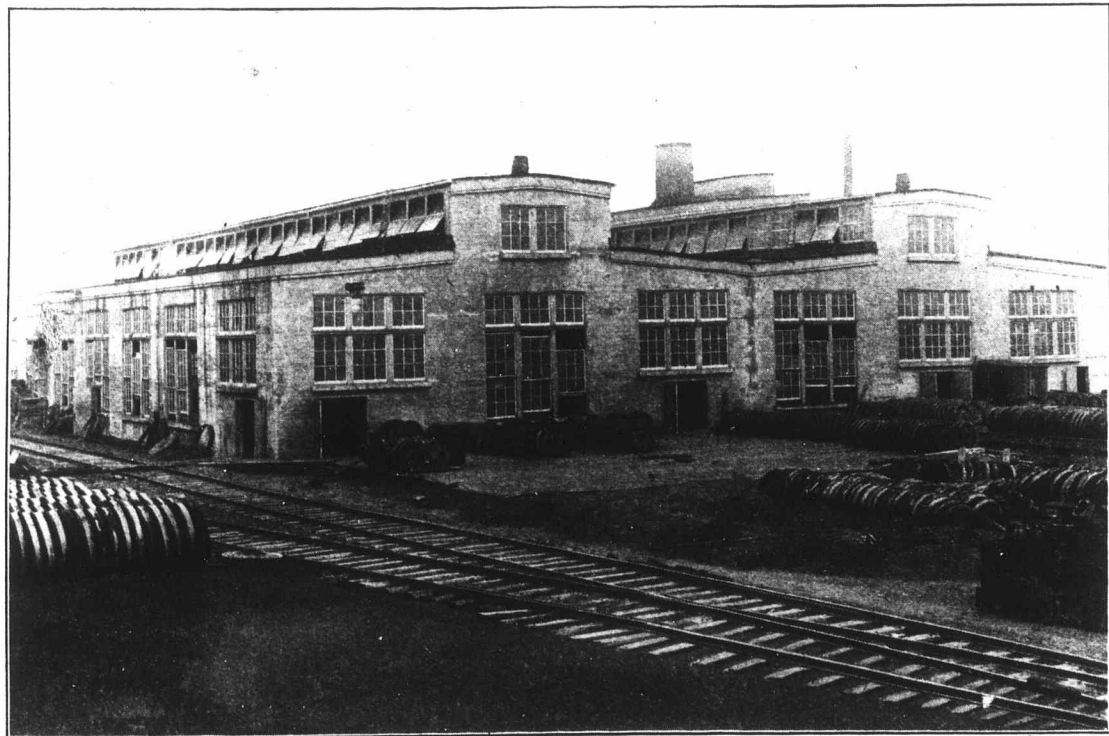
(2) Bessemer.—Until about eight years ago the leading process of steel manufacture in both Great Britain and the United States. It is still the leading process in Germany.

(3) Open Hearth—which is rapidly replacing the Bessemer furnaces in England, the United States and Canada. This process is more easily controlled, there is less danger from burning the steel and its product is more uniform and reliable. The yield of ingots compared with the total of metal charged is also, as compared with the Bessemer, higher.

Next to the district of Sydney and Sydney Mines, N.S., Sault Ste. Marie, Ont., is the most important iron and steel making centre in Canada. At this place the Algoma Steel Co., Ltd., have three blast furnaces, two of 250 tons each per day, and one of 450 tons per day. The place third in importance is Hamilton, Ont., where there are two furnaces with an aggregate capacity of 500 tons per day. Both are owned and operated by the Steel Company of Canada. At Port Arthur, Ont., there is one furnace of 100 tons capacity (The Atikokan Iron Company, Limited). At Midland, Ontario, there are two blast furnaces of 125 and 250 tons per day (Canada Iron Corporation, Limited). At Port Colborne, Ont., there is one furnace of 300 tons (The Canada Furnace Co., Ltd.) There is also one of 112 tons at Deseronto, Ont., and one of 84 tons at Parry Sound, Ont. Both are owned and operated by the Standard Iron Company of Canada, Ltd. There are three other small furnaces in Canada, one of 100 tons at Londonderry, N.S., two of 7 and 8 tons respectively at Drummondville, Quebec, and one of 25 tons at Radnor Forges, Quebec. All of these are owned by the Canada Iron Corporation, Limited, but none of them have been in operation for some time.

All the iron ore consumed by the blast furnaces in Ontario, with the exception of about 130,000 tons which is mined in the Michipicoten and Moose Mountain districts of North-Western Ontario, and in Hastings County, in Eastern Ontario, is imported from the States of Minnesota and Michigan. Also all the coal required for firing and coking at these Ontario furnaces is imported from the United States—mainly Pennsylvania.

The fact that Canada's iron furnaces consume over 2,000,000 tons annually of imported iron ore, and only some 140,000 tons of domestic ore, must not be taken to indicate the lack of good iron ore deposits in Canada. For such is not the case. The existence of such world-famous iron ore deposits, both as regards quantity and quality, as those of Newfoundland, on the East, and of Minnesota and Michigan on the West, makes the working of ordin-



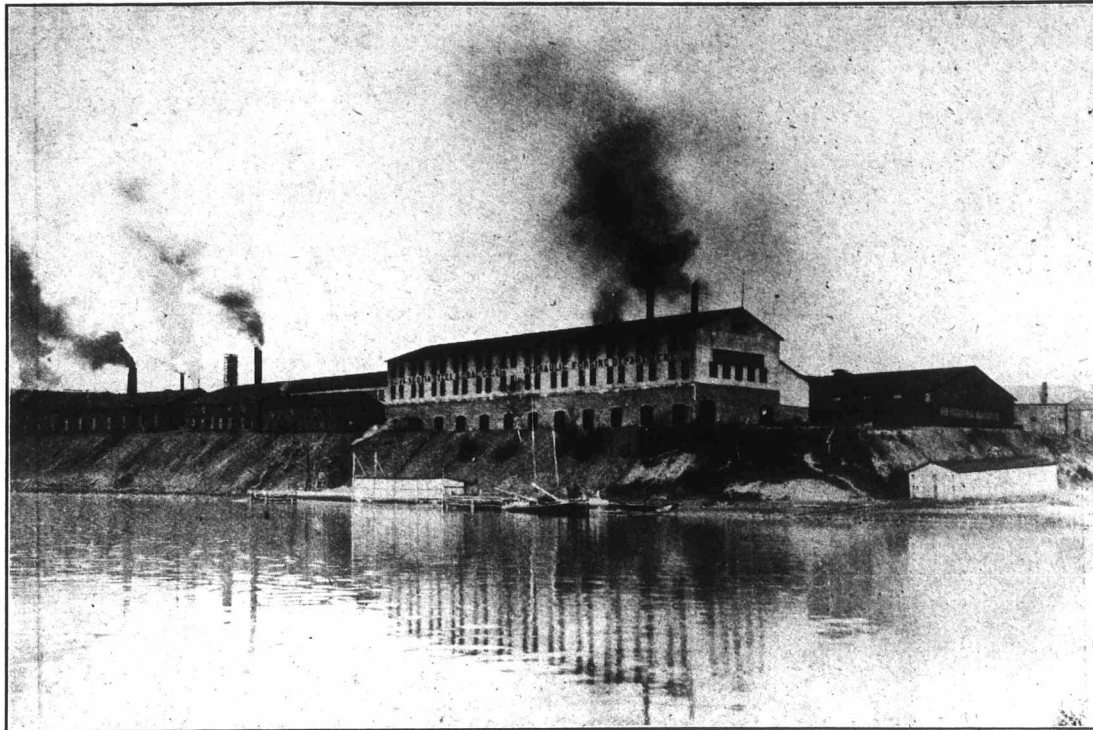
FOUNDRIES OF EASTERN CAR CO., LTD., NEW GLASGOW, N.S.
The Eastern Car Co. is a subsidiary of the Nova Scotia Steel & Coal Co., Ltd.

ary deposits impracticable. The ore from Michigan and Minnesota so completely dominates the furnaces of this Continent that they supply fully four-fifths of the ore smelted in the furnaces of the United States and Canada. In fact, the ores from these two States supply the iron ore from which between one-third and one-half of the world's iron production is made.

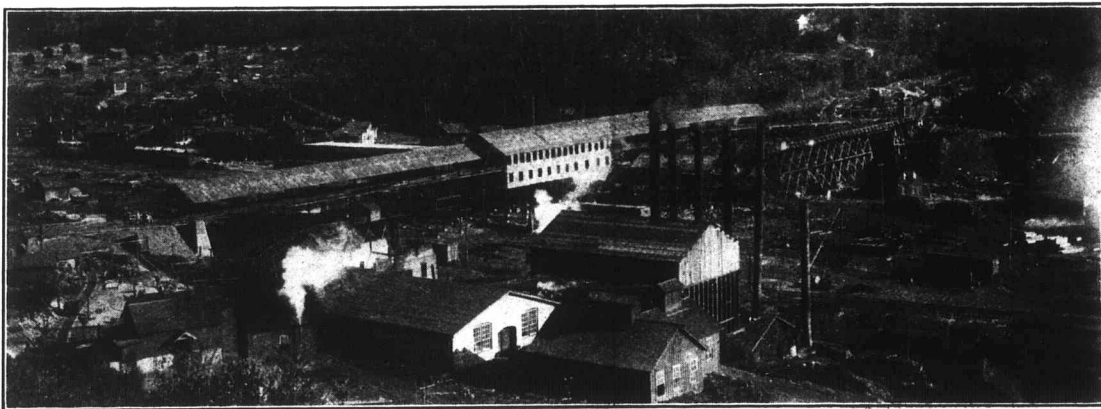
The coal fields of Cape Breton County, N.S., lying immediately to the rear of the blast furnaces at Sydney and Sydney Mines is one of the finest deposits of coal on the continent of North America, and is the most extensively worked of any in Canada. Of the total of 15,012,178 tons of coal raised in the whole Dominion in 1913, Cape Breton County fields produced 6,265,495 tons, and of these the Dominion Coal Co., Ltd., alone mined 5,285,968 tons.

There are three other coal districts in Nova Scotia, but all are of much less importance than the Cape Breton County fields. The Pictou County fields in the vicinity of New Glasgow, N.S., produce about 800,000 tons annually. The Cumberland County fields, situated in the vicinity of Springhill, N.S., produce about 700,000 tons annually, and the Inverness County fields on the West Coast of Cape Breton produce 300,000 tons annually.

There are coal fields in New Brunswick, but none that are extensively worked. The total annual production of the Province is less than 100,000 tons.



PLANT OF THE NOVA SCOTIA STEEL & COAL CO., LTD., NEW GLASGOW, N.S.



COAL CREEK COLLIERY, OF CROWS NEST PASS COAL CO., LTD., AT COAL CREEK, NEAR FERNIE, B.C.

After leaving the eastern part of New Brunswick, one may travel west across the rest of that Province, the whole of the Province of Quebec, Ontario, Manitoba, and pretty well across the Province of Saskatchewan before encountering the next Canadian coal deposit. But here nature has made up for the deficiency in Central Canada by laying down one of the greatest known deposits on the globe. Fully two-thirds of the whole of the large Province of Alberta, and considerable of the adjoining portions of British Columbia and Saskatchewan is known to be underlaid with coal, ranging in variety from lignites to anthracites. Valuable deposits of coal also exist in British Columbia on the West Coast of the Rockies, and on Vancouver Island.

But coal is of value, and is mined only in proportion to the population and industry within reach of it, and since it does not pay to carry coal from the Maritime Provinces any further West than Montreal, or the coal from the Western fields any further East than Winnipeg, fully one-half of Canada's people and industries cannot profitably be supplied with Canadian coal. The whole of the Province of Ontario and a large part of Quebec draw their supplies of coal from Pennsylvania, U.S.A. But the population and industry of Western Canada are increasing rapidly, and, with it, the demands upon those excellent coal resources. In the Province of Alberta only some 300,000 tons of coal were raised in the year 1900, but, by the year 1913, the yearly production of this Province had increased to over 4,000,000 tons. In 1913 the coal production of British Columbia was 2,714,420 tons. The principal coal mining districts of Alberta are—Calgary, Lethbridge, Edmonton and Medicine Hat, and the principal districts in British Columbia are Crows Nest Pass, Nicola and Princetown, and Ladysmith and Comox on Vancouver Island.

About 1,700,000 tons of Canadian coal is coked annually in ovens distributed throughout the country as follows:

Dominion Iron and Steel Co.—620 by-product ovens at Sydney, N.S.

Nova Scotia Steel and Coal Co.—150 ovens at Sydney Mines, N.S.

Alberta and International Coal and Coke Co., Ltd.—216 Beehive ovens at Coleman, Alberta.

West Canadian Collieries, Limited—50 ovens at Lille, Alta.

Leitch Collieries, Limited—101 ovens at Passburg, Alta.

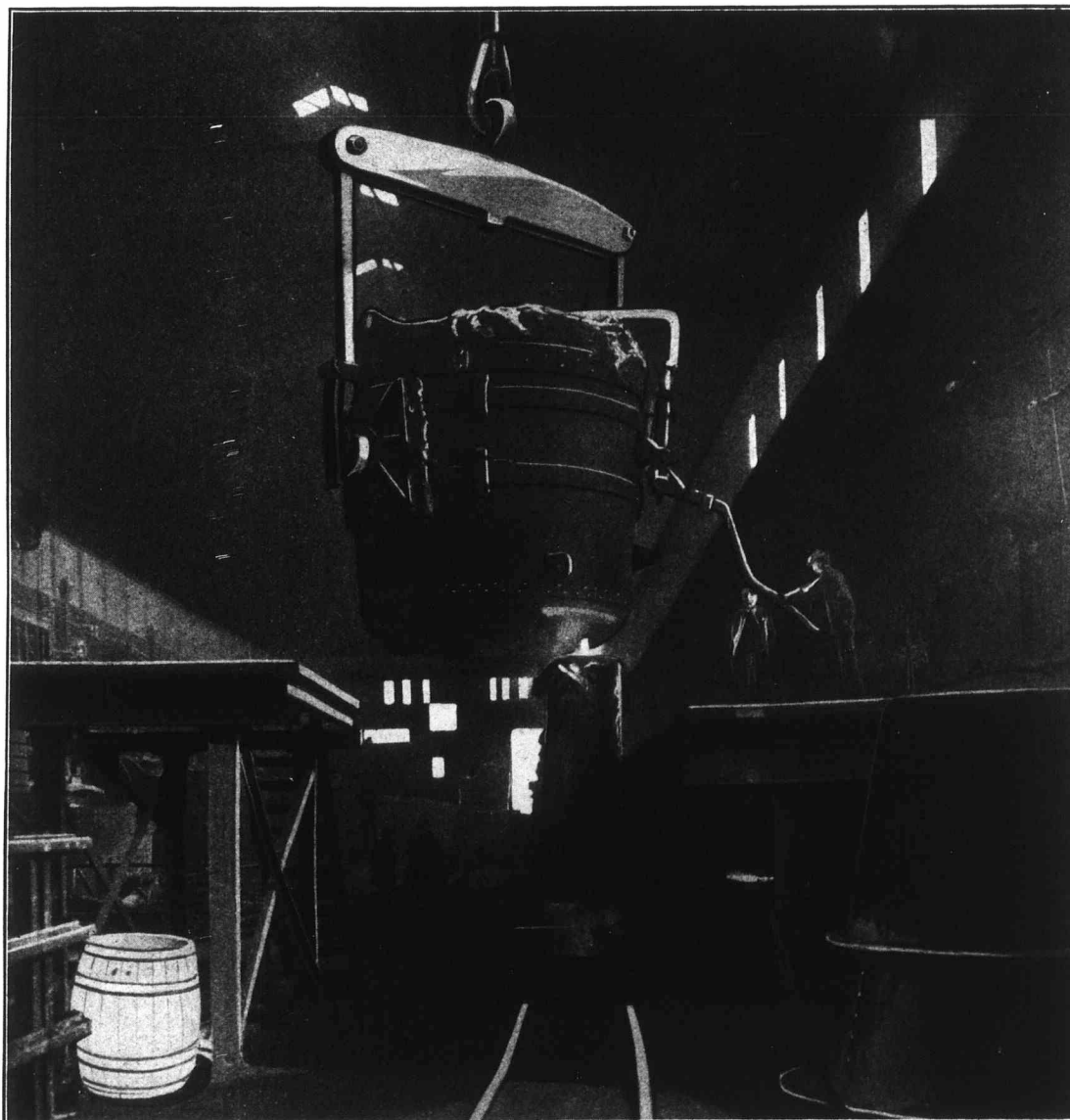
Crows Nest Pass Coal Co.—464 Beehive ovens at Fernie, B.C.; 486 at Michel, B.C.; 240 at Carbonade, B.C.

Canadian Pacific Railway, Limited—240 Beehive ovens at Hosmer, B.C.

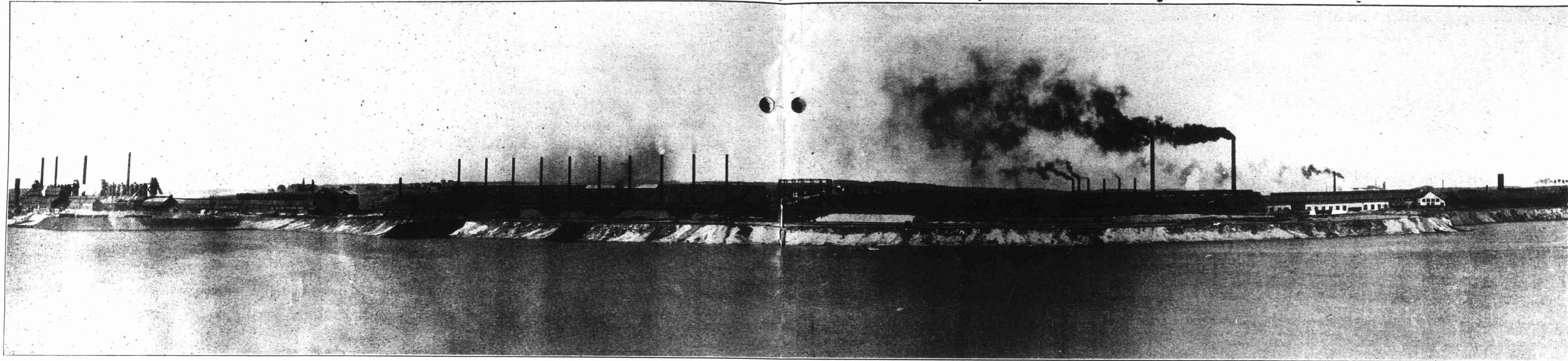
Canadian Collieries, Limited—150 ovens at Comox, Vancouver Island.

The ovens coking imported coal are as follows: Algoma Steel Corporation, Limited—110 By-products ovens at Sault Ste. Marie, Ontario.

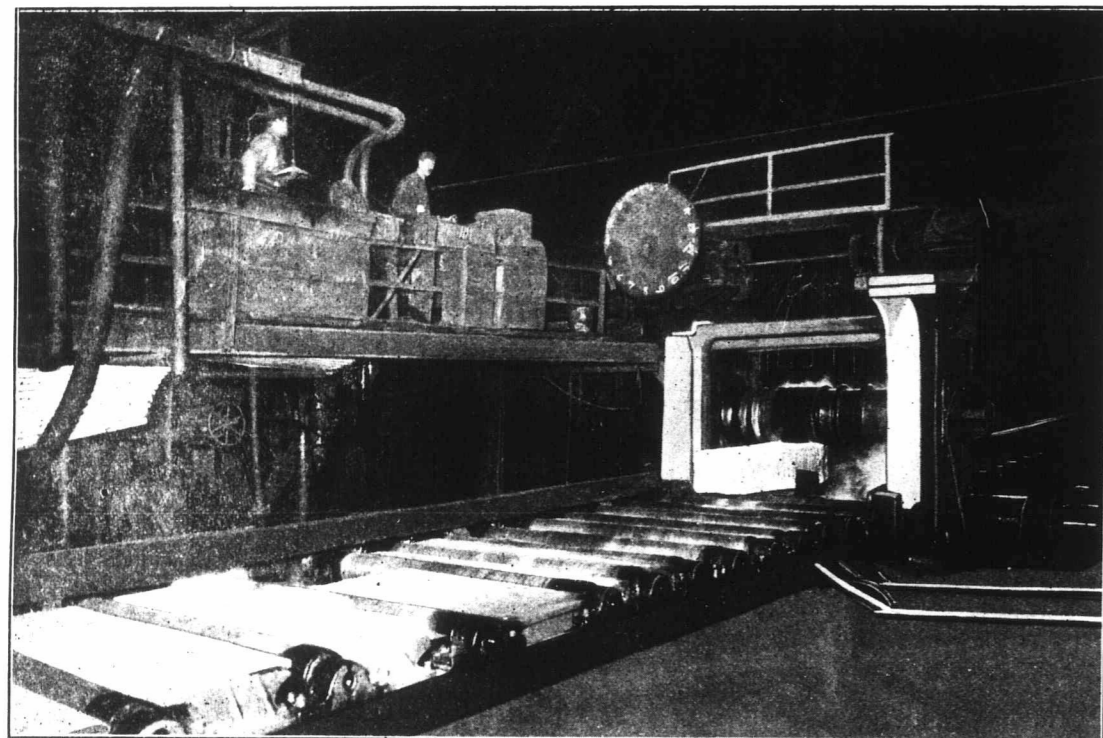
Atikokan Iron Co.—100 Beehive ovens at Port Arthur, Ontario.



POURING A 3-TON INGOT OF STEEL.



PLANT OF DOMINION IRON & STEEL CO., SYDNEY, N.S.



VIEW OF ROLLING MILL IN THE PLANT OF THE NOVA SCOTIA STEEL & COAL CO., LTD., NEW GLASGOW, SHOWING A 3-TON HEATED INGOT IN THE PROCESS OF BEING COGGED OR ROLLED.

Coal occurs in what are known as seams, or layers, from a few inches to as many as 25 and 30 feet thick. Sometimes several seams occur one above the other. In the Cape Breton County coal fields there are nine different coal seams at different depths, ranging in thickness from three to twelve feet. In these coal fields there are 24 collieries, that is, there are 24 different places at which shafts are sunk to a depth sufficient to reach one or more of these seams. At the mouths of each of these collieries there are power plants that provide the power necessary to drive mining machinery, hoist the coal and keep fresh air pumped into the mine for ventilation. At each colliery there are also screening sheds where the coal is cleaned.

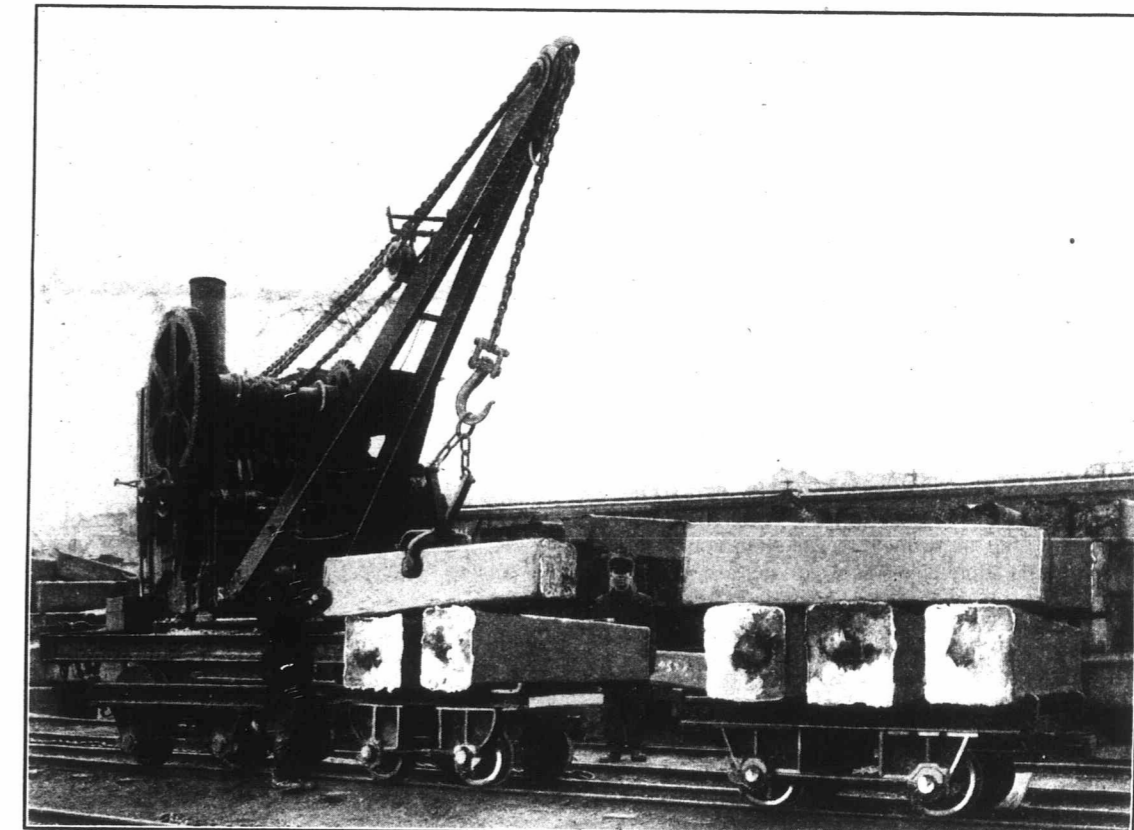
Down under the ground men are working in the various seams. With the aid of different coal cutting machinery, explosions, picks and shovels, they tear the coal down from the face of the seam, load it into cars and haul it to the shaft, where it is hoisted to the surface. According as the face of the seam is torn down and taken away the miners prop up the roof of rock and shale above with wooden pit props. In the older collieries so much of the coal has been taken from some of the seams that one has to travel back from the shaft for miles before reaching the face of the seam where the miners are working. In some of the Cape Breton County collieries the workings already extend for miles out underneath the ocean. But there is such a layer of rock, shale and mud above these coal seams that

the waters of the ocean cannot penetrate through. Any water that does ooze in—and in most mines there is a certain amount of seepage—is pumped out. The coal is generally hauled from the face of the seam to the shaft by mules that often pass the whole of their lives in the pit without being brought to the surface.

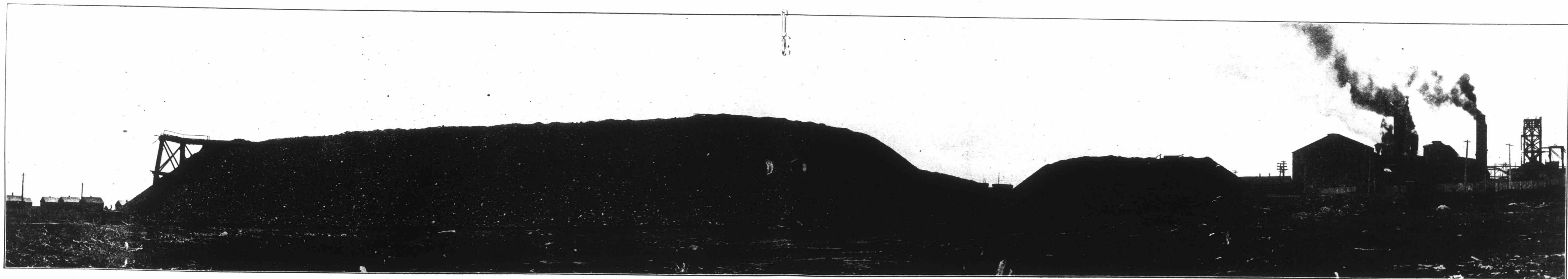
Iron ore is often mined from the surface as an open quarry. At the greatest iron deposit in the world, viz., that of the Masabi Range, Minnesota, U.S.A., where the ore is a soft hematite, it is dipped up and loaded into cars with steam shovels. This materially reduces the cost of mining. But, in many cases, iron ore is taken from underground workings. One of the very notable cases is that of Wabana, Belle Island, Newfoundland. As in the case of the coal at Sydney, the seams of iron ore at Wabana extend far out under the ocean, and the ore is hauled for several miles underneath the ocean to the Island, before being brought to the surface.

Nickel

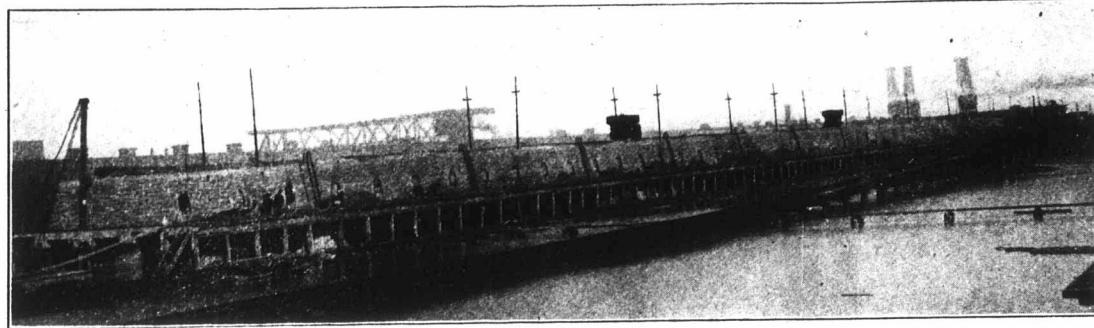
TRAVELLING west on the Canadian Pacific Railway, one passes through a territory, not far from the town of Sudbury, where the fields are never green and the trees never clothed



LOADING 3½ TON STEEL INGOTS IN THE YARDS OF THE NOVA SCOTIA STEEL & COAL CO., AT NEW GLASGOW, FROM CARS ONTO SMALL TRUCKS.



NO. 1 COLLIERY AND COAL HEAP OF DOMINION COAL CO., GLACE BAY, N.S.



BEE-HIVE COKE OVENS OF ATIKOKAN IRON CO., LTD., PORT ARTHUR, ONT.

with foliage. In fact, there are neither trees nor grass. The air is so saturated with sulphur fumes that it is impossible for vegetable life of any kind to exist. These fumes come from heaps of ore that are being roasted, and from the blast furnaces where this roasted ore is being treated for the recovery of the nickel and copper it contains. This barren spot of country is Copper Cliff—the great nickel camp, not only of Canada, but of the world. It is also the second largest mining and metallurgical camp of the Dominion.

The ore as it comes from the mine contains about 25 per cent of sulphur. Most of this is disposed of by piling the ore in heaps of from 500 to 3,000 tons each on foundations of firewood. When fired, this dry pine produces a short fierce heat that serves to ignite the sulphur in the ore, which, once ignited, continues to burn for several weeks. During this roasting process, in addition to the sulphur being driven off, important changes take place in the ore, which improve its smelting qualities. The roast yards are situated in the open, so that the wind and currents of air can play over and through the heaps of ore readily. In this way the air becomes saturated with the sulphur fumes, which destroy vegetation over a radius of about two miles, rusts wire fences, and telegraph lines, and gives a brownish tint to all wooden objects. But the fumes do not seem to have any injurious effect on man or beast. Their presence does not even make the atmosphere uncomfortable, except upon rare occasions, when they are particularly dense and accompanied by a fog. The workmen are healthy and seem to be immune to some of the ordinary ills from which people in other districts suffer.

From the roast yards the ore is taken to the blast furnaces, where it is mixed with coke and quartz, instead of limestone, as a flux. The ore contains a considerable quantity of iron. Some of this combines with the quartz, forming slag, which is drawn off from the furnace in a molten state and poured on to the dump heaps as waste material. The resulting matte, as it is called, sometimes contains about 6 per cent of copper, 16 per cent of nickel, the balance being mostly iron and sulphur. This furnace matte is then treated in reverberatory furnaces, where the quantity of iron and other impurities is further eliminated and the resultant product contains about 25 per cent copper and 55 per cent

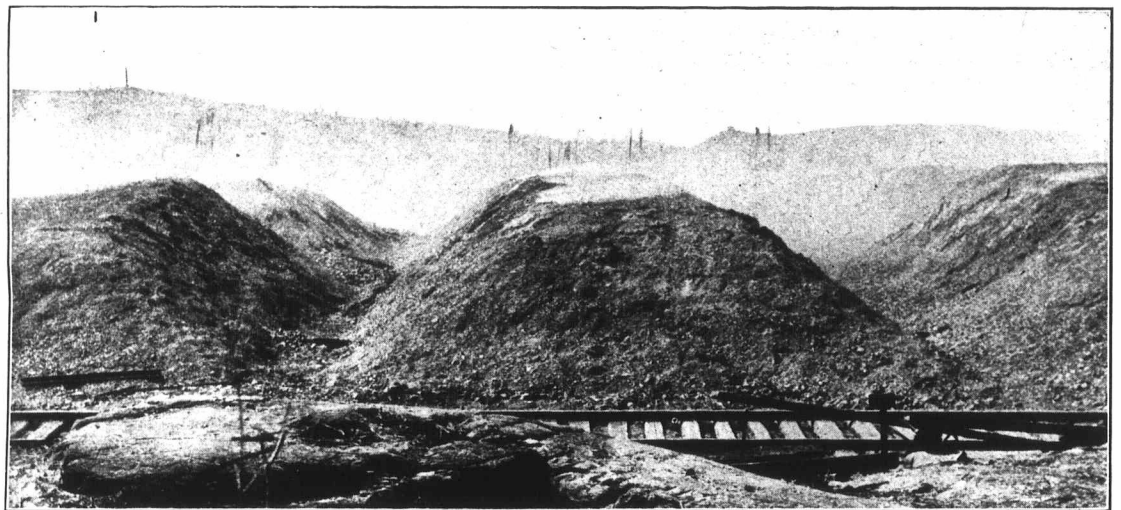


DRILLING HOLES INTO A BED OF ORE WITH COMPRESSED AIR-DRILLS.

nickel. In this condition it is shipped to the refineries.

Heretofore none of this matte has been refined in Canada, and the public sentiment in favor of the establishment of a Canadian nickel refinery has been rapidly growing until a few days ago the Prime Minister, Sir Robert Borden, announced the receipt of a letter from the President of the International Nickel Co., in which that Company expressed a willingness, out of respect for the wishes of the Canadian people, to establish a refinery in the Dominion.

Pure nickel is used in small amounts for a number of purposes because of its strength and durability and its white color, which does not tarnish. For these reasons several nations have introduced it for coinage. Its cleanness and hardness contrast very favorably with copper or bronze on the one hand and silver on the other.



ROAST-BEDS AT COPPER CLIFF, ONT.

The clouds of sulphur fumes may be seen rising from the heaps of roasting ore.

Though the importance of pure nickel is likely to grow, the chief use of the metal is in the production of alloys, particularly nickel steel, in which the greater part of the nickel now refined is employed.

Steel containing from 2½ to 3½ per cent of nickel has certain of its properties greatly improved, so that for many purposes it is replacing ordinary structural steel. Its value for armor plate has long been known, and the rivalry of the great maritime nations in the building of dreadnaughts is one of the causes for the recent increased demand for nickel. It is stated by Mr. McNeill, president of the International Nickel Co., that the growth of the motor vehicle business is important in this respect also; and its value for bridge building is shown by the selection of nickel steel for the rebuilding of the Quebec bridge, which fell so disastrously some years ago.

Alloys much higher in nickel are employed for special purposes, such as Invar, steel with 36 per cent of nickel, which has the property of varying very little in length with change of temperature, making it of great value for tapes to be used in the accurate chaining necessary in geodetic surveys.

Next to nickel steel the most important alloy is monel metal, consisting of 68 to 72 per cent of nickel, with the balance copper. The proportions of nickel to copper are those of the Sudbury ores, so that the alloy may be produced directly from the matte, at a cost not much greater than that of copper. The alloy is silver white and takes a brilliant polish, which slowly turns greyish on exposure. It melts at 1,350 degrees Cent., has

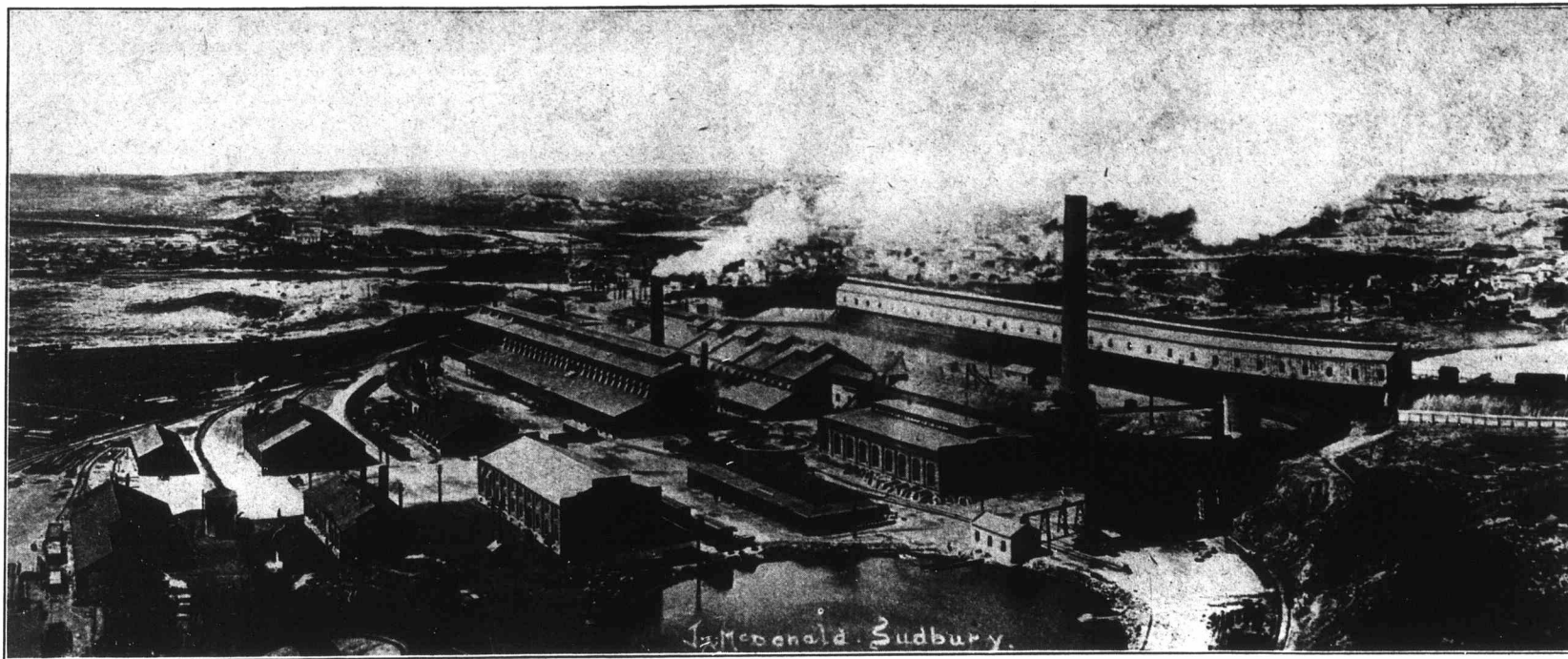
the same specific gravity as copper and can be cast or rolled and treated in various ways like copper or steel, but is distinctly stronger than ordinary steel or than manganese bronze.

The two producing companies in the Sudbury district are the Canadian Copper Co., a subsidiary of the International Nickel Co., and the Mond Nickel Co. The former company has its smelters at Copper Cliff, Ont., and a few miles away, at Coniston, the smelting plant of the Mond Nickel Co., is located. All the ore consumed by the smelters of these two companies comes from the neighbourhood, with the exception of a small but increasing quantity that is shipped from a new mine recently opened on the Porcupine branch of the Timiskaming and Northern Ontario Railway.

The methods employed throughout the Sudbury district in taking the ore from the ground are (1) Open quarry and (2) Sinking of shafts and underground drifting and stoping. There are several mines in the district, but all are owned and operated by the two companies above mentioned. Each mine is provided with what is known as a rock-house where the ore is crushed, screened and stored in bins so that it may be conveniently run into the cars for shipment to the roast yards. After the ore has been torn from its place in the sides or bottom of the quarry, or from the sides, bottom or overhead of the underground drifts, it is loaded into steel cars or skips and hoisted out of the mine directly to the top of the rock-house, over an incline track, which runs directly from the bottom of the pit or mine to the top of the rock-house. As soon as it reaches the top it is automatically dumped on an incline screen, through which the fines and small pieces pass to the storage bins, while the larger

pieces go down over the screen and into the jaws of a crusher, where they are broken up. From the crusher the ore falls into a revolving screen through which pieces, under a certain size, pass to the storage bins. The lumps that are still too large to go through the mesh of the screen pass out the end of the screen and on to a travelling belt or table along side of which a number of boys sit. These boys pick out and cast aside from the ore, passing slowly in front of them, a considerable portion of barren rock or very lean ore. The better grades pass on into the storage bins. These boys become very adept and know by sight and heft the poorer pieces of ore from the good.

Down in the quarry and underground workings there are men who do nothing else but operate steam driven and air driven drills, making holes from three to six feet deep into the solid rock. Others are engaged in loading these holes with charges of dynamite. These charges are generally set off in sections of a number at a time, so that their bursting and breaking power will be as great as possible. The instantaneous discharge of a number of blasts is accomplished by having an electric wire laid from each charge to a single battery. A stick of dynamite has very much the appearance—in shape, if not in color—of a wax candle. One stick of dynamite after another is put down into the drill hole until the hole is filled, or nearly so. Into the upper end of the last stick of dynamite is embedded a percussion cap, which is attached to the end of a wire leading from one electric battery. The battery is situated at a safe distance from the charges, and at the instant the handle of the battery is pushed down all the connected charges go off as one blast. After the dynamite fumes have disappeared the shovellers or muckers, as they are



PLANT OF THE CANADIAN COPPER CO., LTD., COPPER CLIFF, ONT.
The Canadian Copper Co. is a subsidiary of The International Nickel Co.

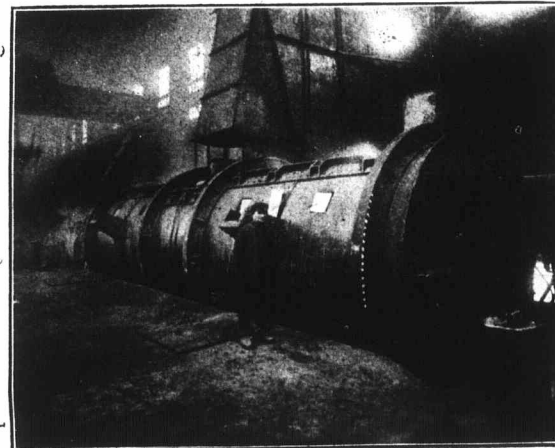
called, load the rock in cars or skips, which are pushed or drawn over tracks that radiate to the sides of the mine from the foot of the incline railway that leads to the rock-house.

This drilling, blasting, screening and sorting look very simple. But it is not so easy, at least, to do it with a minimum expenditure of energy (which costs money), and the greatest despatch (time also costs money). It must also be done with the maximum of safety for the lives of those engaged in the work. Much attention has been given to this last-mentioned feature. The International Nickel Co. employ a safety engineer, whose only duty is to see that all workings and constructions are designed and carried out with every reasonable precaution against accident. The company also maintains a well equipped hospital, with medical and nursing staffs always in attendance.

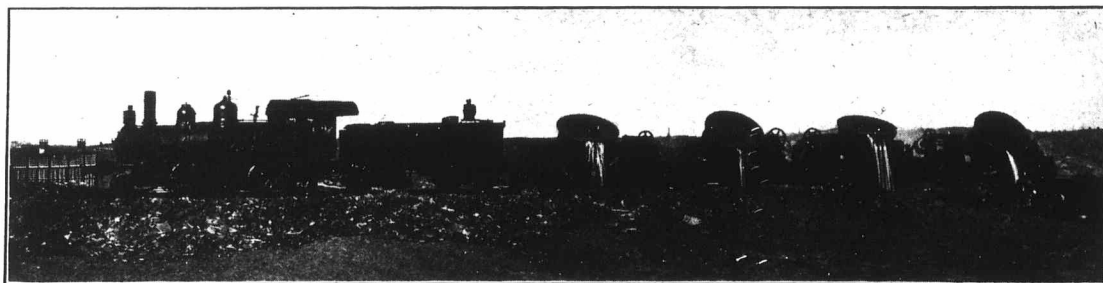
The mines and smelters in the Sudbury district give employment to nearly 6,000 men.

"Gold"

OF ALL the good things which Mother Earth holds in store, there is nothing that allures like gold. The announcement of a new discovery of this yellow metal attracts world-wide attention, and, when of sufficient importance, it draws, from every clime, prospectors and adventurers. This is particularly true in the case of an alluvial deposit. That is, a deposit where particles of gold, ranging from the size of a pin point to a "nugget" as large as a hen's egg, lie scattered among the sands and gravel of a river bed and may be recovered by no more expensive equipment than a pick, a shovel and a pan. Gold is much heavier than sand, and readily drops to the bottom of the pan when shaken up in water to separate the gold from the dross. "Panning" gold, however, is not as simple as it looks, and the practical miner with a pan, will recover several



BASIC CONVERTERS OF CANADIAN COPPER CO., COPPER CLIFF, ONT.



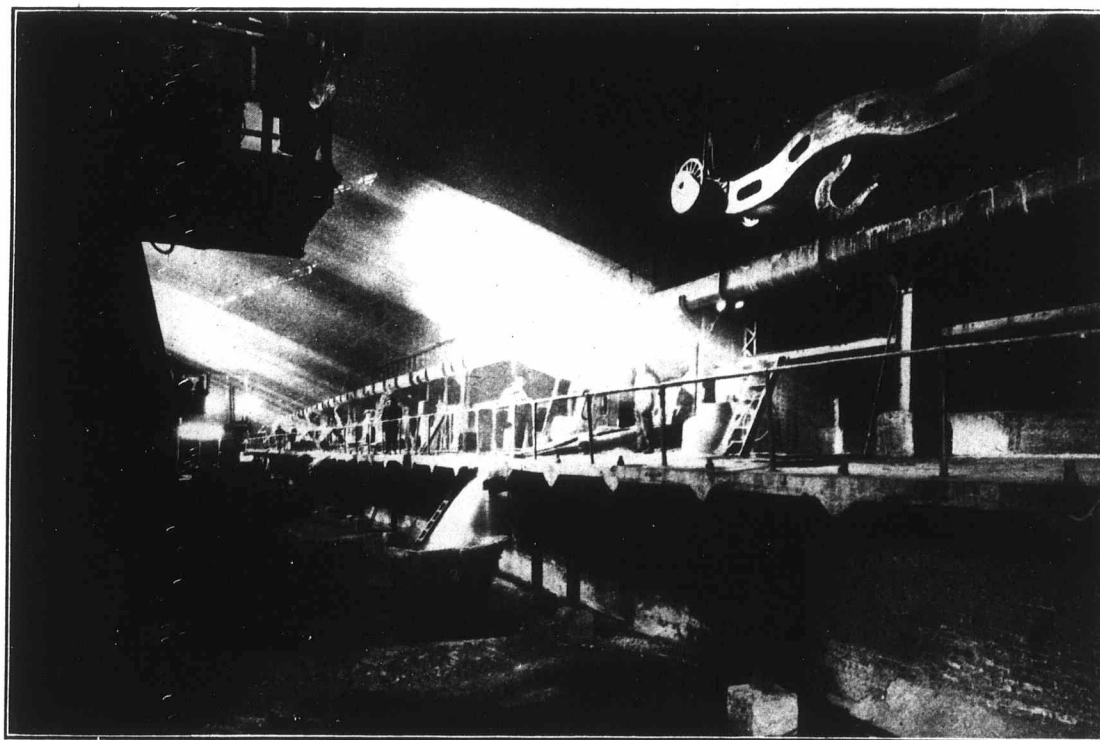
EMPTYING SLAG POTS ON DUMP AT COPPER CLIFF, ONT.

One of the unfortunate features of so many mining camps is their comparatively brief life. When all the ore that can be profitably mined has been taken out of the ground the camp comes to an end, and the community ceases, unless there is some other industry it can turn to. This feature, however, is not true of either Sudbury, or Sydney — Canada's premier mining camps. Both the coal at Sydney and the nickel ore of Sudbury are in known quantities sufficiently large to last for generations.

The silver-ores of the Cobalt district carry a small amount of nickel which is extracted from such of those ores as are treated by the Coniagas Reduction Co., at Thorold, Ont., and The Doloro Mining and Reduction Co. at Deloro, Ont. At both these plants the product is in the form of metallic nickel and nickel oxide. These plants will be described more fully when dealing with silver.

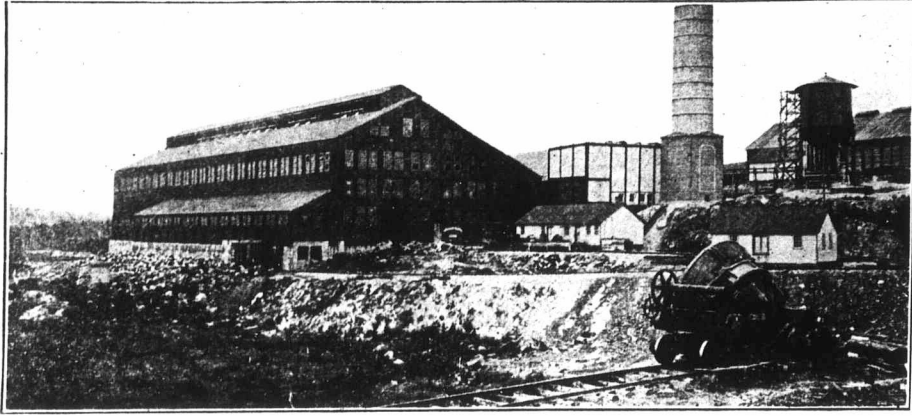
times the "winnings" of a novice working in the same "diggings."

Discoveries of alluvial deposits of gold are scattered all down the ages, from before the time when the Babylonians washed the sands of the river beds in Mesopotamia, to our own Yukon rush of a few years ago. Between these two periods the greatest discoveries were those made in South and Central America, immediately following the discovery of the New World, those made in California about the middle of the last century, and in Western Australia a few years later.



DRAWING OFF NICKEL-COPPER MATTE IN CANADIAN COPPER CO.'S PLANT AT COPPER CLIFF, ONT.





SMELTER OF MOND NICKEL COMPANY AT CONISTON, ONTARIO.

The recovery of gold from rock formations is a much more expensive process, and while such discoveries always attract the prospector, he is seldom the person who works the claims. This is done by companies or individuals who are in a position to spend the money necessary to first ascertain by development, if the deposit is sufficiently extensive and rich to make a mine, and, if so, to purchase the machinery and plant for the recovery of the gold from the ore. Such deposits of gold "in place" generally form much more permanent camps than do auriferous deposits, particularly during recent years, since the development of the cyanide and chlorination processes have made possible the profitable working of ores that carry no more than one-third of an ounce to the ton of ore. In fact, ores carrying values as low as \$2.50 to \$3.00 in gold per ton of ore, have been profitably worked. (The value of an ounce of gold is approximately \$20.)

Gold ore is taken from the mine by the ordinary process of digging a shaft or hole down into the deposit and drifting or tunneling into the bed of ore at different levels. The ore is stoked or pulled down from the sides and tops of these drifts, conveyed to the shaft, and hoisted to the surface. The larger pieces are crushed and all is conveyed to a storage bin, from where it is gradually and automatically fed to a battery of stamps, commonly known as a stamp mill.

Of the various processes for treating gold ores, stamp mill amalgamation is one of the simplest in common use. In stamp milling, the ore is crushed by stamps falling on it in a cast iron box or mortar fitted on one or two sides with screens through which the crushed ore is discharged. The stamps are commonly arranged in groups of five and are raised and dropped at intervals in a definite order, which has been found to give the best results. Water is introduced in the mortar and splashes about with the ore and out through the screen at each fall of the stamps, carrying the crushed ore with it. In many cases mercury is introduced in the mortar.

The crushed ore, or pulp, from the battery then passes over the apron plates. These plates have a coating of mercury, and with this the particles of free gold amalgamate and are caught, while the remainder of the pulp passes on. At frequent intervals, three or four times a day, the stamps are stopped and the plate scraped with a rubber edged scraper. At longer intervals, two or three weeks, the entire accumulation of amalgam is removed, and the plates thoroughly dressed and scraped. This is commonly known as the "clean-up."

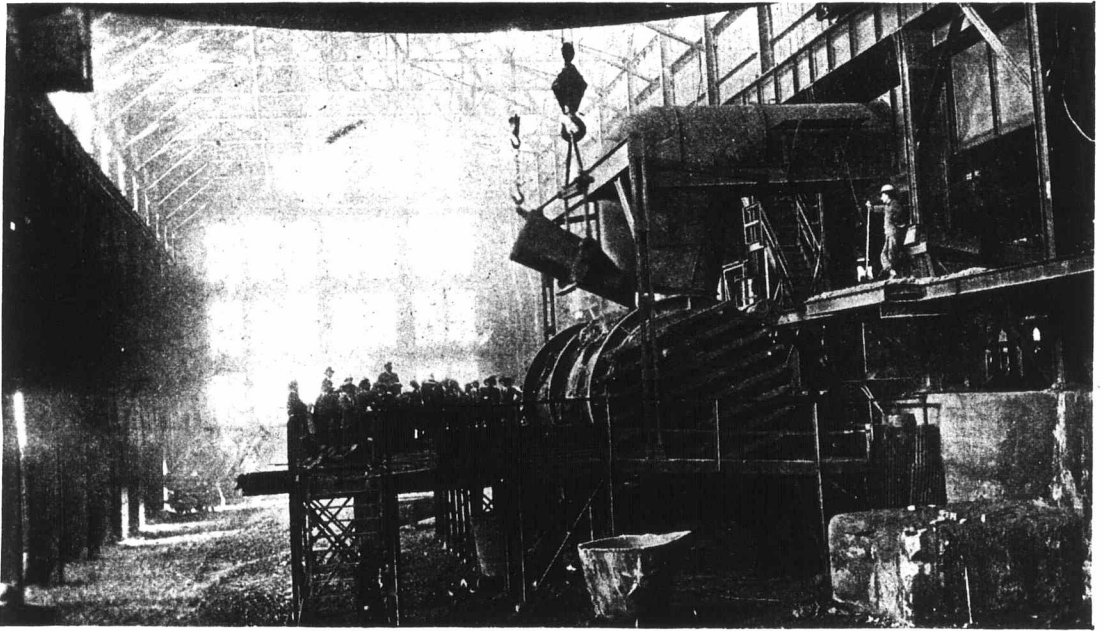
The amalgam gathered from the plates commonly contains numerous hard particles from the ore

and stamps. It is ground to a fine mud and mercury is added. The pulp is washed, treated with nitric acid, and again washed and then squeezed through chamois to remove the excess of mercury. The amalgam is then retorted. The mercury vaporized and driven off by heat is condensed and used again. The retort residue containing the gold is melted in a crucible with soda and borax. The molten mixture is poured into a mould and the bar when cleaned of slag is ready for refining.

To a certain extent, all ores are refractory, in as much as a part of the gold contained in them can not be recovered by means of mercury, no matter how carefully the treatment is carried out. Accordingly, it is now customary to further treat the tailings from the amalgamation process. Sometimes these tailings are concentrated and graded by means of concentrating tables or settling tanks. The resultant product is either cyanided, chlorinated or smelted, according to their nature and to various other considerations. If the tailings from the stamp mill require to be ground finer, they are put through a revolving cylinder filled with flint pebbles or iron balls. Such a machine is known as a ball mill.

The chlorination process depends upon the action of chlorine gas upon gold, the resultant product being gold-chloride, which is then washed out of the ore with water and the metal gold precipitated from the solution by means of chemicals, generally hydrogen sulphide. The process of cyaniding is essentially the same as that of chlorination, except that cyanide of potassium is used instead of chlorine gas, and the gold is precipitated from the cyanide solution by means of zinc shavings, or by electrolysis.

When the gold has been recovered by any of the above described methods, it is invariably impure,

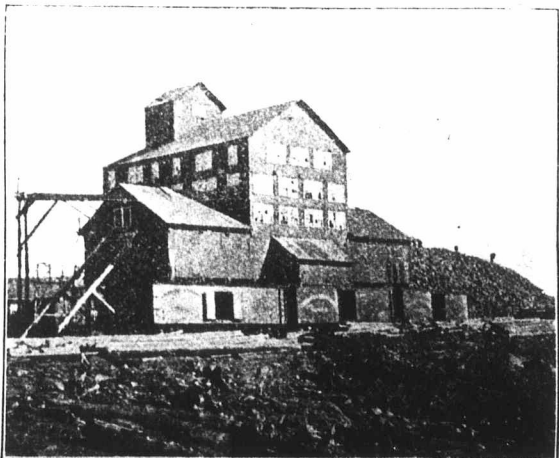


CHARGING A BASIC CONVERTER AT SMELTER OF THE MOND NICKEL COMPANY AT CONISTON, ONT.

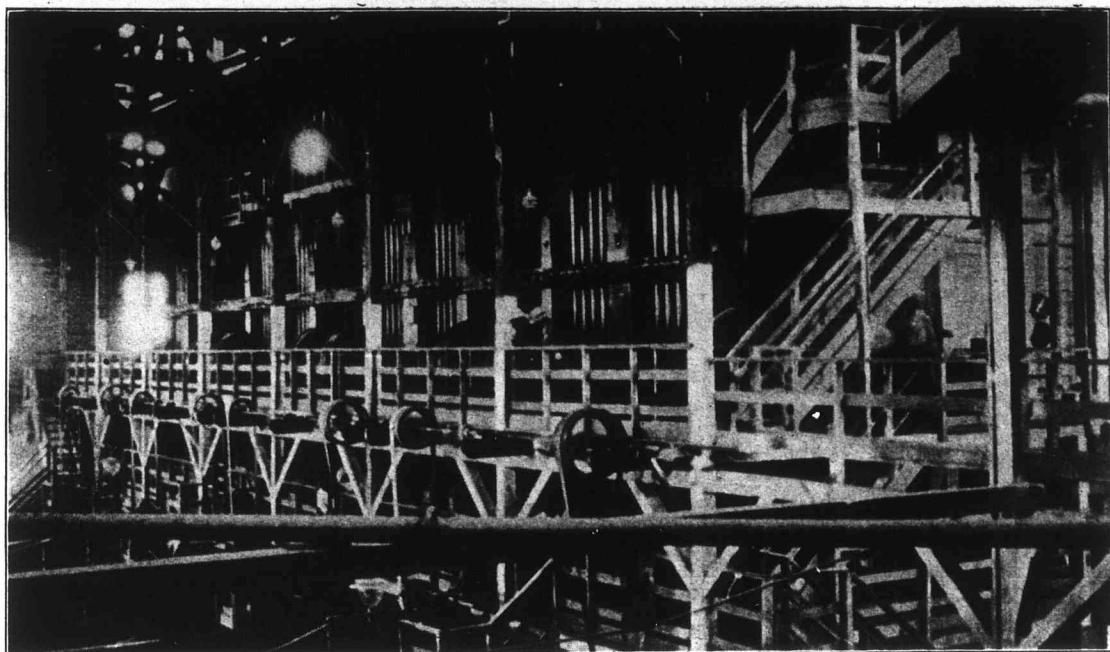
After treatment in the stamp battery, the crushed ore and water flowing from the amalgamated plates still contains more or less of the gold, either locked up inside coarse grains of sand or combined with some ingredient in the ore. All such ores which do not yield a satisfactory percentage of their values on treatment with mercury are known as "refractory" gold ores, as distinguished from "free-milling" ores.

and after being melted and cast into bars, is sent to a refinery.

Pure gold is seldom seen either in coin or in the arts. It is generally mixed with silver or copper, and is referred to as so many karats fine—gold that is 22 karats fine contains 22 out of 24 parts of gold. In the form of leaf, gold is more pure than in any other commercial condition. Pure gold is quite soft, and the most malleable and ductile of all

GARSON MINE, CONISTON, ONT.
Chief Source of Mond Company Ore.

HYDRAULIC GOLD MINING SCENE.



STAMP BATTERIES, HOLLINGER MINING CO., LTD., TIMMINS, ONT.

metals. Leaf-gold can be made as thin as one three-hundred-thousandth of an inch thick by hammering, and an ounce of gold can be drawn out into fifty miles of wire. Gold can readily be identified by its color, its great density or weight, and by the fact that it is not attacked by nitric acid.

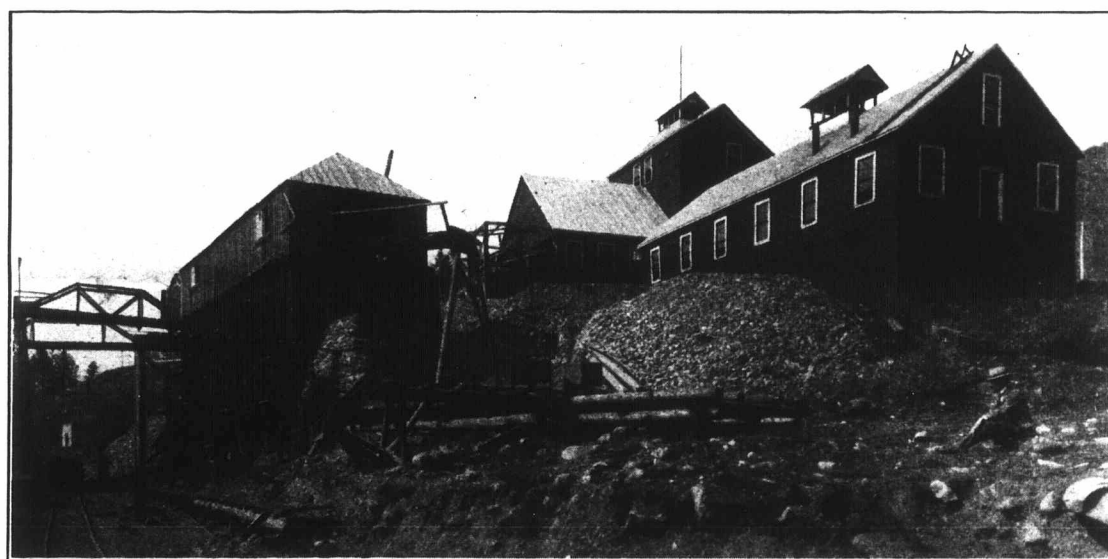
Gold is extensively used in the arts, particularly for the manufacture of jewellery and other forms of decoration. It is also the standard of value for the great majority of nations, and in all countries it is the only recognized medium of international exchange. For this reason its principal use is in the making of coins for general circulation or to be held by governments and banks as a basis on which to issue paper currency and other symbols of value.

Although England produces little or no gold herself, yet London is the world's market for the metal. Over fifty per cent of the world's production of gold passes through her markets, and practically every sale made in any part of the world is based upon the price of gold in London.

By an act of the British Parliament, the Bank of England, in times of peace, is compelled to buy all refined gold offered to it and to pay for the same, in Bank of England notes, £3 17s. 9d. (\$18.92) per standard ounce troy. A standard ounce of gold contains 916.6 parts in every 1,000 of gold. By the same act, the Bank of England is compelled to redeem all its notes in gold. This regulation also holds good only in times of peace. In times of war, such as at present, specie payments are generally suspended. Also by an act of the same parliament, the Royal Mint at London is compelled to convert into coin at the rate of £3 17s. 10½d. per standard ounce troy, which is equal to \$20.67 per ounce troy, of pure gold, without any charge or reduction whatever for it, the average fineness of which is not less

than standard. By reason of these two acts, London is the great reservoir into and out of which gold flows freely. In fact London is the only free market for gold in the world.

There is, therefore, always a market for gold, irrespective of the quantity produced. The price in London is never below \$18.92 per standard ounce



LE ROI GOLD MINES, ROSSLAND, B.C.

troy, and the price in any other part of the world should not be less than this by more than the cost of carrying the gold to London. There are certain times, however, during which the price may be higher in other parts of the world than in London. For instance, it will be higher in New York if the

balance of trade between New York and London is in favour of New York, because, in that case, conditions are such, or becoming such, that gold will require to be shipped from London to New York in order to liquidate the trade balance.

Until recently the producers of gold in Canada had little or no facilities for marketing their gold, and particularly all the metal produced was shipped to the refineries of the United States and Europe. But in 1904 a refinery was established at Trail, B.C., by the Consolidated Mining and Smelting Company, Limited. About the beginning of 1909, the Mint at Ottawa began to receive gold. During the last few years, the Government assay office in Vancouver has also received, assayed and purchased gold bullion.

On an average, about one-third of Canada's annual gold production remains within the country. The balance finds its way into the United States in either the refined or unrefined condition.

During 1915 the gold production from Nova Scotia amounted to \$137,178, derived principally from West Gore, Tangier, Caribou, Fifteen Mile Brook, Lake Catcha, Renfrew and Oldham. All of this came from free-milling quartz deposits, with the exception of that from West Gore, where the gold is combined with antimony.

What gold comes from the Province of Quebec is recovered from the residue or cinders produced by the burning of pyrites in connection with the manufacture of sulphuric acid.

Ontario is the largest gold-producing Province in Canada. A small amount of the yellow metal comes

from the district of Algoma in this province, and a somewhat larger amount from the Rainy River District. But the great bulk of Ontario's gold comes from the Timiskaming district, where, according to the Preliminary Report of the Department of Mines, Ottawa, for 1915, "The Hollinger and Acme Mines contributed about one-half of the output of the Province, and the Dome Mines nearly one-fifth of the total."

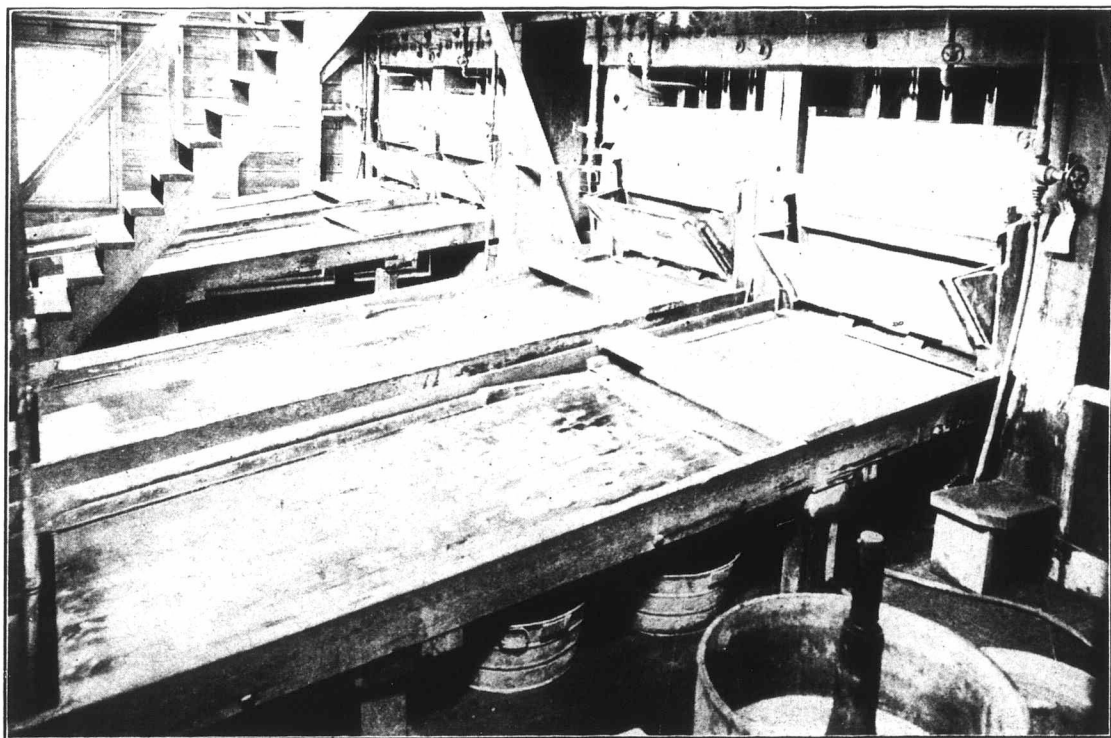
Ontario gold is recovered from free-milling ores.

A small amount of alluvial gold is recovered from the sands of the Saskatchewan River, in the Province of Alberta.

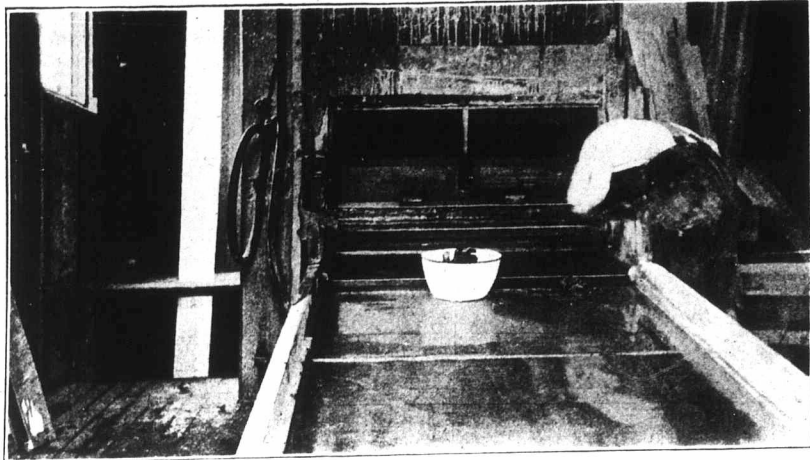
In 1915 the recovery of gold from alluvial or placer workings in the Province of British Columbia, amounted to about three-quarters of a million dollars. The balance was recovered from free-milling quartz and from the ores treated in smelters.

Among the camps of British Columbia, Rossland stands first, as a gold producer, with the Boundary District second, followed by Nelson and the Coast Districts. The chief producers in the Rossland district are the Centre Star and the Le Roi groups, owned by the Consolidated Mining and Smelting Company of Canada, Limited, and the Josie Mine of the Le Roi Mining Company, Limited. The principal producers in the Boundary District are the Granby Mines and Rawhide at Phoenix, the Mother Lode at Deadwood, and the Nickel Plate Mine, at Hedley, the last mentioned has been a considerable and steady producer for a number of years.

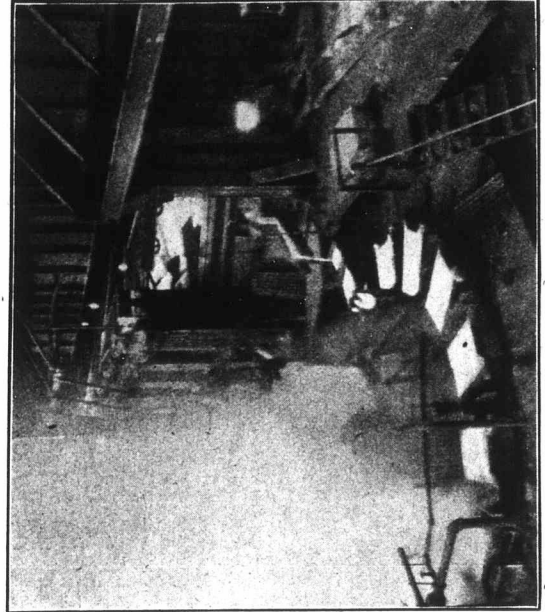
With the exception of a small recovery from copper ores, the Yukon production of gold comes from her alluvial deposits.



A 20-STAMP GOLD MILL.



A CLEAN-UP IN A CYCLAMP GOLD MILL.



CASTING COPPER ANODES AT AN ELECTROLYTIC REFINERY.

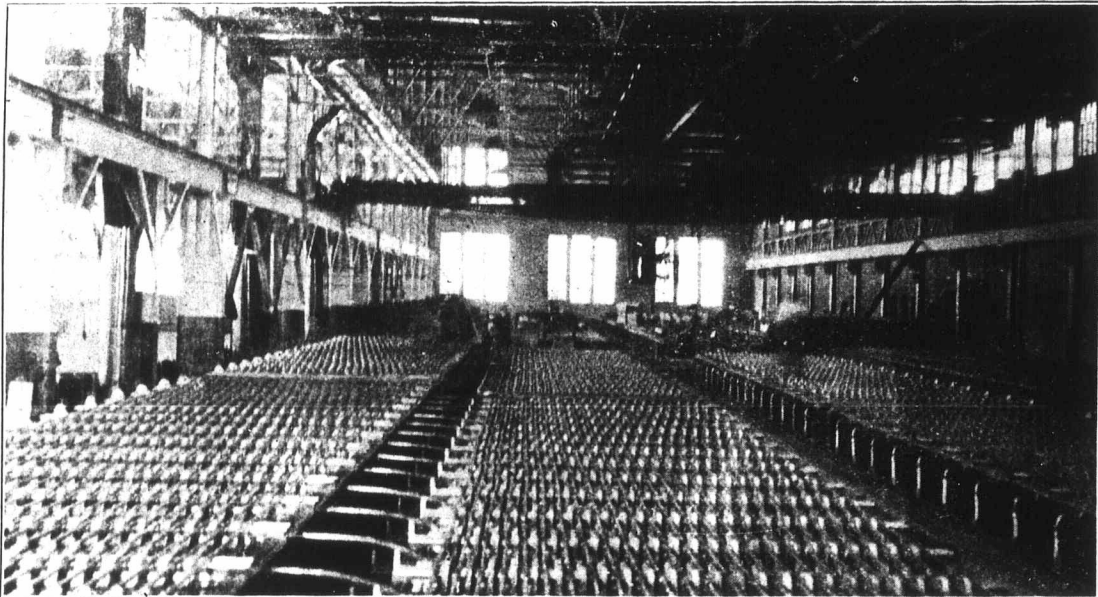
Copper

FEW metals are more useful in the industries than is copper. It is reddish in color, very tenacious, easily malleable and ductile. Being a good conductor of heat it is used for fire boxes and boiler pipes. It is also one of the constituents of brass and various kinds of bronze and other alloys. As a conductor of heat it is used for fire boxes and boiler pipes. It is also one of the constituents of brass and various kinds of bronze and other alloys. As a conductor of electricity it is second only to silver, and hence is extensively used in electrical machinery, telegraph, telephone and power transmission wires. Electrotyping and engraving are other processes in which it is used extensively. Of the chemicals into

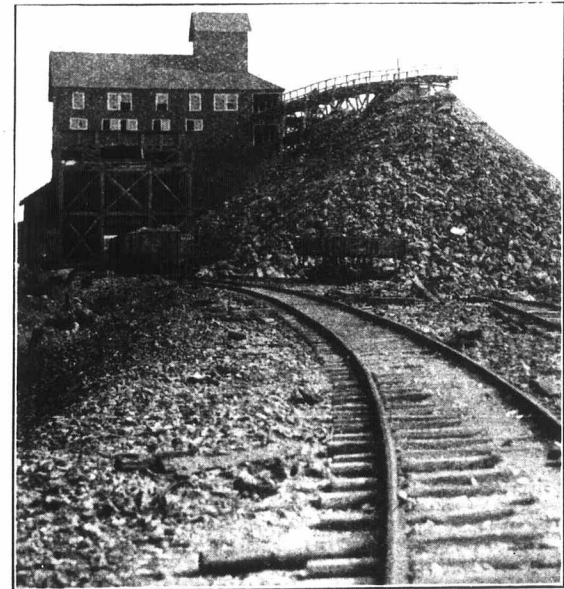
In the production of metallic copper suitable for commercial purposes three distinct processes are usually required, viz.: Mining, smelting and refining.

Though there are many kinds of copper ores, those of commercial importance are few in number. They may be divided into three classes, viz.: sulphides, oxides and native copper. Native copper occurs in Canada in a number of different localities scattered from the Atlantic to the Pacific, but none of these deposits are of sufficient importance to form a regular producer. In fact, there are few deposits of native copper in the world of special importance, outside of those of the Michigan copper district. There are also several known occurrences of copper oxide ores in Canada, but none are sufficiently extensive to form a mine. The best known deposits of this class of ore in the world are those

ing Province of the Dominion. The deposits that are being most extensively worked at present are those in West Kootenay and Kamloops in Southern British Columbia, and on a number of the Coastal Islands, including the island of Vancouver. The principal active producing mines in these districts are at Phoenix, Motherlode, Rossland, Britannia, Texada Island and Granby Bay. The copper ores of Southern British Columbia are the most important. The ore throughout this district is remarkably uniform and easily smelted, and in addition, it car-



AN ELECTROLYTIC COPPER REFINERY.



ROCK-HOUSE AT ONE OF THE MINES OF ONTARIO COPPER CO., COPPER CLIFF, ONT.

which copper enters the best known is blue vitrol, which substance is required for calico printing, electrotyping and for destroying weeds. The arsenate of copper is a green powder generally known as Scheele's green. The arsenite of copper is commonly known as "Paris Green," which is used as a poison for killing insects, bugs, etc. It is also used as a pigment in the printing of wall paper, artificial flowers, etc. Copper oxide gives a ruby-red colour to glass.

The world's production of copper in 1913 amounted to 2,189,732,130 pounds. The countries contributing to this production were as follows:

United States	1,224,484,098
Japan	161,376,720
Spain and Portugal	120,591,620
Mexico	116,402,880
Australia	104,277,580
Chile	88,184,000
Canada	76,975,832
Russia	74,735,940
Peru	56,658,220
Germany	55,776,380
British South Africa	50,485,340
Norway	19,400,480

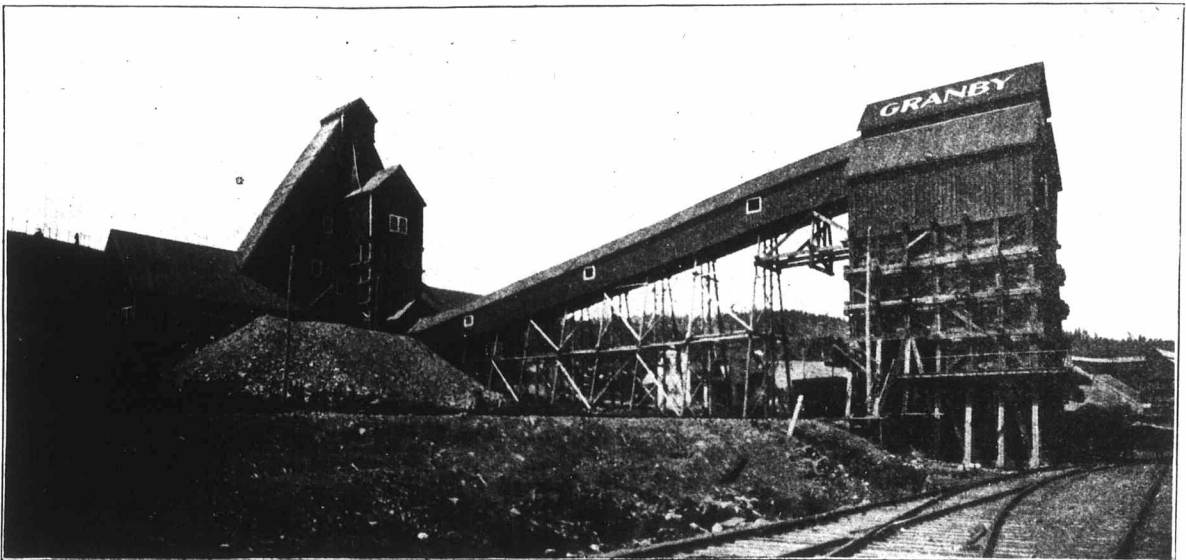
Canada's production of copper is rapidly increasing. In 1915 it amounted to 102,622,486 lbs., and if the output during the early part of 1916 keeps up throughout the year the aggregate for the twelve months of 1916 will be well over 125,000,000 lbs.

which form the copper mines of New Mexico and Arizona, U.S.A. The only copper ores that are being worked in Canada are the sulphides, which occur most abundantly in the Provinces of British Columbia and Ontario.

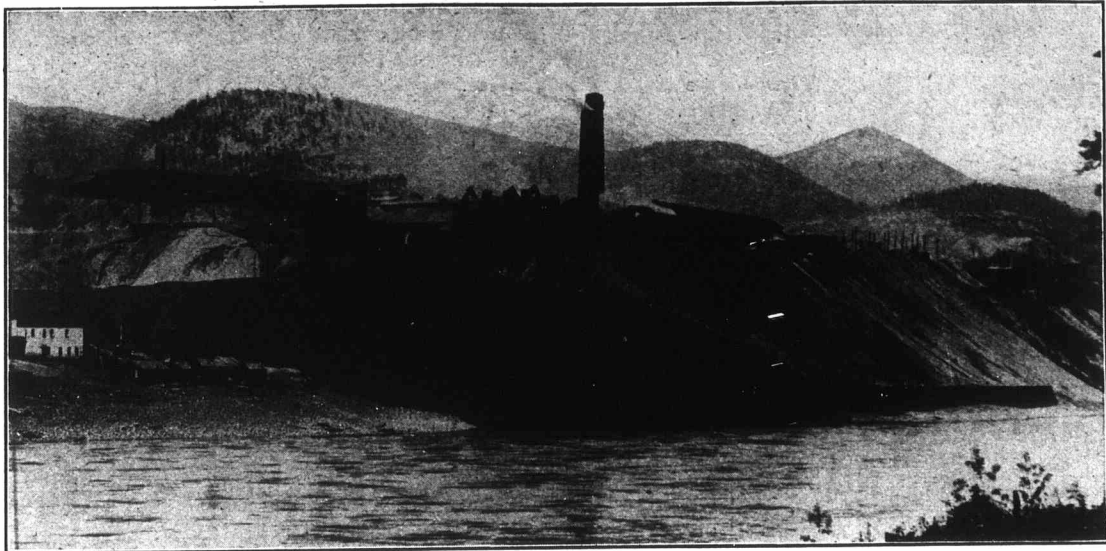
British Columbia is the premier copper produc-

ries values in gold and silver. The average is from 1.2 to 1.6 per cent of copper and about \$1.00 in gold and silver per ton.

There are three copper smelters in operation in Southern British Columbia. The smelter of the Consolidated Mining and Smelting Co. of Canada,



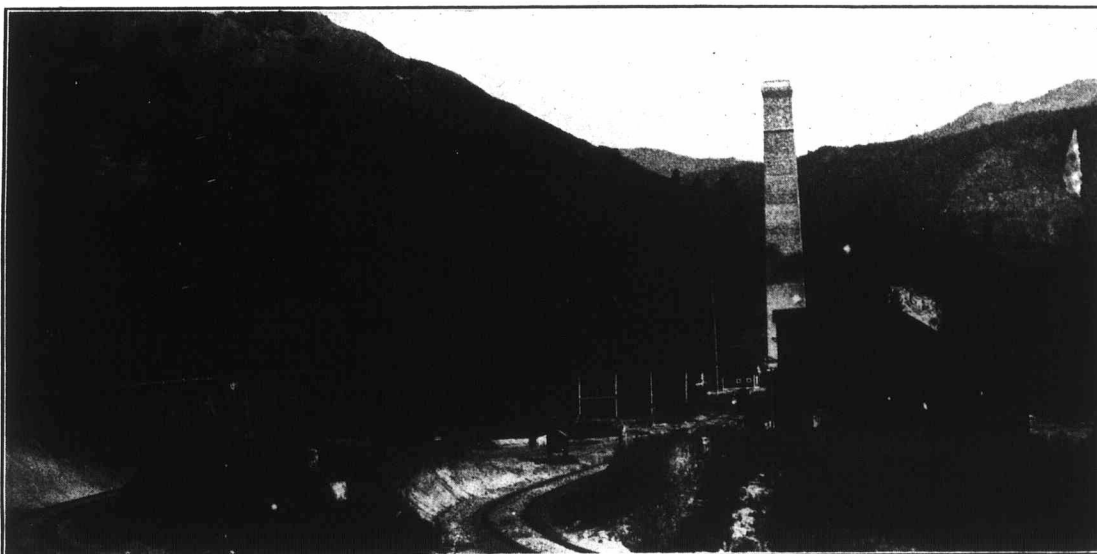
GRANBY COPPER MINE, PHOENIX, B.C.



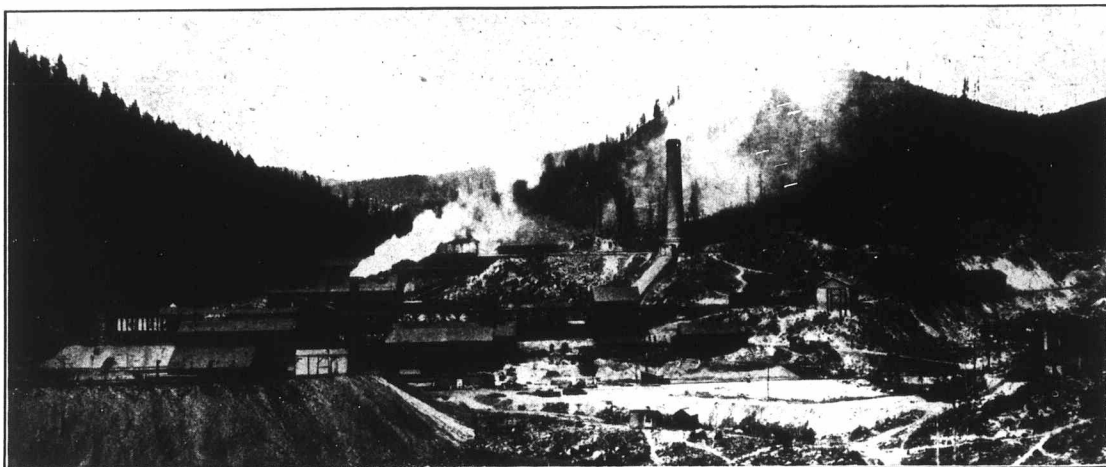
SMELTER OF CONSOLIDATED MINING AND SMELTING CO. OF CANADA, LTD., AT TRAIL, B.C.

Ltd., at Trail, treats the ores of the Rossland camp producing a copper matte which is shipped to the United States for refining. At Grand Forks the Granby Consolidated Mining, Smelting and Power Co., Ltd., treats the ores from the Phoenix district. At Greenwood the smelter of the British Copper Co., Ltd., treats the ores from the Motherlode and some other mines belonging to the B. C. Copper Company. Both of the last two mentioned smelters carry their product from the blast furnaces into Bessemer converters from which it emerges in the form of blister copper, which is also sent to the refineries of the United States. On the Pacific coast of British Columbia The Tyee Copper Co., Ltd., has a smelter at Ladysmith on the east side of Vancouver Island. A new smelter has commenced operation at Anyox on Granby Bay and is treating the ore from the surrounding districts, the greater tonnage, however, coming from the mine in the immediate vicinity belonging to the Granby Consolidated Mines, Smelting and Power Co., Ltd. All smelting companies in British Columbia treat custom ores in addition to the ores from their own mines.

Ontario is the second important copper producing province. Her production is derived entirely from the nickel copper ores of the Sudbury district. In this locality two smelters are in active operation,



SMELTER OF GRANBY CONSOLIDATED MINING, SMELTING AND POWER CO., LTD., AT GRAND FORKS, B.C.



SMELTER OF BRITISH COLUMBIA COPPER CO. LTD., AT GREENWOOD, B.C.

viz., those of the International Nickel Co., and the Monds Nickel Co., already described when dealing with nickel. The nickel copper matte from these furnaces are shipped to the refineries of the United States and Great Britain.

Quebec's production of copper is derived from the cinder or residue remaining after the burning of pyrites in the processes of making sulphuric acid. This cinder is also shipped to the refineries of the United States.

From this it will be seen that practically all the copper produced in Canada goes out of the country in the form of matte, blister copper or cinder. A considerable quantity also goes out with the export of copper ore to the furnaces of the United States. Canada's requirements of copper, which are necessarily considerable in a country where so much new electrical development work is going on, has to be imported. This is a national waste which could be obviated by the encouragement of copper refineries in Canada. Just here it is worth while noting that the only important metals now being carried to the finished state within the

country are those that have been encouraged in the early stages of their development by bonuses, such as, steel and lead which have been bonused by the Dominion Government, and nickel and Cobalt oxides which have been bonused by the Ontario Government.

The product of a copper blast furnace is very impure and requires to be treated in a reverberatory furnace where it is heated in an oxidizing flame, which drives off the sulphur and other impurities leaving a product containing about 98 per cent copper, known as blister copper, so called because, when cooling, blisters are formed on the surface of the pigs of metal.

Blister copper, as received at the copper refineries, commonly contains arsenic, sulphur, iron and other substances. If gold or silver are present in appreciable quantities the copper is melted and cast into anodes for electrolytic treatment. Otherwise the copper is refined directly in a furnace. The copper is first melted by a hot fire and any slag which forms is skimmed off. The copper is then "rabbed" or agitated in an oxidizing atmosphere at high temperature. This treatment drives off part and oxi-

dizes part of the arsenic, sulphur and iron, as well as oxidizing some of the copper. The slag containing the oxidized impurities is skimmed off and the molten copper is "poled" or subjected to a reducing flame which reduces the copper oxide. For this purpose wooden poles are burned in the metal. The copper is then ready to be cast into ingots, wire bars or cakes, according as it is to be used.

In electrolytic copper refining, not only is the copper freed from impurities, but precious metals are readily separated and recovered. The metal is cast into anodes and electrolyzed in an acidulated solution of copper sulphate. The copper is dissolved and redeposited on the cathode. Substances not dissolved, including gold and silver, fall to the bottom of the containing tank, forming a thin mud. Fragments of copper are screened out from the mud which is then passed and dried and melted with lead to recover the gold and silver. The scrap copper taken from the mud is recast into anodes.



GRANBY SMELTER AT ANYAX, B.C.

In market quotations of copper five terms generally used are: Blister Copper, Electrolytic copper, Lake copper, Casting copper and Pig copper.

Blister copper, that is low in precious metals and sufficiently free from impurities for certain uses, is ordinarily cast directly into ingots. This copper is usually unfit for the uses requiring a high grade copper, such as, electric transmission, brass manu-

facture and rolling, but is suitable for copper castings and a large part of it is put to that use.

Pig copper is ordinarily another name for blister copper.

The term "Lake" copper refers to the metal produced from the ore of the Lake Superior district. Having been made from native copper, it possesses certain special qualities.

Electrolytic copper refers to all new copper that has been refined electrolytically.

Another term that is also used is: Secondary copper, this has reference generally to old copper remelted.

(To be Continued in Subsequent Issue.)

The following is approximately the Mineral Production of Canada during the Calendar Year 1915:

		1915		
COAL, COKE, IRON & STEEL:		\$47,957,757	GRANITE:	\$1,634,084
Coal			PYRITE:	\$1,028,678
Nova Scotia	7,429,888 tons		Quebec	153,607 tons
Alberta	3,320,431 "		Ontario	143,303 "
British Columbia	2,089,966 "		GYPSUM:	\$849,928
Saskatchewan	236,940 "		Nova Scotia	
New Brunswick	122,422 "		New Brunswick	
Yukon	9,724 "		Manitoba	
Iron & Steel			ZINC:	\$636,204
Ontario	493,500 tons		British Columbia	14,819 tons
Nova Scotia	420,219 "		Quebec	634 "
Coke			SALT [ALL FROM ONTARIO]:	\$600,226
Nova Scotia	484,993 tons		COBALT [ALL FROM COBALT, ONT.]:	\$502,388
Ontario	316,211 "		Metallic	211,610 lbs.
British Columbia	275,375 "		Oxide	379,219 "
Alberta	24,354 "		PETROLEUM:	\$300,572
By-Products from Coke Ovens			Ontario	214,444 lbs.
Ammonia-Sulphate	10,448 tons		New Brunswick	1,020 "
Tar	7,365,931 gals.		CHROME [ALL FROM QUEBEC]:	\$221,287
Gas	1,089,602,000 cub. ft.		ANTIMONY:	\$192,208
NICKEL [ALL FROM ONTARIO]:		\$20,465,541	ARSENIC [ALL FROM ONTARIO]:	\$148,531
Nickel Matte	68,077,823 lbs.		Metallic Arsenic	1,518 lbs.
Nickel Oxide	200,032 "		Arsenic Oxide	4,979,141 "
Nickel Metal	55,325 "		MAGNESITE [ALL FROM QUEBEC]:	\$137,304
GOLD:		\$18,936,971	GRAPHITE:	\$121,023
Ontario	419,348 oz.		Ontario	2,489 tons
Yukon	237,786 "		Quebec	67 "
British Columbia	218,419 "		MINERAL WATER:	\$118,796
Quebec	15,553 "		MICA:	\$81,021
Nova Scotia	6,858 "		Quebec	619,350 lbs.
Alberta	200 "		Ontario	390,000 "
COPPER:		\$17,726,307	FELDSPAR [ALL FROM ONTARIO]:	\$59,124
British Columbia	56,692,988 lbs.		OCHRES FOR PAINT:	\$48,353
Ontario	39,303,279 "		TALC [ALL FROM ONTARIO]:	\$40,554
Quebec	6,082,003 "		GRINDSTONE:	\$35,768
Yukon	531,216 "		CORUNDUM [ONTARIO]:	\$33,138
CLAY, SILICA & LIMESTONE:		\$17,181,104	MOLYBDENITE:	\$28,460
Portland Cement	\$6,977,024		TRIPOLITE:	\$12,119
Bricks	2,524,134		BARYTES:	\$6,875
Limestone	2,501,731		MANGANESE:	\$5,460
Sand and Gravel	2,098,683		PHOSPHATE:	\$2,502
Lime	1,015,878		ACTINALITE:	\$2,420
Sewer-pipe	795,646		SLATE:	\$2,039
Pottery	781,071		PEAT:	\$1,050
Marble and Sandstone	365,781			
Quartz	205,453			
Kaolin	13,000			
SILVER:		\$14,088,397		
Ontario	24,653,057 oz.			
British Columbia	3,628,727 "			
Quebec	93,602 "			
Yukon	58,382 "			
ASBESTOS [ALL FROM QUEBEC]:		\$3,513,269		
NATURAL GAS:		\$3,300,825		
Ontario	13,510,071,000 cub. ft.			
Alberta	4,378,947,000 "			
New Brunswick	425,826,000 "			
LEAD [PRACTICALLY ALL FROM B. C.]:		\$2,541,116		
ALUMINUM:		\$2,500,000		

WESTERN ASSURANCE COMPANY.
 INCORPORATED 1851
 Fire, Explosion, Ocean Marine and Inland Marine Insurance.
Assets Over - - - \$4,000,000.00
Losses paid since organization, over - - - 63,000,000.00
 HEAD OFFICE - - - - TORONTO, ONT.
 W. R. BROCK, President. W. B. MEIKLE, Vice-Pres. & Gen. Man.
 QUEBEC PROVINCE BRANCH:
 61 ST. PETER STREET, MONTREAL
 ROBERT BICKERDIKE, Manager

UNION ASSURANCE SOCIETY LIMITED
 OF LONDON, ENGLAND
 FIRE INSURANCE SINCE A.D. 1714
 Canada Branch, Montreal:
 T. L. MORRISEY, RESIDENT MANAGER.
 North-West Branch, Winnipeg:
 THOS. BRUCE, BRANCH MANAGER.
 AGENCIES THROUGHOUT THE DOMINION

The London & Lancashire Life and General Assurance Association, Limited
 Offers Liberal Contracts to Capable Field Men
GOOD OPPORTUNITY FOR MEN TO BUILD UP A PERMANENT CONNECTION
 WE PARTICULARLY DESIRE REPRESENTATIVES FOR CITY OF MONTREAL
 Chief Office for Canada:
 161 ST. JAMES STREET, MONTREAL.
 ALEX. BISSETT - - - - - Manager for Canada

British America Assurance Company
 FIRE, MARINE AND HAIL.
 Losses paid since organization over \$28,000,000.
 W. R. BROCK - - - - - President
 W. B. MEIKLE, Vice-President and General Manager
 PROVINCE OF QUEBEC BRANCH:
 Lewis Building, 17 St. John Street
 MONTREAL
 THOMAS F. DOBBIN - - - Resident Manager
 HAVE VACANCIES FOR A FEW GOOD CITY AGENTS

Founded in 1805
THE LAW UNION AND ROCK INSURANCE CO. LIMITED
 OF LONDON
 ASSETS EXCEED \$18,000,000.
 OVER \$12,500,000 INVESTED IN CANADA.
 FIRE & ACCIDENT RISKS ACCEPTED
 Canadian Head Office:
57 Beaver Hall Hill, MONTREAL
 Agents wanted in unrepresented towns in Canada
 J. E. E. DICKSON, Canadian Manager.
 W. D. AIKEN, Superintendent Accident Dept.

Commercial Union Assurance Co. LIMITED
 OF LONDON, ENG.
 The largest general Insurance Company in the world
 [AS AT 31st DECEMBER, 1915]
 Capital Fully Subscribed..... \$14,750,000
 Capital Paid Up..... 1,475,000
 Life Fund and Special Trust Fund..... 72,629,385
 Total Annual Income Exceeds..... 45,000,000
 Total Funds Exceed..... 133,500,000
 Total Fire Losses Paid..... 174,226,575
 Deposits with Dominion Government..... 1,208,433
 Head Office, Canadian Branch:—Commercial Union Bldg.,
 232-236 St. James Street, Montreal.
 Applications for Agencies solicited in unrepresented districts.
 J. MCGREGOR - - - - - Mgr. Canadian Branch
 W. S. JOPLING - - - - - Asst. Manager

FIRE INSURANCE IN CANADA.

The following table shows the growth in the net amount of insurance in force in Canada since 1902:

1902	\$ 508,812,305
1905	630,334,240
1908	719,516,059
1911	950,220,721
1912	1,070,308,669
1913	1,168,590,027
1914	1,242,160,478
1915	1,289,065,670

The companies' premium income, which in 1902 was less than \$18,000,000, has grown in 1914 to \$45,102,108.

The total payments to policyholders by Canadian companies amounted to \$25,908,676, made up as follows: Death claims, \$8,375,751; matured endowments, \$4,525,138; paid to annuitants, \$1,454,359; paid for surrendered policies, \$6,337,938; dividends paid to policyholders, \$5,215,489. United States companies paid to policyholders \$8,334,960, and British and Colonial companies paid \$2,166,281.

A FREQUENT FORM OF FRICTION.

Young Demmons, an adjuster for a big insurance company, was just returning home from a nearby city, where he had been to adjust a loss on a building that had been burned, when he met an old friend.

"How did the fire start?" inquired the friend.

"I can't say with certainty," replied the adjuster, "and nobody seemed able to tell. But it struck me it might have been the result of friction."

"Why," asked the friend, "what do you mean by that?"

"Well," said Demmons gravely, "friction sometimes comes from rubbing a \$15,000 policy on a \$10,000 building."

INSURANCE COMPANIES MUST PAY.

The liquidator of the Dominion Trust Company, as executor of the Arnold estate, was successful in obtaining judgment in its suit for the \$250,000 insurance on policies on the life of the late W. R. Arnold, managing director of the company, who met his death in his garage by a gun shot on October 12th, 1914.

The insurance companies, the New York Life, Sovereign Life and the Mutual Life, set up in their defence the theory that Arnold had deliberately taken his own life.

Chief Justice Hunter did not think that sufficient evidence had been brought before him to convince him that Arnold had deliberately planned suicide. Judgment on costs was reserved. The insurance companies will appeal.

ADVERTISING AXIOMS.

The following sayings re advertising have been acknowledged as axioms or facts. You cannot deny them. Experience, observation and experiment have removed them from the doubtful class to certain.

- (1) A business not worth advertising is not worth having.
- (2) A dollar judiciously spent in advertising will always double itself.
- (3) No man ever went broke by advertising, but there are thousands who go into bankruptcy annually because they don't advertise.
- (4) The suburban merchant who blames his neighbors for going into the city, is himself responsible for the exodus.
- (5) It is a pity that the non-advertising merchant cannot see the fact that he is paying the bills of his advertising competitor.—Cowichan Leader (B.C.)

WAR RISK INSURANCE.

War risk insurance has been advanced ½ per cent on all vessels to and from west coast of the United Kingdom. The rate between Liverpool and New York is now 3 per cent.

"CLEAN-UP" CAMPAIGNS.

Fire prevention is being made an important part of the numerous "clean-up and paint-up" campaigns which are being carried on this spring.

"A LITTLE NONSENSE NOW AND THEN."

"Say, Daisy, did yer see when I took hold of yer hand the funny look yer Ma gave me?"

"Go on, Tim, Ma didn't give it to yer; you've always had it."

Drill Instructor Casey: Now, min, yez will take one stip to the rare, thin one to the front, thin one to the rare agin, an' yez'll be as yez were before—yez were as yez are now!

A lady of great beauty and attractiveness, who was an ardent admirer of Ireland, once crowned her praise of it at a party by saying:

"I think I was meant for an Irishwoman."

"Madam," rejoined a witty son of Erin, who happened to be present, "thousands would back me in saying you were meant for an Irishman."

Thomas A. Edison, remarking on a new style aeroplane, said its make-up was, to say the least, novel. "It is, in fact, a striking idea. I have seen nothing to beat it since last month. Then a young man from Orange showed me an engagement ring he was going to patent. 'But,' said I, examining the very ordinary looking circlet, 'what is there patentable about this?' 'It is adjustable, sir,' answered the young man proudly."

The solemnity of the meeting was somewhat disturbed when the eloquent young theologian pictured in glowing words the selfishness of men who spend their evenings at the club, leaving their wives in loneliness at home.

"Think, my hearers," said he, "of a poor, neglected wife, all alone in the great, dreary house, rocking the cradle of her sleeping babe with one foot and wiping away her tears with the other!"

Publican—And how do you like being married, John?

John—Don't like it at all.

"Why, what's the matter wi' she, John?"

"Well, first thing in the morning it's money; when I goes 'ome to my dinner it's money again, and at supper it's the same. Nothing but money, money, money!"

"Well, I never! What do she do wi' all that money?"

"I dunno. I ain't given her any yet."

There is an old negro living in Carrollton who was taken ill several days ago and called a physician of his race to prescribe for him. But the old man did not seem to be getting any better, and finally a white physician was called. Soon after arriving Dr. S. felt the darkey's pulse for a moment and then examined his tongue.

"Did your other doctor take your temperature?" he asked.

"I don't know, sah," he answered feebly. "I hadn't missed anything but my watch as yit, boss." — Old Joke Book.

Charles Taylor was walking down the hallway of the Montrose hotel about 2 a.m. yesterday, when he saw a white apparition moving along the floor. He hastened alongside of it and tapped it on the shoulder, finding what proved to be a man.

"Here, what are you doing here?" said Charles to the man. The man opened his eyes and seemed to come out of a trance.

"I beg your pardon," he said. "Im a somnambulist."

"Well you can't walk around in these halls in the middle of the night in your pajamas," said Charles, "no matter what your religion is."—Cedar Rapids Gazette.

There was a certain bishop who had a pleasant habit of chatting with anybody he might meet during his country walks. One day he came across a lad who was looking after some pigs by the roadside, and the bishop paused to ask him what he was doing.

"Moindin' swine," the lad replied, stolidly.

The bishop nodded his head thoughtfully.

"Ah, is that so?" he commented. "And how much do you earn a week?"

"Two shillin's," was the reply.

"Only two shillings?" remarked the bishop. Then he continued, pleasantly, "I too, am a shepherd, but I get more than two shillings."

The lad looked at his suspiciously for a minute, then he said, slowly:

"Mebbe you gets more swoine nor me to moind." —Tit-Bits.

In Newfoundland

Prosperous Sealing Season. — Aid for Ship-building.

(Special Correspondence.)

St. John's, Nfld., April 22nd.

Notwithstanding the heavy drains upon its finances owing to war expenditures, and an abnormal shortage of shipping facilities for the marketing of its fishery products, Newfoundland is enjoying a degree of prosperity such as has not been recorded for many years. The Finance Minister, in presenting his Budget Speech, declared that the financial condition of the colony is excellent, and that the outlook for the coming fiscal year was cheering. Local industries show a healthy development, and labor is abundant and remunerative.

The sealing voyage to date is a record one; and all the ships at the "front" secured splendid trips. The total catch of seals for eight ships was 222,952 seals, or an average of 27,856½ seals each ship. The net value is \$589,471.69; and the amount shared by the crews of the vessels is \$196,490.23. The crew of one vessel—the Florizel—shared \$167.09, while the captain stocked the handsome sum of \$5,413.82. This is a very remarkable haul for just twenty days' work.

The owners of the vessels engaged in the fishery will reap a large harvest, as the price of seal oil will be the highest quoted in many years. There is also a good demand for skins in the American market owing to the scarcity of leathers. This item of the seal fishery is practically the perquisite of the suppliers, as the crews of the vessels receive only the weight price of the skins.

Reports from the fleet operating in the Gulf indicate that the catch will aggregate about 50,000 pelts.

This promises to be a very prosperous year for the owners of the sealing vessels, as most of the ships will be engaged in freighting during the summer. The larger vessels will be used in the freighting of pulp wood and pit props to the United Kingdom, whilst the smaller vessels will be placed in the coal and iron trade. Hitherto the sealing vessels were tied up to the owners' piers during the summer months; so the new ventures will provide employment for a number of seamen and engineers who would otherwise be working on slack time.

The mining companies at Wabana are preparing for a busy season, and the difficulties with which they were confronted last season will be obviated by the increased tonnage available by the employment of local carriers.

The Anglo-Newfoundland Development Company will inaugurate a new shipping route presently, as a large pier has just been completed at Heart's Content, in Trinity Bay, which will make it possible to continue the shipping of pulp and paper practically the year round. Formerly the ice blockade in Notre Dame Bay was a serious handicap to the company, as from December to April shipping was closed in this region. An arrangement has been effected by which the steamers owned by the Anglo-Newfoundland Development Company will bring return cargoes of salt from the other side; this will be a boon to our fishing interests which have for many years been largely dependent on Norwegian and Danish tramp steamers for their salt supply.

Several measures of importance in the economic and industrial development of the colony are now under consideration in the House of Assembly, chief of which is the Shipbuilding Bill introduced by the Minister of Marine and Fisheries. This Bill provides that any company authorized by the Government shall receive "for and during a term of fifteen years, any sum by which the net annual profits of the company shall be less than seven per cent upon so much of the capital of the company as shall be actually paid in cash."

In order to encourage shipbuilding the bounties are increased from ten dollars, eight dollars, five dollars and four dollars per ton on builders' measurement, respectively, to twenty dollars, sixteen dollars, ten and eight dollars per ton. The plant, machinery, implements, apparatus and material necessary for installation of shipyards will be admitted duty free, also hardwood planks, spars in raw state, wire rigging, machinery for windlasses, patent wheel gear, iron pumps, sail cloth, chains, anchors, motor engines for hoisting. Such articles are not manufactured in the colony.

The Minister of Marine and Fisheries has also introduced a Bill which provides for the appointment of a Herring Fishery Board. This Board, of which the Minister shall be president ex officio, will deal with all matters pertaining to the herring fishery,

obtain all the knowledge possible on the subject, and circulate the same amongst the herring packers and exporters. Herring catchers will be licensed, and every package will be labelled; and the packers who are guilty of putting up irregular products will be penalized.

There is quite a shortage in the local provision market, just at the moment, due chiefly to lack of tonnage.

From January 1st to April 15th, 28,175 barrels of flour were imported into St. John's, as against 63,186 barrels for the corresponding period in 1915. In pork we are short 1,197 barrels. The total to date for St. John's is 8,001 barrels, as against 9,198 barrels last year. We are also short on beef by some 2,250 barrels. We are ahead on molasses by some 400 puncheons. The wholesale price now quoted for molasses is the highest for many years—47 cents per gallon for grocery, and 50 cents for fancy.

Market quotations for week ended April 15th

Flour:—	
Manitoba First Patents	\$8.10
Do., Second Patents	8.00
Minneapolis	7.80
Kansas	7.80
Ontario	7.80
Pork:—	
Fat Back, per brl.	\$23.00
Ham Butt, per brl.	25.00
Family Mess, per brl.	28.00
Beef, per brl.	\$20 to \$22.00
Sugar:—	
Light Brown, per 100 lbs.	\$7.10 to \$7.20
Granulated, per 100 lbs.	8.40
Loaf, per 100 lbs.	9.50
Hay, per ton	\$30.60
Fodder, per ton	\$13.00 to \$15.00
Oats, per bushel	87½c.
Bran, per sack	\$1.90
Corn feed, per sack	\$2.30
Cattle Feed, per sack	\$2.00
All other commodities are correspondingly high.	

POSSIBILITIES OF AGRICULTURAL DEVELOPMENT IN CANADA.

(Concluded from page 4.)

tion into Canada exceeded 2,900,000, the area under field crops grew from just under 20 million acres to nearly 33½ million acres, and during the same period the wheat acreage in Canada grew from 4,224,542 to 10,293,000. Under similar conditions of immigration and land settlement during 14 years from the restoration of peace, it is conceivable that equal additions might be made to the total acreage under field crops and to the wheat acreage, in which case the former might in that period grow to 47 million acres, and the latter to over 18 million acres from the 12,293,000 acres of the 1915 wheat crop. These are moderate estimates, and an increase in the wheat area within 14 years to even 20 million acres need not be regarded as impossible. Such an area under wheat in Canada would, at an average yield per acre of say 20 bushels, produce a total crop of 400 million bushels, or in an exceptionally favourable year, with a yield per acre of, say 24 bushels, a total of 480 million bushels. Past efforts on the part of agricultural and scientific authorities to predict the future wheat production of Canada do not, however, encourage prophecy. In 1898, Sir William Crookes estimated that not more than about six million acres of wheat could be expected to be under cultivation in Canada within 12 years of that date. In 1910, the official return of wheat production in Canada was 8,863,151 acres,—2,863,151 acres, or 47 per cent more than the Crookes estimate. A prophecy erring on the side of optimism was made by Mr. Hugh McKellar in 1902, when Deputy Minister of Agriculture for Manitoba. Mr. McKellar then estimated that the wheat production of Manitoba and the Northwest Territories would reach the total of 350 million bushels by 1912. The official return for that year gave not more than 224 million for the whole of Canada, and it was only last year that, in an exceptional season, the McKellar estimate was exceeded with a total yield for Canada of over 353 million bushels.

Whatever direction the agricultural activities of Canada may take in the future, it is clear that there is an abundance of land immediately available for

THE Dominion Savings AND Investment Society

Capital - - - \$1,000,000.00
Reserve - - - 225,000.00

T. H. Purdom, K.C. Nathaniel Mills
President Managing Director

Dominion Savings Bldg.
LONDON, CANADA.

CANADA LIFE FACTS

Canada Life agents wrote \$1,000,000 more business in Canada in 1915 than in the previous year.

The Canada Life paid policyholders in 1915 \$7,822,201, this being over \$3,000,000 in excess of the similar payments of any previous year, and policyholders' dividends being the chief item.

The Canada Life Income in 1915, \$9,333,623.19, was the greatest in the Company's history.

The Surplus earned was \$1,480,866. The Cash Dividends paid policyholders in 1915 were over \$2,800,000.

HERBERT C. COX,
President and General Manager

CANADA'S COAL OUTPUT.

The value of each province's output of coal is as follows:—

	1915.	
	Tons.	Value.
Nova Scotia	7,429,888	\$16,584,573
British Columbia	2,089,966	6,531,144
Alberta	3,320,431	8,136,527
Saskatchewan	236,940	361,787
New Brunswick	122,422	304,830
Yukon	9,724	38,896
Total	13,209,371	\$31,957,757

*Railway shipments.
The exports of coal in 1915 were 1,766,543 tons valued at \$5,406,058 as compared with exports of 1,423,126 tons in 1914, valued at \$3,880,175, an increase of 343,417 tons or 2.41 per cent.

FIRES IN BRITISH COLUMBIA IN 1915.

The B. C. Department of Insurance has issued a statement showing the causes of fires in dwelling houses in the province during the past year. It will be noted that by far the greater number of the fires of which the cause has been definitely traced are attributable to "carelessness" of one kind or another. There were 701 fires in the province during 1915, as reported to the department by municipalities, 60 per cent of which were in private dwellings and 40 per cent in business premises.

settlement and for the growth of wheat. Recent progress in railway construction has rendered large areas easily accessible, and with the restoration of peace, the return of the Canadian forces and the resumption of immigration from other countries, an era of rapid agricultural development would seem to be assured.

Impregnable

During 1915, assets of the Sun Life of Canada increased 16% to \$74,326,423 — much the largest resources held by any Canadian Life Company.

Sun Life of Canada Policies are SAFE Policies to buy.

SUN LIFE ASSURANCE
COMPANY OF CANADA
HEAD OFFICE—MONTREAL

North American Life

"Solid as the Continent."

PROGRESSIVE.

New business issued during the year 1915 exceeded that of the previous year by One and a Quarter Millions. Total business in force at December 31st, 1915, amounted to over \$56,200,000.

PROSPEROUS.

Net surplus held on Policyholders account increased during the year by \$385,927, and now amounts to over \$2,500,000, while Assets amount to over \$15,716,000.

It is a Policyholders' Company and a very profitable one for any agent to represent.

Numerous good agency openings are available. Correspond with E. J. Harvey, Supervisor of Agencies.

NORTH AMERICAN LIFE ASSURANCE COMPANY

Home Office, Toronto, Ont.
EDWARD GURNEY, President. L. GOLDMAN, 1st Vice-President and Managing Director.

Burglary Insurance

STORES, OFFICES,
CITY RESIDENCES,
SUMMER RESIDENCES.

Accident, Health, Plate Glass Burglary, Fidelity
Judicial and Contract Bonds, Employer's
and Public Liability.

The Provident Accident and Guarantee Company

HEAD OFFICE — — — MONTREAL.
160 St. James Street. Tel. Main-1626.

The Independent Order of Foresters

Policies issued by the Society are for the protection of your family and cannot be bought, pledged or sold.

Benefits are payable to the beneficiary in case of death, or to the member in case of his total disability, or to the member on attaining seventy years of age.

Policies Issued From \$500 to \$5,000

TOTAL BENEFITS PAID..... \$42,000,000

FRED J. DARCH, S.S.
ELLIOTT G. STEVENSON, S.C.R.,
Temple Bldg., Toronto, Can.

EXPORTS TO SOUTH AMERICA.

The United States sold merchandise worth \$97,396,826 to South America during the last seven months of 1916, as compared with sales amounting to \$53,033,940 during the corresponding months of 1910.

WHAT INSURANCE MAN EARNS.

The average income of the whole of the male workers of America is calculated, by eminent economists, to be about \$750 a year. In the United Kingdom it is about \$400. These figures will probably be surprising to the average insurance agent who comes into touch with so much wealth. Probably when he reflects upon the number of multi-millionaires in North America, he will be inclined to doubt the statement. But it is not far wrong — if wrong at all.

Incidentally, it throws into relief the value of an insurance agency. The average insurance agent makes far more than these figures. The average industrial agent all over North America probably earns \$1,000 or more. It was stated recently by the Metropolitan Life in New York that their New York agents earned something like \$1,300 a year on the average.

Exactly what the average "ordinary" agent earns cannot be stated. The figures range from \$90,000 per annum down to about \$600 per annum for whole-time men. Probably the average in the cities is not less than \$1,300 a year.

ONE GUESS ALLOWED AS TO THE NATION.

There is a nation that spits upon international law, upon treaties, upon pledges and agreements. It mistakes for terrifying strength ferocity and a blind, useless maiming and killing of harmless men, women and children; children seem to be its favorite subjects for Zeppelin slaughters. On land and sea, from under the sea and from the air, it kills non-combatants as nonchalantly as an Apache of the old days would scalp a baby or dash out its brains against a doorpost. The madness for destruction which it can satisfy only in part on the monuments of Belgian and French art it feeds fat upon helpless, innocent human beings. The will to power scorns all the "sentimentalities" or honor. Wherever it can it makes a breach in the walls that the nations have slowly built against the old cavageries of war. It murders right and left.—New York Times.

COAL MINING IN PICTOU COUNTY, N.S.

(Concluded from page 6).

workers to slacken the rate of production, when positive acceleration is the imperative and paramount duty of everybody, is not worthy of nomination, let alone election, to a seat in any Legislative Assembly or Parliament of men. The statement put into the mouth of the malcontents' spokesman suggests the assumption that the mischief-maker apprehended the possibility of his being accused of jeopardizing the production and transportation of munitions of war. "The Acadia" (he says) "have the best coal on the market for house use, and that is the trade they make their money on." Or, in other words, "we are not interfering with the munition plants at all, and the householders must shiver and wait, or buy a wood pile, until the company tell us their decision before they arrive at it!"

On Thursday, April 20th, the Nova Scotia correspondent of the "Canadian Mining Journal" had the privilege of an interview with Mr. Hector Prudhomme (vice-president and general manager), who was accompanied by Mr. George Gray (assistant manager). Mr. Prudhomme was in a most sympathetic mood and took pride in the fact that the management had assumed the initiative without receiving any suggestion from the men. But he was powerless to do more than he had done, and could not, even then (on Thursday) state the amount of the advance, which, however, he expected to receive in time for posting up on Saturday.

Asked as to the truth of the rumour that the men demanded more than 10 per cent, the General Manager said:

"Oh, yes, it is true enough. The youths and a few men had a meeting in the Hall here in Stellarton, and after it was over, they handed to me a demand for a 25 per cent advance. But my directors, as you see from this telegram which they sent me in reply, could not entertain such a preposterous demand as that. That such a demand was formulated and submitted would suggest that no person of experience could have been controlling the meeting, and were such a demand to be seriously pressed, the company would have no alternative to the closing of the mines. I am hopeful, however, that the final offer, when it does arrive, will be entirely acceptable."



Prudential Mutualization Means

that the holders of Fourteen Million Policies are the Owners of the Company and that for all time the policyholders will control the Company for their own benefit.

Great has been the work and growth of The Prudential, but greater is its future destiny

The Prudential Insurance Co. OF AMERICA

FORREST F. DRYDEN, President.
Home Office - - - Newark, N.J.
Incorporated under the laws of the State of New Jersey

AN IDEAL INCOME

can be secured to your Beneficiary with Absolute Security by Insuring in the

Union Mutual Life Insurance Company,
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on its

MONTHLY INCOME PLAN

Backed by a deposit of \$1,688,902.65 par value with the DOMINION GOVERNMENT in cream of Canadian Securities.

For full information regarding the most liberal Monthly Income Policy on the market write, stating age at nearest birthday, to

WALTER I. JOSEPH, Manager
Province of Quebec and Eastern Ontario.
Suite 502 MCGILL BLDG., MONTREAL, QUE.

SPARKS FROM THE FIRE WASTE.

The fire waste on this continent is excessive, and is sapping its prosperity. Reduction of the fire waste is an important part of the campaign for the conservation of the national resources.

Fire losses in the United States and Canada in 1915 were \$184,959,100, most of them due to carelessness.

Fire losses and the cost of fire prevention in the United States amounts annually to \$450,000,000, or more than the total American production of gold, silver, copper and petroleum in a year.

The cost of fires each year is one-half the cost of all the new buildings erected in a year.

The annual per capita fire waste in the United States is \$2.51, in Europe, 33c. Cause: The latter has better construction, less carelessness, increased responsibility.

If buildings in the United States were as fireproof as in Europe, the annual cost of fire losses and protection would be only \$90,000,000.

Over five thousand are killed and 50,000 are injured as a result of fire.

Defective flues are responsible for 13 per cent of all the fires.

All fires are the same size at their start. Every second counts, so be prepared.

An ounce of fire prevention is worth a pound of fire extinguishment.

The way to get lower insurance rates is to have fewer fires.

Book Review

PROFESSOR MUNRO ON MUNICIPAL GOVERNMENT.

The Macmillan Co., of Canada, Ltd., of Toronto, has just published (\$2.50), Principles and Methods of Municipal Administration by William B. Munro, Professor of Municipal Government in Harvard University.

While the volume deals with the management of municipal business in the United States there is much of interest to Canadian students of civics and in particular the references to the Commission form of city government now in force in a number of Canadian cities.

"The commission movement must be credited, let it be added, with far more than its direct and obvious results. To say that it has resulted in the adoption of a particular type of charter by two or three hundred cities is not to tell the whole tale. The salutary reaction of the commission propaganda upon the charter revisions of as many other cities is something which is none the less important although not so generally recognized."

The author thinks the prime essential of an efficient civic administration is an interested and informed community and points out that the general American standard of daily life is far above their standard of politics and that the rank and file of Americans think as sensibly as the people of any other land. He concludes that for this exception there is no ineradicable reason, since it comes largely from our policy of putting faith in statutory automations rather than in human possibilities. He thinks the situation can be altered by (a) raising the plane of electoral interest and knowledge; (b) providing a suitable framework of government, and (c) provide a smooth-working and consistent scheme of internal organization.

One is disappointed no reference is made to the principal feature in modern city government, namely:

the initiative, referendum and recall, and the only reference to proportional representation is a suggestion that there should be provision for minority representation on school boards by proportional representation. Surely the only way to raise the plane of electoral interest and knowledge is to make it possible for the voters to control their representatives by the initiative, referendum and recall instead of spending so much time and energy in selecting representatives who do pretty much as they think fit and that being the case is it to be wondered at that the plane of electoral interest and knowledge is low.

There is a valuable chapter on Municipal Finance. The author thinks it an economic absurdity to say that the tax burden falls mainly upon the well-to-do and very little upon the wage-earner. He points out that it appears in the rent bill and in the price of everything that the poor as well as the rich must buy and that the landlord and groceryman are municipal agents for the collection of taxes. He thinks "The most important item in the high-cost of living is the high-cost-of-government." While not a believer in the single tax he thinks the practice of taxing land, buildings, and personal property at a uniform rate has wrought injustice everywhere and that this plan will be replaced by a graded property tax, or by income, trade or habitation taxes or by some combination of these. He makes a strong plea in favor of a single Council making the appropriations and disbursing the money. "Although this innovation is a radical departure from the time-honored doctrine a division of powers, it has in practice proved to be a step in the right direction. At any rate, the old doctrine of complete division between the appropriating and distributing powers in city government seems to be doomed." He is strongly in favor of serial bonds rather than sinking fund bonds. Serial bonds do not call for trustees or for re-investment, and no accumulations are necessary. There is no financial patronage to bestow upon favored banks; the city cannot omit a contribution for debt-payment purposes in any year. Bonds will mature and they must be paid or defaulted; there can be no miscalculations.—R.

SEVERE LOSS IN POPULATION BY PROVINCE.

Mr. F. S. DeGray, acting secretary of the British Columbia Provincial Board of Health, estimates the loss of population since the outbreak of war at nearly 100,000. The cessation of railway work is given as the cause of the exodus of 20,000 people; general periodic depression drove out 50,000, while the war took the remainder of a total of 99,429.

Twenty-two thousand B. C. soldiers have gone to the front since the last of the year. British army reservists had numbered 500; other reservists, 200; aliens and their families who have left the country, 2,500; families of soldiers who went to Europe with or after their husbands, 1,800; munition workers, 1,000, and interned aliens, 929.

NEW YORK'S POPULATION.

The New York City Directory for 1916 has just been issued by the publishers, R. L. Polk and Company. It contains 1,210,000 names, which is 105,324 more than the 1915 Directory contains. If the census made during the compilation of the Directory is correct, the City now has a population of 5,528,751 persons, which would be an increase of 155,768 over the census recently made by the police.

GAIN IN BUSINESS BOOKS.

"The Literary Digest," notes an astounding decrease in the amount of American literary production in 1915 as compared with 1914. The number of books appearing in 1914 is placed at 12,010 and for 1915 at 9,734. In three classifications, however, gains were shown last year; these were in domestic economy, history and business. Of the latter 229 books were published in 1914 and 252 in 1915. "The gain in books on business," says "The Publisher Weekly," is not easily interpreted. It shows an increased demand for handbooks of practical and theoretical information in this department, but why this demand should be emphasized just now is not easily explained."



TRADE MARKED COTTONS

Of Dependable Quality

"Magog" Prints
 "Steelclad" Galateas
 "La Pauline" Mulls
 "AA" Ducks
 "Rockfast" Drills
 "Ostend" Crepes
 "Ibex" and "Dragon" Blankets

Made in Canada and Guaranteed by

Dominion Textile Co.

LIMITED

MONTREAL TORONTO WINNIPEG

OPERATING:

The Dominion Cotton Mills Co., Limited
 The Merchants Cotton Company, Limited
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 The Colonial Bleaching & Ptg. Co., Limited
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MANUFACTURING:

All lines of White and Grey Cottons, Prints, Sheetings, Shirtings, Pillow Cottons, Longcloths, Cambrics, Ducks, Bags, Twills, Drills, Quilts, Bureau Covers, Towels and Towelling, Yarns, Blankets, Rugs, Twines, and other lines used by Manufacturers in Rubber and other trades.



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Established 1863

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Highest Awards at Twelve International Expositions. Special Prize, Gold Medal, Atlanta, 1895

G. & H. Barnett Co.

PHILADELPHIA, Pa.

Owned and Operated by
NICHOLSON FILE COMPANY



DIVIDEND NOTICES

BANK OF MONTREAL

NOTICE is hereby given that a Dividend of Two and one-half Per Cent upon the paid up Capital Stock of this Institution have been declared for the three months ending 30th April, 1916, also a Bonus of One Per Cent, and that the same will be payable at its Banking House in this City, and at its Branches, on and after Thursday, the FIRST day of June next, to Shareholders of record of 29th April, 1916.

By order of the Board,
FREDERICK WILLIAMS-TAYLOR,
General Manager.

Montreal, 18th April, 1916.

ILLINOIS TRACTION COMPANY

DIVIDEND NOTICE.

A Quarterly Dividend at the rate of Three Per Cent (3%) on the Common Stock of the Illinois Traction Company has been declared for the Quarter ending April 30th, 1915, payable May 15th, 1916, to Shareholders of record of May 1st, 1916.

By order of the Board,
GEO. M. MATTIS,
Treasurer.

Champaign, Ill.

PUBLIC NOTICES

"LA COMPAGNIE DE BOIS DE CONSTRUCTION EUREKA, LIMITEE."

Public notice is hereby given that, under the Quebec Companies' Act, letters patent have been issued by the Lieutenant Governor of the province of Quebec, bearing date the twenty-ninth day of March, 1916, incorporating Charles Brodeur, notary, Jules Mathieu, advocate, and King's Counsel, Arthur Jollivet, broker, Joseph Moise Loiselle, broker and Joseph Pesant, gentleman, of Montreal, for the following purposes:

To carry on in all its branches a lumber, pulp wood, timber, furniture wood, cord wood and charcoal business, and manufacture, produce, sell, buy and fabricate lumber, pulp wood, timber, logs, furniture wood, charcoal and wood of all kinds, and

PROFESSIONAL

THE REV. M. O. SMITH, M.A., WILL ADVISE with fathers concerning the instruction and education of their sons. No. 544 Sherbrooke St. West. Or telephone Main 3071, and ask for Mr. Kay.

HOWARD S. ROSS, K.C.

EUGENE R. ANGERS

ROSS & ANGERS

BARRISTERS and SOLICITORS

Coristine Building, 20 St. Nicholas St., Montreal

all or any articles to be made wholly or partly therefrom;

To carry on in all its branches the business of a land and real estate company;

To purchase, lease, hold or otherwise acquire and own and develop lands of whatsoever description and wheresoever situate, and timber licenses, limits and leases, claims, berths, concessions, booming grounds, driving rights, water powers, water lots, and other easements, servitudes, rights and privileges whatsoever;

To purchase, lease or otherwise acquire the property, rights, franchises or privileges of any persons, firms or corporations owning timber claims, timber lands or licenses and to hold, sell, exchange, lease or otherwise dispose of same according to circumstances and the needs of the company;

To construct, purchase, lease or otherwise acquire and operate, manage or control and dispose of, by sale, exchange or otherwise, pulp and paper mills and mills for the preparation of timber, lumber, and furniture wood, door and sash factories, lath and shingle mills and other works for the making of any articles capable of being manufactured out of or with wood or wood and pulp waste resulting from the industry of the company; machine shops, manufactories, shops, plant and accessories necessary for the general exploitation of timber claims, timber limits, timber licenses or lands, including the cutting, transportation, handling, manufacturing and finishing of logs, lumber, timber, furniture wood, cord wood, charcoal and of any manufacture of wood, wood or pulp waste and all products of wood and other materials severally and in combination, and of all byproducts of wood whatsoever;

To construct, buy, lease or otherwise acquire, own and hold, operate, control and manage: (1) warehouses, stores, shops, sheds, yards, offices and commercial establishments for the purpose of dealing generally, both wholesale and retail in all merchandise and products of the company, and also hotels, boarding houses, restaurants, halls, clubs, workingmen's houses, dwellings, camps and structures of every kind and description suitable for the attainment of the business of the company, or for lodging and accommodating its workmen, employees or other persons; (2) works and refining plants for the manufacture of all kinds of chemical products whatsoever manufactured, distilled or otherwise produced from the waste of the industry of the company or from the sap of trees such as maple syrup and sugar or other like products, and to sell or otherwise dispose of same in any manner whatever;

To construct, lease or otherwise own and equip: (1) tugs, boats, barges or vessels of every description and to navigate same for the purpose of displacing or transporting the company's products, employees or any other persons, and to that end to build wharves, docks, piers, slips and works necessary for the improvement of navigation and also for the construction of tugs, boats, and vessels of all kinds, appliances and equipment for the handling of traffic under all forms; (2) docks, dams aqueducts, canals, flumes, drains, timber chutes, bridges, road ways, logging railways on land owned or controlled by the company and all other works, appliances and equipment incidental to the foregoing; (3) power houses, equipment, machinery, plants and works for the generation, distribution and utilization of power under all forms for lighting, heating and other purposes for the use of the company, and to that end utilize and develop water courses and water powers for the floating and storing of wood, the production of electric power and utilize said power for the operation of saw-mills, factories and shops of the

company or of other corporations or persons provided, however, that the sale, distribution and transmission of power or electric, hydraulic or other energy beyond the lands of the company be subject to all local and municipal by-laws on that behalf, and that in the county of Labelle;

To acquire by purchase, lease, exchange, or otherwise, and to use, hold and improve lands, tenements, hereditaments, immovables and interest therein, and generally to carry on the business of a land company, with the power of purchasing, holding, developing, improving, clearing, settling, cultivating, renting, pledging, hypothecating, exchanging, selling, and otherwise dealing in and disposing of real estate and lands, whether cultivated or not and any interest and right therein, and for that purpose to pay out and invest capital in purchasing, surveying, clearing and improving, developing and preparing for occupation and settlement, such lands as may be necessary for the purposes of the said company and in and upon such lands to make, construct, erect, build and maintain roads, bridges, and other internal communications, houses, mills, factories and manufactories and other buildings and works necessary or expedient for the occupation or improvement of any such lands and to operate and carry on any works of improvements thereon;

To construct dwelling houses and other buildings upon such real estate or any part thereof;

To sell, lease, convey, exchange, dispose of, or otherwise deal with such real estate or any portion thereof, and to develop, improve and lay out any such property in building lots, streets, lanes, squares or otherwise;

To make advances by way of loans to purchasers or lessees of any part of the company, real estate for building purposes or other improvements, to aid by way of advances or otherwise in the construction and maintenance of roads, streets, water-works, sewers, and other works of improvement calculated to render the company's property more accessible and to enhance its value;

To take and hold mortgages, hypothecs, liens and charges, to secure the payment of the purchase price of any property sold by the company or any money due to the company from purchasers or advances by the company to purchasers for building purposes or other improvements;

To invest moneys in immovable property for the benefit of any person or corporation; to undertake the care and management of investments so made and similar investments, and guarantee the security of the same;

To acquire and own office buildings, apartment houses and any and all other classes of buildings, and to sell or lease the same or parts thereof and to act as managers or agents for such buildings;

To apply for and acquire on any terms letters patent of invention, patent rights, processes, trade marks, copy-rights, or any other privileges or protections of a like nature for or connected with any matter, articles, or subject of manufacture or convenient for the business of the company and to turn the same to account by manufacturing or working the same or granting licenses in respect thereof or otherwise;

To purchase or otherwise acquire or undertake all or any part of the business, property, assets or liabilities of any person, partnership, or company carrying on business with objects similar in whole or in part to those of the company, or possessed of property suitable and proper for the purposes of the company and to issue paid up shares, bonds, or debentures or other securities for the payment, either in whole or in part, of any such immovable property, business, rights, claims, privileges, and concessions;

To purchase, acquire, hold and own the capital stock, bonds and other securities of any other company, corporation or individual, carrying on or engaged in any business which this company is empowered to carry on or engage in, and to acquire, hold, sell, or otherwise dispose of such shares, bonds or other securities;

To remunerate by payment in cash and with the approval of the shareholders in stock, bonds or any other manner any person or persons, corporation or corporations, for services rendered or to be rendered in placing or assisting to place, or guaranteeing the placing of the shares of the stock of the company, or any debentures or other securities of the company, or in or about the formation or promotion of the company in the conduct of the business;

To enter into any arrangement for sharing of profits, union of interest, co-operation, joint adventure, reciprocal concession or otherwise, with any person, partnership or company carrying on or about to carry on any business or transaction which this company is authorized to engage in or carry on or to amalgamate with any such company;

To raise, and assist in raising money for and to aid by way of bonus, loan, promise, endorsement, guarantee of bonds, debentures or otherwise, of any other company or corporation, and to guarantee the performance of contracts by any such persons with whom the company may have business relations;

To distribute among the shareholders of the company, in kind, any property or assets of the company, and in particular any shares, debentures or securities of any other company or companies which may have purchased or taken over, either in whole or in part, the property, assets or liabilities of this company;

To invest and lend the moneys of the company not immediately required in such manner as may from time to time be determined;

To sell, lease, exchange, or otherwise dispose of, in whole or in part, the property, rights, or undertakings of the company, for such consideration as may be agreed upon, and in particular for shares, debentures or securities of any other company;

To enter into any arrangement with any government or authorities, supreme, municipal, local or

DIVIDEND NOTICE

THE STANDARD BANK of Canada

QUARTERLY DIVIDEND NOTICE NO. 102

Notice is hereby given that a dividend at the rate of THIRTEEN PER CENT PER ANNUM upon the Capital Stock of this Bank has this day been declared for the quarter ending the 29th April, 1916, and that the same will be payable at the Head Office in this City and its Branches on and after Monday, the 1st of May, 1916, to shareholders of record of the 21st April, 1916.

By order of the Board,
G. P. SCHOLFIELD,
General Manager

Women in Industry

otherwise, that may seem conducive to the company's objects, or any of them, and to obtain from any such government or authorities, any rights, privileges and concessions which it may be desirable to obtain, and to carry out, exercise and comply with, or sell, or dispose of any such arrangements, rights, privileges and concessions;

To make donations and subscriptions to any objects likely to promote the interest of the company, and to create and contribute to pension and other funds and schemes for the benefit of person employed by the company, or the wives, widows, children, or dependents of any such persons and to subscribe or guarantee money for any charitable or public object;

To do all such other acts and things as are incidental conducive to the attainment of the above objects, or any of them, and to carry on any business for the manufacturing or otherwise germane to the purposes and objects set forth, and which may seem to the company capable of being conveniently carried on by it or calculated, directly or indirectly, to enhance the value of or render profitable any of the properties or rights of the company, and to that end to import and export timber, lumber, pulp wood, furniture wood or wood of all kinds and descriptions and all products produced, manufactured or owned by the company or any thereof for its business purposes;

The things, rights, powers, privileges and obligations mentioned in any of the above clauses shall be deemed to be several and not dependent on each other, under the name of "La Compagnie de Bois de Construction, Eureka, Limitee," with a capital of forty-nine thousand dollars (\$49,000.00), divided into one thousand nine hundred and sixty (1960) shares of twenty-five dollars (\$25.00) each.

The principal place of business of the corporation, will be in the city of Montreal.

Dated from the office of the Provincial Secretary, this twenty-ninth day of March, 1916.

C. J. SIMARD,
Solicitor for Applicants.
JULES MATHIEU, C.R.,
Solicitor for Applicants.

Notice re Selection of Auditors under Section 56 of the Bank Act

Notice is hereby given that the General Managers of the Chartered Banks in Canada intend to proceed at any early date to select by ballot not less than forty (40) persons (not one of whom shall be a body corporate), who shall be eligible, subject to the approval of the Honorable the Minister of Finance, to be appointed Auditors under the provisions of the Bank Act for the ensuing year. Formal applications to receive consideration should be made to the Secretary of the Canadian Bankers' Association, at Ottawa, and be in his hands on or before the 20th day of May, 1916.

GEO. BURN,
President, the Canadian Bankers' Association.
Ottawa, 28th April, 1916.

INFORMATION ABOUT RUSSIA.

The total area of Russia, both in Europe and Asia, is 8,505,957 square miles, or one-seventh of the total area of the globe, and about three times the area of the United States, excluding Alaska and our outlying possessions.

The population of Russia is approximately 170,000,000.

The climate varies from the frost-bound wastes of Northern Siberia to the sunny cotton fields of Transcaucasia.

The total length of the rivers, lakes and canals of the Russia empire is 239,161 miles, of which 178,580 miles are navigable.

The following indicates the increase in receipts in ordinary state revenue in Russia:

	Roubles.
1867	415,000,000
1897	1,416,000,000
1908	2,418,000,000
1912	3,105,917,000
1913	3,417,000,000

Deposits in Russian banks and state savings banks increased almost steadily from 2,500,000,000 roubles in 1904 to almost 6,000,000,000 roubles in 1913.

In the same period the number of state savings banks increased from 6,417 to 8,160 and the number of depositors increased from 4,854,000 to 8,597,000.

A comparative table of the production of four cereals in the United States and Russia in the year 1913 follows:

	Russia, Bushels.	United States, Bushels.
Wheat	955,980,000	763,380,000
Oats	1,222,375,000	1,121,768,000
Barley	562,800,000	178,189,000
Rye	999,514,285	41,381,000

One of the most striking results of the war has been its effect on the work and the status of women in the belligerent countries. Prior to the war the leaders of the Women's Movement demanded with vehemence, rights and opportunities in industrial life that have now been opened up to them automatically, following upon a series of unexpected events. The women of what is known as the civilized world are at the moment—without any revolution—entering upon a broader sphere of influence. This has been occasioned partly by a desire to prove their ability to undertake responsibilities and even more because their aid is needed and appreciated by the men in the countries now in the throes of a relentless world struggle. It is yet to be seen to what extent they will make use of the opportunities for which they have striven so long.

In England the situation is farther advanced above the normal than in Canada, just as the war has touched the English people more closely at every turn. More men have gone to the front, more munitions are being made, the general production has been increased and imports are being curtailed to a greater extent. Thrift is being practised far more universally. Our population in Canada, compared to that of Great Britain, is as 8 to 46. The sending of 500,000 men to the front, with all the attendant circumstances, means in reality a far greater sacrifice to us in Canada than an army of 500,000 would to the Mother Country. We are furthermore about to pass through the same abnormal conditions in our labour market as have been experienced in England and Scotland. It behoves us, therefore, to study the experiences of the British people and prepare ourselves for the emergency.

As stated above, production in England has increased, notwithstanding that almost every available man of military, and therefore earning age, is being trained and sent to the battle front. Investigation proves that much of this increased production is being accomplished by women. This has been brought about by three main causes. First, when the husband or father has gone to the front the income of the family has decreased, and the mother and daughters have been forced to supplement it. Secondly, a lack of sufficient men has opened up to women positions in many walks of life hitherto denied to them. Thirdly, women have volunteered their services from patriotic motives, and an intense desire "to do their bit" at home while their men are fighting abroad. The same conditions as have been experienced in the home land are presenting themselves in Canada to-day, and before long we shall find that the problem will have to be faced and dealt with.

Some weeks ago, Baron Shaughnessy, in a speech in the Montreal Board of Trade, stated that we could not go on recruiting indiscriminately without injury to the industrial life of Canada. Baron Shaughnessy is one of our foremost men. He stated his opinion, and since then has neither retracted nor qualified it. His statement, therefore, should merit our careful attention.

In England production has been developed hand in hand with the army since the war, and recent statistics show the marvels that have been accomplished by systematic organization, grouped around one central theme, that of winning the war. Every available atom of energy is being gradually pressed into service, cutting out the non-productive elements wherever possible as time goes on. If we are to prove ourselves worthy members of the Empire we must follow the example thus set to us, and without delay.

When the male wage earner enlists and goes to the front, thereby reducing the income of those dependent upon him, a certain class of woman, earning from five to eight dollars per week, drifts into industrial life. No special effort is required to secure the utilization of her energy. She has plenty of opportunities, for the rank and file of the army have left many unskilled positions vacant behind them.

When we come to the next class, the \$8 to \$15 a week woman, the problem becomes more complex and difficult to handle. The army leaves vacant not only the unskilled posts, but also what we may term for our purpose the "semi-skilled" posts. Under this designation come clerks in offices and stores, superintendents, etc. Society is a complex unit, formed of many parts, each of which is necessary to complete the whole. The semi-skilled

workman has to be replaced just as much as the unskilled. It is obvious that his place cannot be filled by the unskilled \$5 a week woman. Many of the men who have left their positions have received a good education. It is necessary, therefore, to look to similarly educated women to fill their places. This is where the real difficulty arises, for educated women who are comfortably supported by their parents or their husbands and have never even considered the possibility of entering business in any form, are not likely to come forward until they realize that such a step is an undoubted necessity. In some cases the care of children in the home absorbs their whole attention. There are, however, many married women and widows without children, and still more unmarried women, whose energy is at present going to waste. If we are to succeed either in our problem of recruiting or in maintaining the economic status of the Dominion, we must gradually utilize all the idle energy of the country.

It is generally felt that educated women will gladly respond to the call from patriotic motives alone. When one considers the sacrifices being made by society girls in Red Cross and other work, whose whole time in the past has been spent on pleasure, one finds a spark that can be kindled into a flame. Men are doing their part nobly. Let the women show what they can do. Let them be made to feel that by ceaseless daily toil they can increase the production of the country and as truly "do their bit" as their brothers and husbands who are acquitting themselves gloriously on the battlefields in France.

How to deal with this undeveloped mass of human energy is in itself a question. The class of woman that is required has been accustomed to work gratis in a thousand charitable pursuits. But discipline and volunteer work do not go hand in hand. If woman is to replace man in a business house or store, she must accept a salary and subject herself to whatever rules may be in force in whatever vocation she may take up. If financially independent, the salary can be given to the Red Cross or Patriotic Fund. That is a matter for each woman to settle with her own conscience.

A larger question must be dealt with when we consider on what basis the scale of pay is to be determined. The difficulty is that once women have been admitted into walks of life, hitherto unopened to them, they cannot be ejected in a body at the conclusion of peace. If they enter industrial life on the principle of equal pay with men for equal work, the same conditions will prevail after the war, and will become part of the foundation of the social structure of the country. If they enter on a lower scale of wages they must make up their minds to accept the results of such a policy as a permanency. It is not intended, however, to enter into a discussion of so complex a question in this short article, involving as it would a study of the experiences of other countries. A question of more immediate concern arises from the fact that our unemployed women have had little or no training for business. In many cases it will be found necessary for them to undergo a short course of instruction in a commercial or technical school, but generally speaking, practical work under an efficient manager, coupled with a keen desire to do well, and the application of some sound common sense, will quickly initiate them into the mysteries of business life.

It has recently been announced that a registration bureau for women will be opened under the auspices of the Woman's Canadian Club at the Royal Victoria College, on the first of June. The object of the bureau will be to replace the men who have enlisted by women, wherever possible, and the work will be carried on with the co-operation of The Recruiting Association, and all the leading business men of the city. This is a practical step in the right direction, and it is hoped that it will receive every available support from the women of Montreal.

We are standing on the brink of a crisis in the development of our country, when the influence of every step that may be taken will be felt throughout the years to come. Let us therefore hasten slowly. Let us study the history of the older countries and profit by their experience. Above all let the women of Canada realize that they are needed by their King and Country quite as much as are their husbands and brothers.

Conditions in the West

Special Correspondence by **E. CORA HIND**, Commercial and Agricultural Editor, Free Press, Winnipeg, Man.

Winnipeg, April 28.—The first week of open water is drawing to a somewhat dramatic climax. Outward movement has been around fifteen million bushels, and reports are that a very large fleet of boats are on their way up, but have been delayed at the Soo owing to a new ice jamb at White Fish, and that it may be necessary to send the ice breakers out again to disperse this jamb. This delay may cause considerable trouble over charters made for the first ten days of open water.

This pleasing intelligence had scarcely been assimilated by the trade when word came over the wires from Fort William that the men in elevator "D" the largest elevator at Fort William, and the chief elevator of the C. P. R., had gone on strike, and that a general strike was pending if employers did not come to terms, other elevators being given until Monday to make a decision. The strike is for more pay. Though conditions and wages vary a little among the elevators the advance demanded is about 2½c. an hour, and time and a half for overtime, which is a very important item at this season. At the elevator "D" the present rate of wages is 27½ for unskilled and 30c. an hour for skilled labor, and the new scale, if admitted, would be 30c. for unskilled and 32½c. for skilled labor, and 45c. for unskilled, and 48½c. for skilled overtime.

As soon as the news reached Winnipeg a meeting of the terminal elevator interests was convened, and it was resolved to send a delegation down to negotiate with the men and try to reach an amicable settlement.

The delegation left this evening in the private car of D. C. Coleman, general manager of the C.P.R., who will represent his company's interests.

From the standpoint of the men it is certainly a good time to strike, as men are very scarce, owing to the draft for the war, and it is the very height of the shipping season.

Chairman Robert Magill, of the Canada Grain Commission, who was in the city attending a meeting of the commission, received an ultimatum from the men of the Government Terminal also.

Floods Subsiding.

My last, in which I stated that flood danger was over, proved premature, and all this week very considerable sections of St. Boniface, Norwood, Fort Rouge, and other suburbs of the city have suffered considerably from flood, and there has been serious loss of property, though fortunately no loss of life. A considerable area of country has been, and is still under water, and in those sections, of course, it has been impossible to get on the land. However, both in Saskatchewan and Manitoba considerable progress has been made, though reliable authorities claim that so far not ten per cent of the wheat has been seeded, and that less than 40 per cent of the land is as yet ready. Last year by the first of May over 75 per cent of the wheat was seeded, and much of it was up a couple of inches. In Alberta it is claimed that over 50 per cent of the wheat is seeded, and in some sections nearly all seeding is completed. It must be borne in mind, however, that the acreage under seed at any time in Alberta is not much more than half that of Manitoba, and only about one-quarter of the regular seeded areas of Saskatchewan.

In a number of districts in Saskatchewan where the land is still too wet to plow they are utilizing the time to thresh the grain that was overtaken in stack and stook by the snow of last fall. This is a somewhat novel sight for the west. None of this grain has as yet reached market, but the sample is said to be fair.

Speaking of samples, it is interesting to report that in spite of all the grain that lay out on the ground last winter, and to move which so much effort was made in March and the early part of April, the number of cars of damp and tough grain reaching the inspection department has been greater if it has been as great as in a normal year.

No Fireworks.

The markets following the opening of navigation have been very tame, there has been no sharp advance, and no slump; indeed, markets have held remarkably steady, though trade on the whole has been narrow, and almost entirely professional.

Mr. Burbidge, the agent of the Allied Governments, is still with us, and is still reiterating that we are dwelling in a fool's paradise, and that one of these fine mornings the prices will tumble about

our ears. In the meantime he does little trade and indeed, export business has been of a very limited character. The strength in the markets appears to have been mainly due to the poor condition of American winter wheat, and our own delayed seeding. The American political situation appears to have had remarkably little effect. Our own western farmers who have not parted with their wheat are in no hurry to do so, and seem to think it good value to hold. The May report of the United States is being looked forward to with even more than usual interest, as it will give something authoritative on the amount of winter killed and abandoned area. No authentic estimate of our own reduction of acreage due to late season will be available much before the end of May. Wheat seeding can be continued with a reasonable degree of safety up to the 20th of May in certain districts, and it will take a week after that before figures can be secured. That there will be a considerable decrease is now generally admitted, even by the most optimistic. No one is worrying over this very much except the grain men, who like a big crop to play with, buy cheap and sell dear. The farmers realize that there is money in a reasonable acreage well put in and a good area of summerfallow ready for 1917, also that coarse grains will be profitable in view of the growing demand for well fed livestock. Also the wise ones bear in mind that what two men can seed it takes from four to five to harvest, and with the present scarcity of labor and high wages that it is just as well not to be swamped with a lot of land carrying a light crop next fall. In spite of the Dominion Government's urgent request that they seed wheat on third year stubble there are not many farmers in the west fools enough to try it.

Farmers realize that the armies of the Allies do not need our crop to actually supply them with bread, and that thrift can best be obtained by seeding what they can put in on good cultivation, and have a reasonable prospect of harvesting, and no more. A 25 bushel crop off 150 acres is a much more profitable investment than a 12 bushel crop off 300 acres stubbled in.

The weather for the past few days has been very favorable, as there have been light cool winds with one or two degrees of frost at night, which is excellent for drying the surface land. One of the oddest sights of an odd season is that the extreme north of Manitoba is this year seeded first, the Dauphin country and the famous Swan river valley being ten days ahead of southern Manitoba.

Grain Tickets.

The whole question of grain tickets has again come before the Grain Commission, and this very important matter is receiving very careful consideration. It will be remembered that at a sitting some weeks ago the use of the "subject to grade and dockage ticket" was to be suspended after the first of May, and that if elevators wished to have it revived for next year they were to apply to have the Grain Act amended in order to permit of its issuance. It seems the commission has received a great many applications along this line. Furthermore, in view of the fact that one of the great complaints against this ticket was that elevator companies frequently sold the farmer's wheat without his consent, or knowledge, and when he did order it sold merely paid him the market price for that day, and charged him terminal storage for wheat that had often been out of the terminal for weeks, and sometimes months, and if he had had an advance on his car charged him interest on that advance, when all the time they had had the full price of the car to use, the commission raised the question as to whether the Grain Act should not be amended to make it a criminal offence not only to sell grain stored on these tickets, but to substitute grain even of the same grade under the regular storage tickets.

The matter came up for discussion to-day, and the elevator companies, through Frank O. Fowler, secretary of the North West Grain Dealers' Association, and the Grain Exchange, through its president, W. A. Milner, filed very long and comprehensive pleas not only for the amending of the Grain Act to permit of the "subject to grade and dockage ticket," but also that substitution of grain not only be permitted, but that it was perfectly legal even under the Act as it at present exists. This, to say the least of it, is going strong, and the opposition asked for time to consider these argu-

Textile Mills

throughout Canada are working overtime on military and regular business

Four mills are now under construction. Several plants have resumed operations during the past few months. A number of concerns have recently doubled the capacity of their plants. Practically all the mills are installing new equipment as quickly as it can be secured.

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FACTORIES IN

MONTREAL, TORONTO, OTTAWA, WINNIPEG

INDIA'S 1915-16 SUGAR CROP.

Official estimates place the 1915-16 cane sugar crop of British India at 2,636,000 tons, compared with 2,462,000 tons for previous campaign and an average yield of 2,383,297 tons. Sowings were 2,375,000 acres against 2,311,000 acres in 1914-15 an increase of 3 per cent. Yield per acre was 2,486 pounds against 2,386 pounds in 1914-15.

ments and to present a written reply. And there, for the moment the matter rests. It may seem of local importance to the casual reader, but not so to any branch of the grain trade or to any raiser of grain. It means a revolution in the system of handling.

While the commission has not expressed an opinion it was pretty clear that what the commission leans to is the use of the "subject to grade and dockage ticket," and the prohibition of sale and substitution of grain under any ticket.

Livestock.

Receipts of livestock have been materially curtailed by the floods, but are again increasing. The features of the market are the high prices being paid for really inferior stock, both cattle and hogs.

COMMODITY MARKETS

Week's Wholesale Review

With the opening of navigation, trade conditions are more active in all lines. River boats had possession of Montreal Harbour last week, but this week will see the arrival of the first ocean steamers. Shipping and freights in this country being among the prime factors affecting trade conditions, the prevailing shortage of ocean tonnage is bound to influence all wholesale lines more or less. The dairy situation has been particularly affected by the absence of almost all export trade during the past few months, which has kept prices of butter and cheese at a low level. Eggs are similarly affected.

In the wholesale grocery market refined sugar has risen 10c. to 15c. per 100 lbs. since last week. The market for provisions of all kinds is a little easier after the high prices and large turnover of Easter week. Prices of hardware are firm, and dealers consider the general outlook encouraging. Business is brisk in the lead and paint market, with prices firm, with a tendency to go higher. Boots and shoes are influenced by the advance in price of leather, which is scarce, and likely to be higher still. In spite of this, sales have been good during the past week, and collections satisfactory.

Wholesale trade in general may be said to be more promising and local and country collections quite encouraging.

DAIRY PRODUCE.

BUTTER: During the past week, owing to the liberal supplies of butter arriving from country points, this market has had a fluctuating tendency, with a drop of 1½c to 2c. at both city and country sales. A sale at the Quebec Agricultural Co-operative Society was held on Friday, and the price realized was 28¼c. for finest creamery, and 27¼c. for fine, showing a decline of 2¼c. from their sale a week previous. At Gould's Cold Storage on Thursday an auction sale of held creamery was held, when about 900 packages were sold at 24¼c. to 25c. per lb., which figures were considered satisfactory when the quality was taken into consideration. In general prices are 3c to 4c. lower than at the corresponding period last year.

CHEESE: This market has shown considerable activity with a good grain passing. English prices have gone up so high that there will probably be a falling off in demand.

Current quotations follow:

Butter:		
Fresh creamery	0.30	0.31
Storage	0.28	0.29
Seconds	0.26	0.27
Dairy Butter	0.25	0.26
City Selling Prices, to grocers:		
Choice Creamery Solids	0.32	
Do., Prints	0.32½	
No. 2, Creamery Solids	0.30	
Do., Prints	0.30½	
Choice Dairy Prints	0.28	
Do., Rolls	0.28	
Cooking Butter	0.25	
Cheese:		
Finest Eastern	0.18½	0.19
Finest Western	0.18½	0.19
Fine Cheese	0.18	0.18½
Undergrades	0.17	0.18

MONTREAL PRODUCE RECEIPTS.

The receipts of the principal commodities at Montreal for the past two weeks follow:

	Week end. April 22.	Week end. April 29.
Wheat, bushels	689,364	772,828
Oats, bushels	386,205	241,002
Barley, bushels	12,688	10,071
Flour, barrels	39,619	32,916
Eggs, cases	17,871	19,326
Butter, packages	4,890	5,689
Cheese, boxes	5,229	10,364
Potatoes, bags	8,843	8,955
Hay, bales	13,972	21,997

PERSONALS.

Captain Jackson Dodds, secretary of the Bank of British North America, has been appointed Deputy Assistant Director of Ordnance Stores to the 63rd Division.

COUNTRY PRODUCE.

POULTRY: This market has been very quiet, with very little poultry arriving during the past week, and what little has been coming has found a ready sale. In spite of the high prices ruling, the demand has been as great, and greater than at this time last year. As stocks are getting higher, prices have a tendency to soar, most lines being up a cent or two over last week's quotations. It is hoped that the opening of navigation will bring larger supplies and consequently lower prices.

EGGS: The market in Montreal is considerably easier this week, with prices one cent lower than last week's figures. Deliveries of eggs have been fairly large, though not equal to the corresponding period last year. The exporting season is two or three weeks later than last year's. Storing has commenced at last, although the stocks in store are light compared with last year at the end of April. Latest reports from the British market indicate that Irish eggs are filling all requirements, and Canadian eggs have had to decline considerably in order to invite any business, and this in the face of ocean freight rates three times higher than last year. That exports will be considerably curtailed is the general opinion of the trade.

MAPLE PRODUCTS: This market is very bare of stocks. Reports state that there are very considerable quantities in the country, but no accurate information is available. There has been a good strong demand for both syrup and sugar, prices remaining firm at last week's figures.

Current wholesale prices follow:

Eggs—		
New Laid	0.24	0.25
Honey:—		
Buckwheat, in combs	0.12	0.13
Buckwheat, extracted	0.10½	0.11
Beans:—		
3-lb. pickers, carlots, bush.	4.00	4.25
3 lb. pickers, do.	3.95	4.15
Undergrades, bus.	3.60	3.70
Potatoes:—		
Green Mountains, per bag, car lots	1.75	1.80
Job lots, ex store, per bag	1.90	1.95
Poultry:—		
Frozen stock—		
Turkeys	0.28	0.30
Fowl, large	0.20	0.21
Fowl, small	0.19	0.20
Ducks	0.20	0.23
Geese	0.16	0.17
Roasting chickens, ord.	0.23	0.25
Chickens, milk fed	0.25	0.26
Capons	0.28	0.30
Spring broilers, dressed, pair	1.25	1.35
Squabs, Phila., pr.	0.85	0.90
Poultry—Live:		
Fowl, 5 lbs. and over	0.20	0.23
Fowl, small	0.18	0.19
Turkeys, cocks	0.20	0.21
Do., hens	0.23	0.24
Maple Products:		
Pure maple syrup, 8-lb. tins	0.85	0.90
Pure maple syrup, 10-lb. tins	1.00	1.10
Extra choice syrup, 13-lb. tins	1.40	1.50
Pure maple sugar, per lb.	0.12	0.14

RECEIPTS OF BUTTER, CHEESE AND EGGS.

The following table shows the receipts of butter, cheap and eggs in Montreal for the week ending April 29th, 1916, with comparisons:

	Butter, pkgs.	Cheese, boxes.	Eggs, cases.
Week end. Apr. 29, 1916	5,689	11,202	19,326
Week end. Apr. 22, 1916	4,890	5,229	17,871
Week end. May 1, 1915	4,621	7,280	19,637
Total receipts, May 1st, 1915, to date	419,218	2,022,028	642,531
Total receipts last year up to April 30	404,078	1,544,251	484,283

FREE EGG CASE MOVEMENT ABANDONED.

At a meeting held last week by the Canadian Produce Association, it was decided to give up the free egg case regulations, which have been in force for a month or six weeks, and return to the former policy by which dealers pay for and own the egg cases. Three of the leading firms withdrew their support from the movement, which forced the other firms to fall into line.

LIVE STOCK.

With the exception of the market for calves, the live stock market during the past week was not marked by any great activity. As a rule prices were higher, and there was a firm tone to the whole list, with the one exception of calves. Owing to the liberal supply of calves coming forward, prices had a slightly lower tendency. The sales of choice stock ran from 8 to 9 cents, while the lower grades were featured at from 4 to 6 cents per pound. The demand for spring lambs showed an improvement, prices running \$4 to \$6, according to quality. Older lambs and sheep were scarce, and prices ruled firm. The hog market continued firm, with a good demand. Cattle are scarce, and the prices continue firm. Current quotations are as follows:

	Per cwt.
Butcher steers, best	\$8.95 to \$9.20
Do., good	8.60 to 8.90
Do., fair	8.25 to 8.60
Do., medium	7.90 to 8.20
Do., rough	7.50 to 7.80
Butcher bulls, best	8.00 to 8.25
Do., medium	7.50 to 7.75
Do., common	7.00 to 7.25
Canning bulls	4.25 to 5.25
Butcher cows, best	7.50 to 7.80
Do., good	7.10 to 7.40
Do., medium	6.65 to 7.40
Do., medium	6.5 to 7.10
Do., common	6.15 to 6.50
Do., canners	3.25 to 4.00
Sheep	6.00 to 8.50
Lambs	9.00 to 12.00
Hogs, selects, weighed off cars	12.00 to 12.25
Do., roughs and mixed lots	11.25 to 11.75
Do., common	11.00
Sows	9.35 to 9.90
Calves, milk fed	8.00 to 9.00

EXPORTS OF CANADIAN DAIRY PRODUCTS.

The exports of cheese and butter from Canada during the past thirty-five years follow:

Year.	Butter.	
	Quantity, lbs.	Value, \$.
1880	18,535,362	3,058,069
1890	1,951,585	340,131
1900	25,259,737	5,122,156
1903	34,128,944	6,954,618
1910	4,615,380	1,010,274
1911	3,142,682	744,288
1912	8,844,402	2,077,916
1913	828,323	223,578
1914	1,228,753	309,046
1915	2,724,913	639,625

Year.	Cheese.	
	Quantity, lbs.	Value, \$.
1880	40,368,678	3,893,366
1890	94,260,187	9,372,212
1900	185,984,430	19,856,324
1904	233,980,716	24,184,566
1910	180,859,886	21,607,692
1911	181,895,724	20,739,507
1912	163,450,684	20,888,818
1913	155,216,392	20,697,144
1914	144,478,340	18,868,784
1915	137,601,661	19,213,501

CHEESE EXPORTS.

The following are the shipments of cheese from Portland and St. John, N.B., which arrived on the other side for the week ending April 27, 1916.

	Local.	Thro.	Total.
Liverpool	2,000		2,000
London	332	14,251	14,583
Glasgow		3,961	3,961
Manchester	2,198		2,198
	332	22,410	22,742
Same week last year	1,145	6,270	7,415
Total exports, May 1, 1915, to April 29, 1916, boxes			2,152,415
Do., corresponding period last year			358,299

PROVISIONS.

Prices of live hogs continue strong, with a tendency to advance steadily. Higher prices are looked for this present week, as very few supplies are coming forward, as the Western packers seem to be requiring all supplies. The dressed hog market is quiet, with prices firm. Smoked meats are quiet, and the volume of business passing is light. Lard continues to advance in price each week, showing another advance of 1/2c.

Current prices are as follows:

	Per lb.
Hams:—	
Smoked hams, 8-14 lbs.	0.23 1/2
Do., 14-20 lbs.	0.23 1/2
Do., 20-25 lbs.	0.22 1/2
Do., over 25 lbs.	0.20
Bacon:—	
Roll Boneless Bacon	0.24
Windsor Bacon, selected	0.27
Windsor Bacon, Boneless	0.28
Barrel Pork:—	Per bbl.
Short cut pork	32.00
Clear Fat Pork, 30-40	33.00
Clear Fat Pork, 40-50	33.00
Clear Fat Pork, 20-35	30.00
Mess Pork	29.50
Bean Pork, Canadian	24.50
Barrel Beef:—	
Plate Beef, 200 lbs.	24.00
Pure Lard:—	pound.
Tierces	0.16 1/2
Tubs	0.16 3/4
Pails	3.40
Tins	3.30
Cases, 3, 5, 10's	0.17 1/2
Prints	0.17 3/4
Compound Lard:—	
Western Grades:	
Tierces	0.14 1/4
Tubs	0.14 1/2
Pails	2.90
Tins	2.80
Cases, 3, 5, 10's	0.15
Prints	0.15 1/4
Cooked meats:—	
Roasts houlders pork	0.33
Roast ham, boneless	0.35
Cooked hams, rind off	0.33
Head cheese	0.09
Jellied pork tongues	0.30
Blood pudding	0.09 1/2
White pudding	0.08
Jellied beef tongues	0.28
English brawn	0.11

GRAIN EXPORTS.

The following are the exports of grain from the Ports of Portland and St. John, N.B., that have arrived at their destination week ending April 27, 1916.

	Flour, bush.	Wheat, bush.	Barley, bush.
Liverpool		16,000	
Glasgow	27,772	24,000	24,333
London	12,500	108,722	
Manchester		176,800	
Total	40,272	325,522	24,333

SUGAR PRICES CONTINUE TO SOAR.

The sugar market in New York opened strong after the Easter holiday, with a good volume of business passing at 7.25c. to refiners. The offerings were larger, but in many cases no business would be considered, and many orders were refused. From 7.25c. the price advanced during the week to 7.40c. One factor which has had a tendency to advance prices to the present high level has been the heavy buying on the part of the British Commission, which has purchased some 35,000 tons for British and French requirements. Stocks in Cuba are increasing, the total at the ports being now 901,000 tons, against 585,000 tons last year. Moreover, there is more sugar on the plantations now than a year ago.

In sympathy with the rise in price in New York, the Montreal market has advanced twice during the week. The Atlantic Sugar Refinery raised their price 15c. on Monday, and another 15c. on Tuesday, making a present price of \$8.00 per 100 lbs. The other refineries are quoting their prices at a lower figure, so that \$7.80 may be considered the ruling figure.

FAILURES THIS WEEK.

Commercial failures this week in the United States, as reported by R. G. Dun and Co., are 336 against 333 last week, 361 the preceding week and 447 the corresponding week last year. Failures in Canada number 26 against 36 last week, 37 the preceding week and 65 last year. Of failures this week in the United States, 149 were in the East, 76 South, 59 West and 52 in the Pacific States, and 110 reported liabilities of \$5,000 or more, against 97 last week.

FLOUR, CEREALS AND MILLFEED.

During the past week the market for all grades of flour has remained firm, although the demand has not been large, as local and country dealers continue to buy only in quantities sufficient for their immediate requirements, as in many cases they still hold contracts with millers which are not yet completed. On Friday there was a considerable demand from foreign buyers, notably sales of 2,000 sacks of export patents at 43s. 9d. for May shipment. On the whole the market may be said to be very quiet, with no marked activity expected in the near future.

The millfeed market has kept very firm during the week under a steady demand from all sources for supplies of various kinds, and small offerings. Supplies, however, are none too plentiful, which is keeping the range of prices up to its present high level.

Current quotations follow:

	Montreal.	Toronto.
First patents, per		
bbl., in bags	6.60	6.50 6.70
Second patents, do.	6.10	6.00 6.20
Strong clears, do.	5.90	5.80 6.00
30c per bbl. more in wood.		
Winter wheat flour		
Fancy Patents	5.85	6.00
90 per cent in wood	5.30	5.40 4.40 4.30
90 per cent in bags	2.45	2.50
Cereals:—		
Cornmeal, yellow, in		
per bag, 98 lbs.	2.75	2.50
Rolled oats, per bbl.,		
in wod	5.10	5.20
per bag, 90 lbs.	2.40	2.45
Rolled wheat, 100 lb.		
bbl.	4.00	3.00
Rye flour, 98 lb. bag	2.65	2.80
Graham flour, 98 lb.		3.25
Barley pot., 98 lbs.	3.00	
Barley, Pearl, 98 lbs.	4.50	4.70 4.90
Whole wheat flour, 98		
lbs.		3.25
Middings, per ton	28.00	30.00 26.00 27.00
Bran, per ton	24.00	24.00 25.00
Shorts, per ton	26.00	26.00
Feed flour, per ton	35.00	
Feed flour, bag		1.60 1.70
Moullie, pure grain		
grades, per ton	34.00	35.00
Do., mixed	31.00	
Barley feed, per ton	32.00	
Do., meal, per ton	35.00	
Crushed oats, 80 lbs.	1.75	
Reground oatmeal feed,		
per ton	19.00	

MONTREAL GRAIN STOCKS.

The following table shows the stocks of grain and flour in store in Montreal on the dates mentioned:

	Apr. 29, 1916.	Apr. 22, 1916.	Apr. 30, 1915.
Wheat, bushels	1,871,764	1,367,615	1,299,783
Corn, bushels	8,221	7,721	94,712
Oats, bushels	2,105,017	2,050,274	705,933
Barley, bushels	89,398	98,050	180,332
Rye, bushels	41,495	39,328	14,720
Buckwheat, bushels	4,805	4,805	12,171
Flour, sacks	73,190	69,712	78,698

REDUCTION IN U. S. WINTER WHEAT CROP.

The Chamber of Commerce of U. S. at Washington makes the following reports on the wheat situation:—

The winter wheat crop this year will be approximately one-third less than the crop of 1915, or roughly speaking, around 450 million bushels. There is approximately 20 per cent less acreage in wheat than at this time last year. The decrease in acreage is greatest in the large wheat growing states, particularly Kansas, Missouri, Illinois, Indiana, Michigan, Ohio and Iowa. The abandoned acreage is much larger than the average, and much will be plowed up and replanted in oats and corn.

UNUSUAL ACTIVITY AT FORT WILLIAM

Since the opening of navigation at Fort William ten days ago, there has been one of the greatest rushes of moving grain known from the terminal elevators to the eastern plants. During the past week elevators have been working night and day to supply the cargoes demanded. From Saturday to Thursday last 17,355,000 bushels of all grain have been carried to Buffalo (Montreal and Tiffin). Another big shipment went out on Thursday, with the departure of 17 steamers, carrying 3,138,000 bushels, while the biggest day's cargoes loaded were 4,817,000 bushels on Wednesday.

FRUIT AND VEGETABLES.

Porto Rico pineapples are now arriving on the market, and are selling at from \$3.25 to \$3.50, with lower prices expected shortly. The orange market has a steady upward tendency. Strawberries are arriving more freely, but the quality is not very satisfactory. The lemon market is steady. Onions are strongly maintained, with Egypt's very high in price, owing to the inadequate supplies arriving and high freight rates. Local prices are quoted at \$4 to \$4.50 per 100 lb. bag. Prospects are for still higher prices. Grapefruit has advanced 25c to 50c. as shipments from Cuba and Florida are very light.

In dried fruits, dates are very firm. A shipment transhipped from London, is expected to reach the New York market for this week's delivery. In nuts, Tarragona almonds are showing some strength, walnuts are firm, filberts are scarce, and almost exhausted. Currants will be high in price until the new crop, owing to the small stocks in Greece. Citron and peels have advanced 2c. per lb., due to the high price of sugar and abnormal freight rates prevailing.

Current quotations follow:—

Apples:—		
Starks	5.00	5.00
Spys	5.00	6.00
Spys	6.00	7.00
Ben Davis	3.00	3.25
Russets	6.00	6.50
Baldwins	4.50	5.00
Bananas, bunches	2.00	2.50
Cranberries, Cape Cod, bbl.	12.00	14.00
Grapes, Malaga, heavyweight, bbl.	8.00	10.00
Lemons:—		
Grapefruit, 46-54-64-80-96	4.00	4.50
California	3.00	3.00
Messina, 300 size, box		3.00
Oranges:—		
Navels, Californias, 176-200-216	4.00	4.00
126	3.25	3.25
80-96	2.50	2.75
Jamaica, 196-200-216	2.50	2.50
Porto Rico, 126-150-250-286	2.75	2.75
Pineapples, 18-24 and 30-36	4.50	5.00
Strawberries, Louisiana, box	0.17	0.18
Vegetables:—		
Artichokes, bag	1.50	1.50
Beets, bag	1.50	1.50
Beans, wax, N.Y., per basket	4.50	5.50
Beans, green, N.Y., per basket	4.50	5.50
Cabbage, Montreal, per bbl.	2.00	2.00
Cabbage, red, dozen	0.40	0.40
Do., New American	3.00	3.00
Cauliflower, hampers	4.00	4.00
Do., New American	3.50	3.50
Cauliflower, crate, singles	3.50	3.50
Celery, Florida, crate	3.25	3.25
Cucumbers, fancy, Boston, doz.	2.50	2.50
Garlic, per lb.	0.30	0.30
Horse radish	0.14	0.14
Leeks, bunch	0.30	0.30
Curly lettuce, box, doz.	2.50	2.50
Mint, dozen	0.60	0.60
Mushrooms, 4-lb basket	2.50	2.75
Oyster plant, dozen	1.00	1.25
Onions:—		
Reds, 100 lb. bags	3.75	4.00
Spanish, case	6.50	6.50
Do., crates	3.25	3.25
Parsnips	1.90	1.25
Potatoes:—		
New Brunswick, 80 lbs., bags	1.90	1.90
Sweet, hamper	1.75	2.00
Radishes, doz.	0.40	0.40
Rhubarb, lb.	0.10	0.10
Spinach, New York, bbl.	3.25	3.50
Turnips, bag	0.90	0.90
Tomatoes, hothouse, lb.	0.30	0.35
Tomatoes, Florida, doz.	3.25	3.25
Do, choice	2.75	2.75
Watercress, Boston, hothouse, doz.	0.75	0.75

WINNIPEG GRAIN RECEIPTS.

The receipts of grain at Winnipeg for the week ended April 29, 1916, compared with the previous week and the corresponding week a year ago were as follows:

	Apr. 29, 1916.	Apr. 22, 1916.	May 1, 1915.
No. 1 Hard	1	1	...
No. 1 Northern	1,678	1,221	...
No. 2 Northern	528	546	...
No. 3 Northern	465	309	...
No. 4 Northern	181	165	...
No. 5 Northern	65	59	...
No. 6 Northern	31	15	...
Other grades	229	189	...
Winter grades	4	10	...
Total	2,683	2,525	926
Flax	819	735	186
Oats	71	62	42
Barley	94	80	79

FISH AND OYSTERS.

During the past week fish has been very scarce, and supplies have been difficult to obtain. The trade has been better than was expected, and the prospects are that there will continue to be a good demand, but unfortunately the supplies are not expected to be very plentiful. Halibut, which is a staple line, is exceedingly high priced, especially from the Pacific Coast, due to a strike among the independent fishermen, which has created a great scarcity. A large demand from the American market is accentuating this difficult situation. A few shipments are coming from the East, meantime, mostly very small fish, and as a rule not as good in quality as the western fish. A certain amount of fresh salmon has been coming in from British Columbia, and selling at very high prices. Haddock and codfish are just in, with fair supply and normal prices. Lake fish, such as trout, whitefish, and pike, have not started to move in any quantity yet. Large quantities of river fish are arriving, and will be available for some weeks. The open season for blue trout started yesterday, but it is still close season for pickerel, and dore, until the fifteenth of the month. Bulk and shell oysters are very quiet, without any future of note.

Fresh:—	
Haddock, per lb.	0.06
Steak Codfish, per lb.	0.07
Carp, per lb.	0.09
Lobsters, live, per lb.	0.23
Salmon, Red Cohoes, or Silvers, Round, per lb.	0.25
Salmon, Red—Cohoes or Silvers, Dressed and Headless, per lb.	0.25
Halibut, medium, per lb.	0.18
Herrings, medium, 60 lb. per 100 count	2.50
Whitefish, per lb.	0.14
Pike, per lb.	0.09
Shad Fish, each	1.25
Perch, dressed, per lb.	0.12
Bullheads, dressed, per lb.	0.10
Smoked Fish:—	
Haddies, per lb.	0.09
Fillets, per lb.	0.10
Frozen:—	
Dore	0.10
Whitefish	0.11
Mackerel	0.09
Oysters:—	
Standard Solid Meats—No water. No. 5 Can(containing 3 wine gals.	4.25
Ordinary Bulk Oysters, Standards, per Imp. gallon	1.70
Shell Oysters, Cape Cods in large barrels	8.00

FAVORABLE MARKET FOR CANADIAN EGGS.

According to the report of the Canadian Trade Commissioner, Mr. J. E. Ray, in Birmingham, the prospects for Canadian eggs from now until June are very favorable if present conditions continue. He stated further that "eggs were so badly needed at the beginning of the year that several firms made the experiment of trying to get supplies from Archangel late in December; but the experiment ended disastrously. Five steamers with 22,000 cases of eggs (1,400 each) are frozen up in the White sea and there is no hope of their being released earlier than the end of May. Irish eggs at this time last year could be purchased at \$2.20 per 120; to-day's shippers are firm at \$3.40. Egypt, during January, sent 37,000 cases; during February, 25,000; and during March, 7,000. This was the total quantity that the Government would issue permits for. No permits have been issued for April, and it is very doubtful what number of eggs will be shipped during that month, as the season practically finishes at the end of March."

VALUE OF CANADA'S LIVE STOCK.

Horses	\$370,378,482
Milch Cows	164,223,592
Other cattle	151,477,474
Swine	48,363,346
Sheep	16,224,667

COST OF APPRENTICESHIP.

It has been figured that the average cost of apprenticeship, including the cost of bringing a man to the working efficiency necessary to profit, is approximately \$1,000. If this man is disabled from any cause, the employer must immediately recognize a charge for the cost of training another workman, in addition to whatever damage he may be liable upon to pay as a result of the accident.

MANY PROBLEMS IN THE CHINAWARE TRADE.

In all lines of importance business men in Canada today are encountering serious difficulties, caused by the shortage of labour in Europe and the great scarcity of Atlantic tonnage which, when available, can only be had at almost prohibitive prices. Importers of china and glassware have a full measure of these problems to solve. Prior to the war our supplies of china and glassware were obtained from England, France, Germany and Austria. Austria and Germany are no longer a source of supply, thanks to the British blockade, and the French plants are in many cases closed down or their output is largely curtailed. The English china manufacturers find themselves almost the sole possessors of an unlimited market, quite beyond their capacity to supply, owing to a labour shortage somewhat similar to that existing in France. In many cases consignments of china arriving in Canada from Great Britain are but one half of quantities ordered.

The American product consists mainly of china of an inferior quality, such as semi-porcelain and earthen ware, as the ball clay and kaolin suitable for the finer grades of china have never been found in the United States. The American industry dates back only some thirty or forty years, during which time, however, wonderful strides have been made. Forty years ago the American people faced the same situation as we do today, namely, an excellent home market supplied by a high-priced foreign article against the importation of which Congress set up a high tariff. Results show that they have made excellent use of their natural resources, and where they have not been able to discover the grades of clay required, they have imported the raw product and manufactured as much of the finer grades as possible at home.

Hitherto in Canada we have only produced the commonest types of china-ware, such as brown tea pots, flower pots, kitchen bowls, etc. Those of our clay deposits that have so far been developed are suitable only for such articles, or as fillers in the manufacture of pulp, paper and textiles. Quite recently an important discovery of a large kaolin deposit has been made at St. Remond. This deposit is shown the clay to possess a high ceramic value. Already a company has been formed under the name of the Canadian China Clay Co., with a capitalization of \$1,500,000 to develop the deposit.

The progress of the undertaking is being watched with keen interest, and if it proves a success a search will be made for similar deposits in other parts of the country.

It would be difficult to overestimate the importance of this project from a Canadian standpoint. In all times pottery and the ceramic art have gone hand in hand with progress towards the higher ideals of life, while the economic value of the industry is by no means small.

INCREASE THE BEET SUGAR AREA.

A special effort should be made in Canada to grow more sugar beets. With sugar now selling at nearly \$8. per hundred, wholesale, and likely to go considerably higher, there is an excellent opportunity for farmers to make money by growing sugar beets. It is stated that in some parts of Western Ontario, there has been an increased acreage, amounting in some cases to 40 per cent. Sugar beet factories are paying a bonus of 50 cents per ton on contract prices for beets and the indications are that still higher prices will be paid.

Previous to the war, Great Britain and France secured the bulk of their beet sugar from Germany, Austria and Belgium, although France had a considerable acreage of sugar beet under cultivation. Unfortunately this land was located in the North of France and is now in the hands of the Germans. This means that Great Britain and the other allies must depend upon sugar cane for their supply, which has resulted in the sharp advances.

Ontario in normal times has 20,000 acres under beet sugar cultivation, producing about 8,000,000 bushels per year. At ordinary prices this returns the farmer about \$45 per acre, but with the higher prices now being paid, the farmers will undoubtedly reap a larger return. This is in keeping with the government policy of production and thrift and not only brings in an increased return to the farmers, but aids the Empire in its fight against the Huns.

CANADA'S FIELD CROPS.

Ottawa, April 19, 1916.

The Census and Statistics Office has just issued in the form of a press bulletin a summary of the results of inquiries into (a) the merchantable quality of the field crops of 1915; (b) the stocks of grain and other agricultural produce of 1915 remaining in farmers' hands on March 31, and (c) the stocks of wheat in Canada on the same date.

Merchantable Quality of 1915 Crops.

The returns received from crop reporting correspondents show that of the total estimated wheat crop in 1915 of 376,303,600 bushels over 95 per cent, or 358,281,000 bushels, proved to be of merchantable quality. This proportion compares well with the previous years, being superior to last year by about 2 per cent and somewhat above the average of the past seven years. The proportions of other crops of 1915 which proved to be of merchantable quality are as follows: Oats, 92 per cent (480,208,000 bushels out of 520,103,000 bushels); barley, 88 per cent (47,082,000 bushels out of 53,331,300 bushels); rye, 88.5 per cent (2,118,500 bushels out of 2,394,100 bushels); buckwheat, 83 per cent (6,518,000 bushels out of 7,865,900 bushels); corn for husking, 77.5 per cent (11,142,000 bushels out of 14,368,000 bushels); flaxseed, 95.5 per cent (10,144,000 bushels out of 10,628,000 bushels); potatoes, 73 per cent (45,630,000 bushels out of 62,604,000 bushels); turnips, etc., 86 per cent (55,266,000 bushels out of 64,281,000 bushels) and hay and clover, 86 per cent (9,400,000 tons out of 10,953,000 tons).

Stocks of Wheat in Canada on March 31.

Out of the total estimated yield of wheat in 1915, 23 per cent, or 86,854,000 bushels remained in farmers' hands at the end of March. This proportion compares with 12½ per cent last year, 16½ per cent in 1914, 22 per cent in 1913, and 27 per cent in 1912; so that this year the proportion in hand is larger than in any year since 1912, which related to the crop of 1911. Last year the proportion remaining over was the smallest on record since these inquiries were instituted in 1909. Not only, however, is this year a high one; but owing to last year's excellent yields, the quantity on hand at March 31 is larger than in any previous year, 1912, (the crop of 1911) coming nearest with 62,188,000 bushels.

Of the remaining field crops the proportions and quantities estimated to be in farmers' hands at March 31 are as follows: Oats, 45 per cent or 235,530,000 bushels; barley, 34 p.c., or 18,514,500 bushels; rye, 30 p.c., or 732,700 bushels; buckwheat, 22 p.c., or 1,747,000 bushels; corn for husking, 24 p.c., or 3,453,000 bushels; flax, 25 p.c., or 2,700,300 bushels; potatoes, 20 p.c., or 12,960,800 bushels; turnips, etc., 15½ p.c., or 9,952,000 bushels; hay and clover, 23 p.c., or 2,524,000 tons. For oats, barley and rye the quantities on hand at the end of March are larger than in any previous year on record.

Stocks of Wheat in Canada on March 31.

The Census and Statistics Office also report the completion of an inquiry into the total stocks of wheat and wheat flour in Canada at March 31, the results of which are available for comparison with the special inquiry of the same kind which was carried out last year as for the date of February 8, 1915. This year the total quantity of wheat, and wheat flour expressed in terms of wheat, estimated as in stock in Canada on March 31, is, subject to slight revision, about 196 million bushels, as compared with about 80 million bushels on February 8, 1915. The total for 1915 includes in round figures 86½ million bushels in the elevators, flour mills and in winter storage in vessels; 87 million bushels in farmers' hands and 22½ million bushels in course of transit by rail.

SPANISH RIVER PULP AND PAPER.

A Sudbury, Ont., despatch states that the flooding of the Vermillion and Spanish rivers over the week-end swept away the Spanish River Pulp and Paper Company's dam at the head of Lake Onaping, with the entire winter's cut. The flood damage will reach thousands of dollars.

The Great Lakes Power Co., capital \$2,600,000, has been incorporated at Toronto, and will take over the electric plant of the Algoma Steel Corporation at Sault Ste. Marie, spending about \$3,000,000 in improvements and extensions to the plant.

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Shipping News

BRITISH SEA BUSINESS.

It seems incredible that Great Britain is maintaining her productive power and is adding to her wealth in the midst of this war, as Sir George Paish claims, but the figures speak for themselves. The United States is paying toll to England for shipping facilities at the rate of fully \$600,000,000 a year, and the total increase in earnings of British shipping last year was in excess of \$500,000,000 a year, more than half of which came from American importers and exporters. German commerce and shipping on the high seas have been wiped out. British ships are now carrying more than half of the world's overseas trade at shipping rates that are making their owners rich beyond their wildest dreams.

Great Britain receives more for carrying merchandise on the high seas than would pay the interest and provide a sinking fund to retire her total war debt as it stands to-day.—New York Commercial.

MORGAN'S LOSE CONTROL.

All doubt as to the source of the heavy buying that has been going on in the shares of the International Marine Company for the past month has been removed, when it was learned definitely that control of the Shipping Trust had passed from J. P. Morgan and Co., where it had been from the day the company was formed fourteen years ago, to National City Bank. Control of the property was acquired by representatives of the bank for the account of the recently formed \$50,000,000 American International Corporation, which already owns the Pacific Mail Company.

TO ENCOURAGE SHIPBUILDING.

The Nova Scotia Legislature is passing an Act for the encouragement of manufacturing and shipbuilding by exemption from taxation. The bill provides that all land, buildings and freehold property in actual use, in connection with any manufacturing establishment in Nova Scotia, established for the manufacturing of ships of iron or steel, or any combination of metals of like character, or for manufacturing in iron and steel shall be rated and assessed for the purpose of taxation for all purposes on a sum equal to the assessment thereof immediately preceding the acquisition thereof for the purpose of such manufacturing purposes for a period of fifteen years from such acquisition.

NEW AMERICAN SHIPBUILDING CO.

Shipyards are to be built on Delaware River by the Sun Shipbuilding Co. Belmont Iron Works has 6,000-ton structural steel contract. Six tankers, two for Standard Oil, are contracted for, and work will start in a month. The company will spend \$3,000,000 to outfit yards and employ 2,500 men. The company is backed by Philadelphia, Pittsburg and New York capitalists.



MR. W. B. POWELL,
 General Manager Montreal and Southern Counties
 Railway. The Company's new line to Granby was
 formally opened.

Railway News

RAILROAD EARNINGS.

Aggregate earnings of the three big Canadian railroads in the second week of April show one of the largest gains of the year to date, \$1,241,047, or 40.9 per cent. This compares with an increase of \$1,083,166, or 33.5 per cent, in the first week of the month.

The total of the week was slightly lower at \$3,294,907 than in the first week, but as noted, the increase over the corresponding period a year ago was larger. C. P. R.'s return was the feature, earnings topping those of the first week of the month, while Grand Trunk and C. N. R. figures were slightly lower. Comparisons for the week, with comparisons with a year ago, follow:—

Company	Earnings.	Increase.	P.C.
C. P. R.	\$2,577,000	\$ 876,000	51.5
Grand Trunk	1,241,047	1,083,166	33.5
C. N. R.	668,900	205,200	44.3
Total	\$4,270,405	\$1,241,047	40.9

THE RAILROAD PREDICAMENT.

Railroads produce one thing and sell another. Transportation may be called a commodity, but it is not merchandise. What a railroad sells is a capacity to effect transportation; and what the public buys is the use of that capacity and not the means itself. All the money a railroad spends, whether for labor, capital, materials, intelligence, or terminal structures, is directly or indirectly for the purpose of producing train miles. All the money a railroad takes in is for passenger and ton miles. A railroad does not sell its trains; it sells only their capacity. What it gets from the passengers and tons which occupy that capacity is out of its control entirely. Rates are made by state laws or by the interstate commerce commission. Unable to control its income, the railroad has all the greater reason to look at the cost of its train miles, that is, to the control of its outgo. If it should lose control of its outgo, having already lost control of its income, it would obviously be in a parlous condition. But exactly that is taking place.—New York Times.

CANADIAN PACIFIC

TICKET OFFICES:

741-143 St. James Street. Phone Main 8125.
 Windsor Hotel, Place Viger and Windsor St. Stations.

GRAND TRUNK ANNUAL REPORT.

The annual report of the Grand Trunk Railway, presented at the general meeting in London of April 18, 1916, shows that the railway carried last year 12,082,233 passengers, a decrease of 698,762 as compared with 1914. The average fare per passenger showed a small decrease. The receipts from the passenger showed a small decrease. The receipts from the passenger traffic amounted to £2,109,240, a decrease of £277,092 as compared with 1914. The mileage of passengers train in 1915 was 8,933,001, a decrease of 674,492 as compared with 1914.

The railway handled 20,696,509 tons of freight and live stock in 1915, a decrease of 777,355 tons as compared with 1914. The average rate per ton on the entire freight business was 0.70 of a cent. The receipts from this source being £5,382,701, a decrease of £54,107 in comparison with the previous year.

The gross receipts of the Company in 1915 amounted to £8,292,688, a decrease of £304,080. The working expenses, excluding taxes, amounted to £6,396,162, or 76.05 per cent of the gross receipts as compared with £6,676,876, or 77.67 per cent in 1914.

After meeting the revenue charges for the year there was a surplus of £510,683. Adding the balance of £4,323 7s. 9d. at the credit of Net Revenue Account on the 31st December, 1914, to the above surplus for the past year of £510,683 18s., the total amount available for dividend is £515,007 5s. 9d., out of which an interim dividend of one and one-half per cent on the four per cent guaranteed stock, amounting to £187,500, was paid out on the 9th November last, leaving a balance of £327,507 5s. 9d., from which the directors recommended the payment of a further dividend of two and one-half per cent on that stock, making the full dividend for the year. This will absorb £312,500, and leave a balance of £15,007 5s. 9d. to be carried forward to the next year's accounts.

MONTREAL'S APRIL CLEARINGS.

Montreal bank clearings for the month of April were \$269,945,748, an increase of \$5,365,144 over the month of March, and the highest of the year to date.

The April figures were only exceeded by two months in 1915, and previous to that time the total was not exceeded until going back to October, 1912, when the amount was \$283,733,037.

Clearings for the year to date, with comparisons, were as follows:

	1916.	1915.
January	\$261,581,500	\$188,434,334
February	238,208,669	163,498,912
March	264,580,604	198,451,627
April	269,945,748	199,617,220

RAILROADS ORDERING RAILS.

Railroad companies, large and small, are still ordering rails for 1917 shipment as heavily as mills can be induced to make sales. Manufacturers find much difficulty in declining orders from importunate buyers. In last week contracts for light and heavy sections reported amounted to nearly 150,000 tons.

CANADIAN NORTHERN

QUEBEC

Daily except Sunday 9.30 A. M. Buffet-Parlor Cars.
SHAWINIGAN FALLS **GRAND MERE**
 Via the Short Line
 9.30 A. M. Daily except Sunday. 4.45 P. M. Daily except Sunday.
L'ÉPIPHANIE **JOLIETTE**

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 9.30 A. M. Daily. 4.45 P. M. Daily except Sunday.
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For tickets, parlor car reservations, etc., apply to **City Passenger Agent,**
 230 St. James St., Tel. Main 6570 or **Depot Ticket Agent,**
 Catherine St. East Station, Tel. Lasalle 141.