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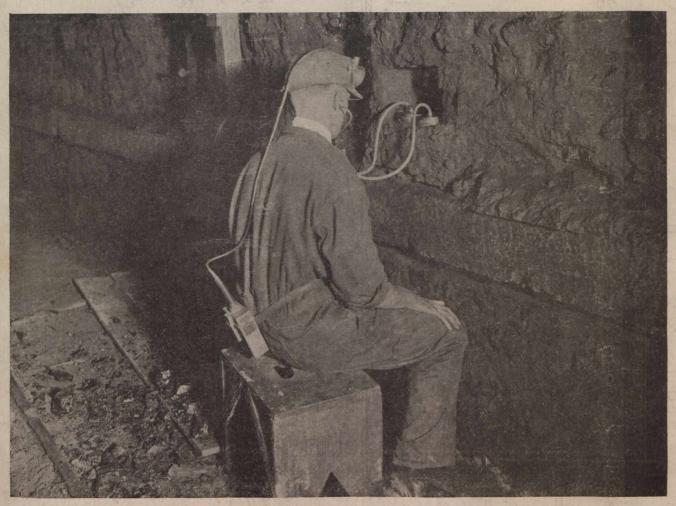
LVII., No. 39.

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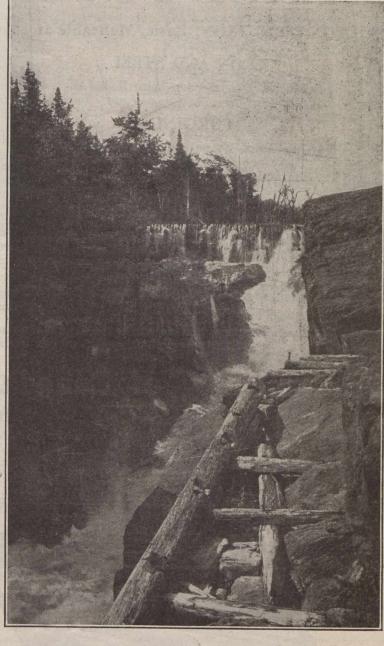
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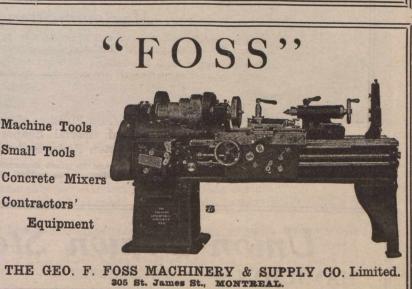
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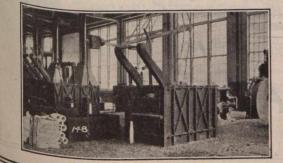
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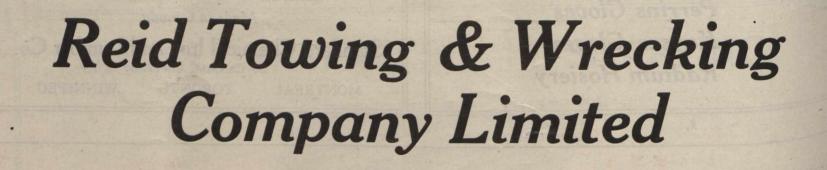
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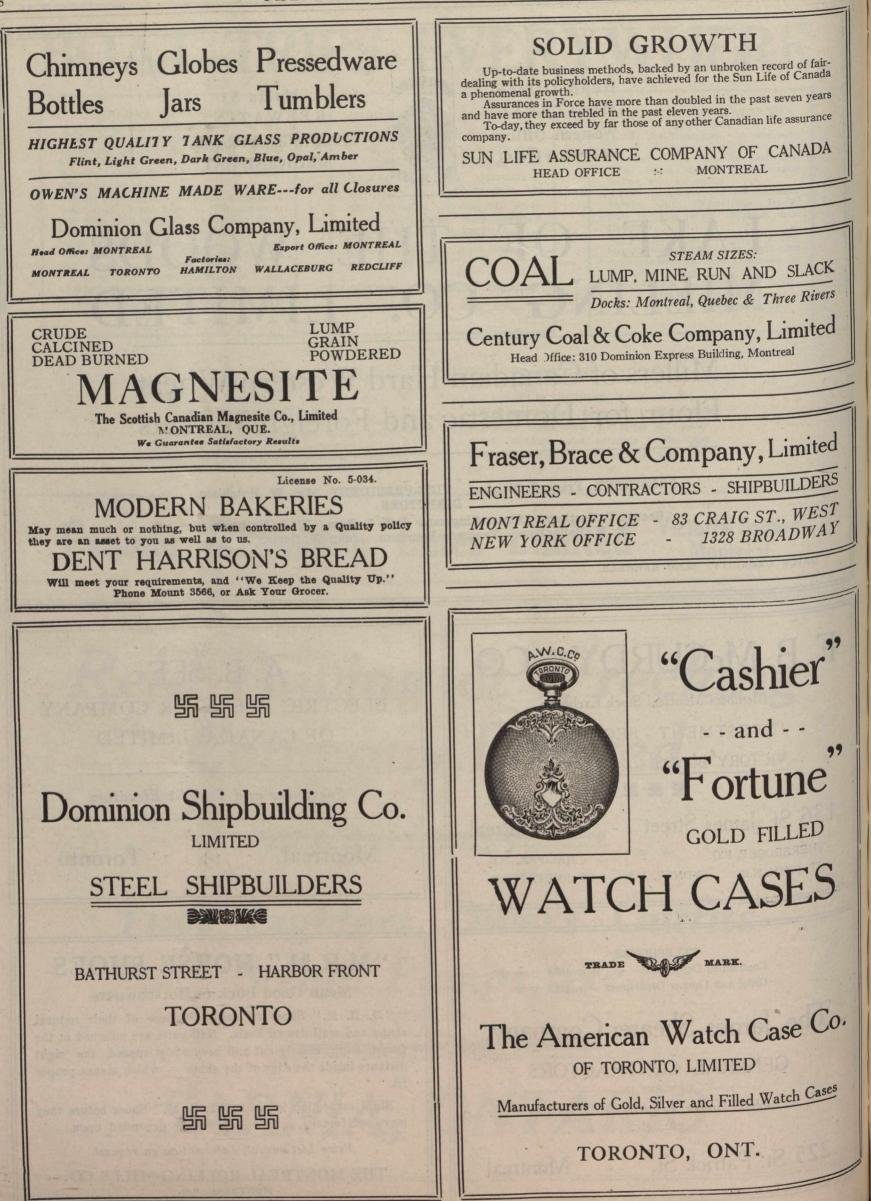
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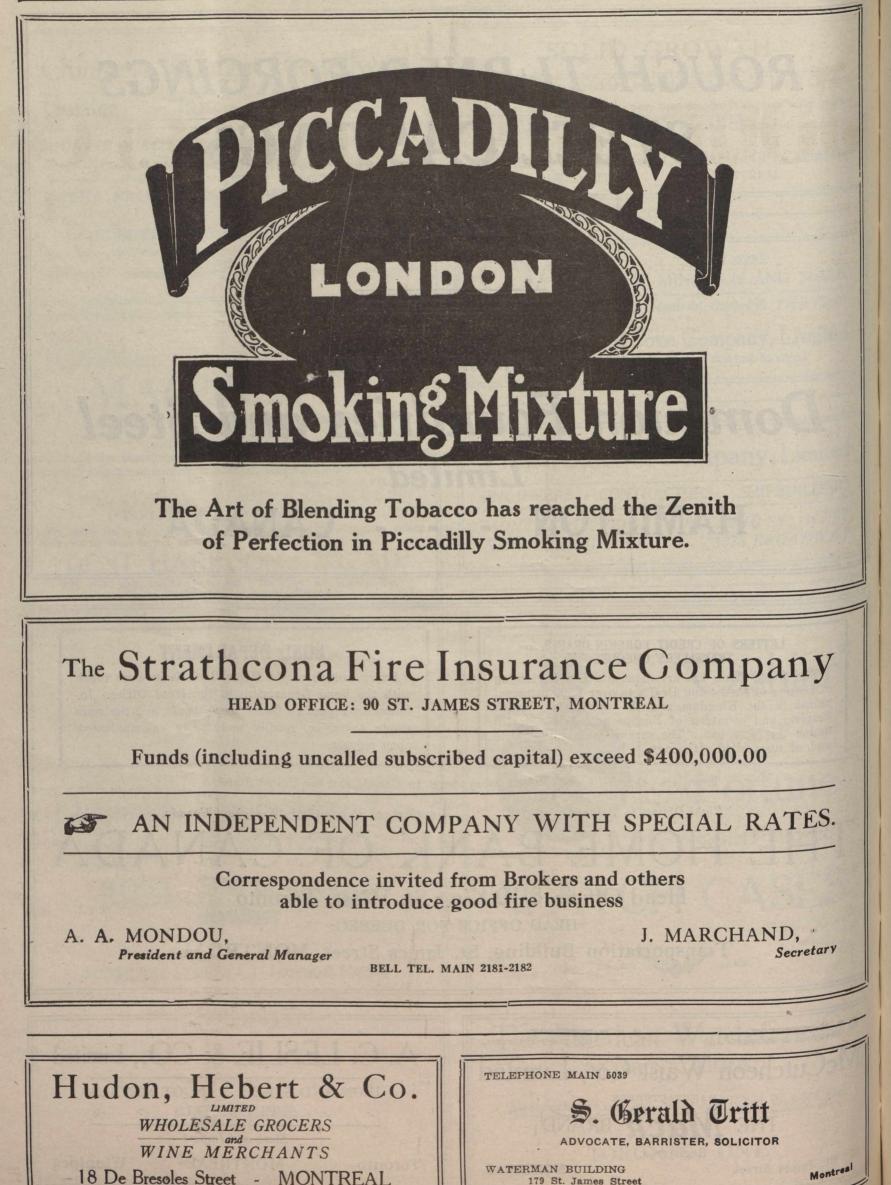
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# The Journal of Commerce

VOL. XLVII, NO. 39.

GARDEN CITY PRESS, TUESDAY, SEPT. 30, 1919. Ste. Anne de Bellevue, Que. Price 10 CENTS

# Journal of Commerce

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### Principal Contents

Editorial-

Political Confusion	11
The Veterans' Claims	11
"ganized Farmers and Organized Labor	12
Hardest Labor Nut	12
The West Indies	12

Special\_

General\_

The National Industrial Conference .... 13The Canadian Coal Situation...... 14Scorn Wheat Certificates . ...... 15The West Indies and the Future ...... 16Mining and Metallurgical Section ....17-24Britain's Strength Unimpaired . ..... 28

0	
Ocean Freights Become Easier	2
Rubber's Even Price	2
News of Pulp and Paper Industry Sulphite and Sulphate Distinguished	2
Men Men and Sulphate Distinguished	2
Men of the Moment	2
Siberian Hare Industry in Canada	2
Commodity Markets	2
Bank, Advertising is Improving Fast	3
Banking News	3
Weel News	.3
Week in Brief	3
	-

#### Political Confusion

THERE has been a sad mix-up in most of the world's affairs; political situtions in almost all countries are in a confused state out of which almost any kind of change may be possible. Canada is not exempt from the confusion and uncertainty. The Unionist Government, formed in 1917 by a coalition of leading Conservatives and Liberals, is still in power, but is visibly weaker through retirements. Shall the coalition, formed for the carrying on of the war, be continued now that the war is over? Is a Unionist party to become a permanent institution in the affairs of the Dominion? If not, when shall the union end and old party system be resumed? That there must at no distant day be a return to something like the old party lines is held by many within and without the present Unionist party. But there are many who, attaching little importance to the points of difference between Liberals and Conservatives, hold that the Government should be carried on as a Unionist one, and that whatever Unionist organization there has been in the country during the past two years should be continued and expanded. What may be the outcome of these conflicting views within the Unionist ranks is not easily seen.

Nor is all smooth in the ranks of those who call themselves Liberals. The recent Liberal Convention brought about a considerable measure of union between the two sections of the Liberal party. But that re-union has not been complete is seen in the situation in the House of Commons. Many of the members who still claim the name of Liberals, did not participate in the Convention and they are not yet prepared to join the organized Liberal party. What line will these gentlemen take in the new situation that is being created?

To add to the confusion the United Farmers and the organized Labor bodies are coming into the political arena, either separately or, as in some cases, in union, declaring themselves against the Government, and against both the old parties. There is every probability that the next general election will send quite a large number of the representatives of these classes to the House of Commons. They will not be numerous enough to undertake the responsibilities of government, but they may be numerous enough to become a very disturbing influence and a menace to the Government of the day, whatever party may be in power. We shall have less rigid party lines than in former times. There will be groups of members who may at any time move from one side to the other.

Perhaps these new conditions will make for greater independence of thought and action, and that should be beneficial. But, on the other hand, the new situation will not make for stability of government, and stability of government is likely to be much needed. The country may have to pass through a period of political unrest and confusion before it reaches the settled conditionsthat are desirable.

#### The Veterans' Claims

WHAT threatened to be a very unpleasant and possibly dangerous movement on the part of the returned soldiers has happily been averted by the proceedings at Ottawa. The request of the Great War Veterans' Association for a royal commission to inquire into the claim for an increased gratuity was very politely, but very firmly, refused by the Prime Minister. The refusal elicited a burst of anger from the Veterans scattered all over the Dominion and a systematic bombardment of members of Parliament with resolutions, letters and telegrams ensued. A member of the Government apparently seeing the expediency of bending to the storm, announced that while the desired commission would not be granted, opportunity would be offered to consider the soldier interests on a bill to be introduced in relation to the Department of Soldiers, Reestablishment, which would be referred to a special committee of the House of Commons. The tempest was stilled for the moment, but threatened to break out again when another member of the Cabinet stated that the gratuity question would not be considered by that committee. The bill was introduced and referred, and the moment the committee met the fact became apparent that the gratuity question must be included within the scope of the inquiry. The committee is now proceeding with the inquiry on that basis, and no doubt every opportunity will be afforded to

the various branches of the soldiers' organization to present their views. That the com. mittee may be able to reach conclusions entirely satisfactory to the soldiers is too much to expect. Some of their demands went much beyond the public sentiment of the country, strong as that is towards liberal treatment of the men who served Canada and the Empire so well. The committee may be able to devise some measures that will be helpful to the men and within the bounds of financial reason. And at all events, a full and frank inquiry into the contentions of the Veterans will go far to remove the irritation that has arisen.

#### Organized Farmers and Organized Labor

WO important movements calculated to disturb the serenity of both the old political parties, and to disturb the political situation generally, are making considerable progress in several of our Provinces, especially in Ontario and Westward. Organized labor is in several places coming into the political field. This is not a new movement, but it is one likely to play a larger part both in Federal and Provincial affairs than in the past. Organized farmers are even more active in relation to political affairs. In Ontario, during the past year or two, the body known as the United Farmers of Ontario has grown rapidly. In several instances representatives of the body have been successful at Provincial elections. In the Ontario general election, to take place on the 20th of October, the United Farmers have more candidates in the field than either the Government or the regular Opposition. A feature of these movements that is deserving of special notice is the disposition, manifested in several quarters, of the farmers' organization and the labor organization to unite their forces. Now that the day of election in Ontario - the same as the Referendum day has been definitely fixed, organization work among all parties will become more active, and we may expect to find this union of farmers and labor men taking place in many counties. Where, as frequently happens, a constituency includes one or more towns and a surrounding rural district, the combination may easily prove to be a powerful one, concerning which the Hearst Government may have cause for considerable anxiety. Just what effect these movements may have on the fortunes of the regular political parties is not easy to foresee. There is, however, one phase of the situation which gives promise of good. Apart from the political interests that may be affected, the union of the farmers of the country with the labor organizations of the town should have a good influence in moderating the policy of the extremists who sometimes arise among labor men. The farmer is seldom a radical. Whatever he may call himself in relation to the

political parties, his occupation tends to make While he will demand him conservative. what he regards as reform, and do so with much zeal, he will always desire to accomplish his purposes by constitutional means and with a regard to the maintenance of orderly government that is not always found in the radical labor leader in the city. From this viewpoint, the union that is taking place in some quarters between the United Farmers and Organized Labor is one that should be productive of good results. Farmers, who are sometimes regarded as a slow people, will be moved by the more progressive spirit of the labor unions. Workmen who are in the trade unions will have their views modified by their association with the more conservative men who till the soil. Both classes should be the better for their coming together.

#### The Hardest Labor Nut

THE great strike of the employees of the United States Steel Company's mills brings to the front the feature of the labor problem that seems to give the least hope of satisfactory solution-the question of the open or closed shop. Other questions there are on which the conflict is keen and not likely to be quickly ended. The eight hour day, with the forty-four hour week, is still being fought over. In all probability, while there will be no formal settlement of the question, practically recognition will be given to the fact that in some industries what is sought has already been granted, and that in some other industries, such as farming, fishing and lumbering the same rule cannot be applied. Minimum wage is still to be fought for; the acceptance of the principle in the case of women's work, and perhaps in some cases of men's work also, will go far towards disarming criticism. Collective bargaining is much to the fore, and is being strenuously opposed by many employers; but in a modified form it is likely to become an accepted part of the industrial programme. In all these matters there is some hope of the establishing of working agreements. But the question of the open or closed shop is much more difficult, as the present strike clearly shows. The United States Steel Company has been, as capitalists go, a not ungenerous employer. As a rule it pays liberal wages, rewards merit, and makes its people as comfortable as possible. On such a basis it should be able to maintain good relations with its workmen, and in the main it has done so. But Mr. Gary the President of the company, has always insisted on his right to the fullest freedom in the selection of his workmen. He offers no objection to the formation of trade unions. He recognizes that such organizations are a part of the social order and that, within certain limits, they are beneficial to all concerned. But when these limits are exceeded Mr. Gary and his workmen separate.

In his address at the annual congress of the Dominion Trade and Labor Council, which met a few days ago at Hamilton, Ontario, the President, Mr. Tom Moore, used the following words: "Any attempt to compel free men to work under conditions known to be unfair to themselves creates resentment and is doomed to failure".

It does not seem to have occurred to Mr. Moore that the very thing that he so warmly condemns is being done by himself and his associates. There are in Canadian factories as well as in the mills of the United States Steel Company, men who do not desire to join the trade unions, men who for one reason or another prefer to work in their own quiet way without participating in the activities of the unions. The mill owners, both in Canada and the States, desire to permit these men to work, wish to make no distinction between them and the member of the union. Mr. Moore in Canada and Mr. Fitzpatrick in the Pittsburg region say these men shall be compelled to join the union,--- "to work under conditions known to be unfair to themselves" and that if they will not do so they shall be deprived of work, deprived of the opportunity to earn a living. It is because the United States Steel Company will not submit to this ruling of organized labor that the great strike has occurred. Labor's insistence on the doctrine of the closed shop is the weakest feature of its programme. Yet labor practically says that this power to "compel free men to work under conditions known to be unfair to themselves" is necessary to the existence of trades unionism.

#### The West Indies

W E present in this issue an instalment of an able article by Mr. Harry J. Crowe, of Toronto, a well-known authority on West Indian affairs, dealing with the problem presented by the increasing commercial in timacy between those British islands and the United States. It is a problem which there seems to be a unanimous disposition to refer largely to Canada for consideration and possible solution. This disposition is doubt less flattering and should lead Canadians to make every effort to arrive at a reasonable knowledge of the facts of the problem, but it should not lead us into hasty or ill-considered action which would complicate the already sufficient political perplexities the Dominion and possibly confer no bene fit upon the islands. Mr. Crowe advocates political union but on a peculiar basis which would hardly we should think, be satisfactor? to either party. Mr. T. B. Macaulay advo cates commercial union but political inde pendence. There are other policies also commended. It is well for Canadians to eou sider them all in the light of what will be best for their own country. Closer relations of some sort, it seems evident are resirable on several grounds.

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# The National Industrial Conference

Much Good Work Done Towards a Clearer Understanding of the Issues-Labor Representatives Were Particularly Successful in Presenting Their Case-Some Nerve Ruffling Episodes

The National Industrial Conference which the Dominion Government, inspired by the success <sup>of</sup> a similar event in Great Britain, had summoned opened on September 15 and lasted for a full Week. The basic elements of the assembly consisted of two groups, each about sixty strong, furnished by employers and employees. As a moderating and arbitrating factor, there was also invited a third group of smaller dimensions, which was made up of departmental officials, representatives from functional bodies and technical societies, agriculturists and interested students of industrial problems. Also in attendance were members of the majority of the provincial Cabinets, within whose field most industrial legislation falls. The employers' group was fairly representative but lacked the presence of most of the great financiers who are the real controllers of Canadian industry. The labor group was chiefly recruited from leading officers of the Trades Union movement in various localities and represented its best product in Canada. The champions of the O.B.U. idea were not in evidence. There had been some charges that the labor delegates had been handpicked by the heads of the Trades and Labor Congress, but had invitations reached the radical extremists, they Would assuredly have scorned them.

#### To Strengthen Constructive Labor Men.

The avowed object of the Conference was to discuss the findings of the Mathers Industrial Comimssion and to assist the Government in translating as many as possible of its findings into legislation which would be acceptable to all concerned. Doubtless there lurked in Senator Robertson's mind a desire to create by personal contact a better understanding between the leaders of capital and labor, which might help to avert or mitigate industrial strife in the future and also to strengthen the hands of the more con-<sup>servative</sup> element in the ranks of labor by a few judicious concessions.

A preliminary committee under the chairmanship of Mr. C. A. Magrath had prepared an agenda Which contained the following items:-

(1) Consideration of the question of the desirability of unifying and coordinating the existing labor laws of the Dominion and provinces.

- <sup>(2)</sup> Consideration of the Royal Commission's recommendations respecting hours of labor.
- (3) Consideration of minimum wage laws.
- (4) Consideration of
  - (a) Employees' right to organize.
  - (b) Recognition of labor unions.
  - (c) The right of employees to collective bargaining.
- (5) Consideration of
  - (a) The Commission's recommendation in favor of the establishment of Industrial Councils.
  - (b) The further recommendation of the Commission regarding Joint Plant and Industrial Councils.

(6) Consideration of the Commission's recommendation that its findings be put into effect on all work controlled by the Government where the principles of democratic management can be ap-

(7) Consideration of resolutions relating to any other features of the report of the Commis(By J. A. STEVENSON.)

Treaty of Peace.

(9) Consideration of any other proposals bearing on the relations of employment and employees.

#### An Admirable Chairman.

The first day was consumed in what might be called ceremonial and keynote speeches. Senator Robertson, who made a very capable and tactful chairman throughout the proceedings, read a long message of encouragement, written by the Premier on his sickbed, and added a few suitable remarks of his own. Mr. Arthur Sifton told with his usual crisp clarity of the Canadian delegates' work at Paris in connection with the Labor convention. Mr. Mackenzie King gave a very excellent survey of the whole range of current industrial problems, and Col. Carnegie of Imperial Munitions Board fame gave an interesting and favorable account of the operation of Whitley Councils in Britain. Mr. E. G. Henderson, an employer, and Mr. Tom Moore, the President of the Trades and Labor Congress, voiced the sentiments of their respective parties, and Messrs. Jett Lauck and Warren S. Stone, two American visitors, gave informative addresses. Special committees on resolutions, three nominated by each of the employers' and employees' group and two by the neutrals, were selected to deal with each of the items on the programme.

On Tuesday, Mr. J. W. Bruce, who is an Australian by birth and an excellent speaker, expounded the desirability of the unification and coordination of the existing labor laws of Canada, which present a curious mosaic of anomalities and redundancies. In reply, Mr. J. R. Shaw of Woodstock was unnecessarily combative, and questioned the good taste of a member of the Mathers Commission, as Mr. Bruce had been introducing a motion. Mr. Tom Moore dealt faithfully with his objections and Mr. Monro Grier, who had a very pleasant style of speaking and a copious fund of anecdotes, smoothed matters over very skilfully, and shewed a sympathetic appreciation of the need for such unification. The question was referred to the Resolutions Committee, whose recommendation that the Government be asked to set up machinery for the necessary unification and coordination, was later on accepted by the assembly.

#### Some Nerve-Ruffling.

Mr. J. A. McClelland of Montreal then put the case of labor for a universal eight-hour day, and a forty-four-hour week. He was not so effective a speaker as Mr. Bruce, but he was able to draw freely from the evidence in favor of an eighthour or even shorter day, which Lord Henry Bentinck, an English Tory M. P., of progressive views, and Lord Leverhulme have given to the world. Mr. Shaw in reply again ruffled the nerves of the opposite party by his unconciliatory and condescending tone and Mr. Melville P. White, a Toronto employer, did not mend matters by the dolorous recital of a lengthy manuscript which was full of statistical inaccuracies, made no attempt to answer the evidence put forward in respect to shorter hours, and merely breathed a profound pessimism that national ruin would certainly follow the adoption of the eight-hour day One sample of his statistics will suffice. He accused Union Labor of only representing 8 per cent. of the workers of Canada, conceding it 250,000 members. But he estimated the Canadian workers at 3,200,000 which is almost the whole adult

(8) Consideration of the Labor features of the male and female population, at least three fourths of whom are without the scope of the trades union movement.

> Mr. R. A. Rigg, the ex-M.L.A. of Winnipeg, who has just returned from overseas, answered effectively for labor, and Miss Helena Gutteridge of Vancouver spoke with great ability. She asserted that in her view the eight-hour day was a compromise and that its general adoption would not decrease production.

> Col. Carnegie gave sympathetic evidence, gleaned from experience in Hadfields', the great Sheffield steel works, of the benefits of the eighthour day and Mr. J. H. Ashdown of Winnipeg, an employer, was favorable to the idea. Mr. C. A. Dunning, the Saskatchewan Provincial Treasurer, pointed out the difficulties of adapting it to agricultural conditions, and Senator Robertson surprised the meeting by shewing that 43.4 of the workers of Canada at present enjoyed an eighthour day.

#### An Uncompromising Spirit.

Mr. E. G. Henderson, a salt manufacturer who had an unfortunate air of patronising superiority, thought an eight-hour day impossible and likely to be fatal to business prosperity, and managed to arouse Mr. James Winning, one of the more moderate leaders in the late Winnipeg strike, to the threat that unless capital made timely concessions, serious industrial conflicts loomed ahead.

At the end of the second day the outlook seemed good for a futile week's wrangle. The spirit of concession and attempts at mutual understanding were alike absent, and many speakers on both sides had clothed their remarks with unnecessary truculence. The employers seemed to be a solid body against yielding to any of labor's demands, and the latter in reply stressed unduly the iniquity of existing conditions.

The debate on hours of labor continued on Wednesday, and after more speeches on both sides, none particularly illuminating, the problem was referred to its Resolutions Committee, who inevitably split and brought in separate reports.

Minimum wage laws formed the next subject for discussion and Mr. Monro Grier opened the debate. He was sympathetic and tactful in opposing the idea of a general minimum wage law as likely to be too heavy a burden to Canadian industry. He was also doubtful of its advantage to labor as maximum.

#### Women Leader's Impassioned Speech.

Miss. Gutteridge put Labor's case for it in a speech marked by considerable passion and obvious sincerity. Five provinces already had minimum wage laws for women and children, to which Mr. Grier had given his blessing, and its benefits should be made nation-wide as in Australia and New Zealand. She gave some deplorable figures as to shameful wages of \$3.37 per week paid to girls in Ottawa.

Mr. E. Parnell, a Winnipeg employer, gave his experience as member of the Board which fixed the minimum wages under the Manitoba Act and testified in favor of the principle. Mr. Trowern, the Secretary of the Retail Merchants Association, did not like the project, but Mr. W. Mackenzie a Laborite from Vancouver urged its immediate enactment. Like its predecessors, this item was relegated to the inevitable committee, who managed to agree on the desirability of a general minimum wage throughout Canada for all women

(Continued on Page 33.)

# The Canadian Coal Situation

#### Present Dependence on Foreign Sources of Supply Makes it Imperative That All Domestic Fuel Resources Be Developed to Utmost

The following is the text of the address on "Canada's Fuel Demand—An International and National Problem," delivered, on 22nd August, 1919, by Mr. Arthur V. White at the recent Annual Convention of the Canadian Gas Association held at Niagara Falls, Ont. Its perusal clearly demonstrates the great importance of this subject, the gravity of which, so far as Canada's national welfare is concerned, can scarcely be over stated . Mr. White is Consulting Engineer to the Commission of Conservation of Canada.

The importance of the subject which we are to discuss, demands most serious and comprehensive consideration. Indeed, apart from the maintenance of the proper morale of the nation and of the sources and distribution of food, there is, I believe, no question involving physical matters which is of such vital issue to Canada as her fuel problem. As some of you know, for many years and whenever occasion has offered I have been emphasizing the gravity of this problem and the need for taking prompt and adequate national action respecting its solution.

To-day, although having in mind the annual coal shortage again menacing us, I desire, nevertheless, to treat our subject more in its broader aspects.

#### European Civilization Jeopardized.

Although we have had coal shortages in Canada and a measure of accompanying distress, yet, after all, the great mass of our people have been practically unharmed by the stress of coal conditions. It may not always be so. Through failure to deal adequately and in a broad, statesmanlike manner with her national coal problem, Canada courts trouble and, I believe, may yet experience such a "pinch" with respect to her fuel supplies as will seriously affect her economic welfare, involving, of course, her financial institutions. Is it not of the deepest significance that Mr. Herbert Hoover in the early part of this month, speaking as head of the International Relief Organization of Europe, stated that "the fate of European civilization now rests in the hands of the coal and coal mine owners of Europe to an equal if not a greater degree than in the hands of the producers of foods and supplies during the next year." Mr. Hoover contends that only greatly increased coal production and an improved organization for its distribution can save Europe from disaster during the coming year.

As already mentioned, we in Canada have been comparatively free from experiencing the keener distresses of coal privation. It is true that during previous coal shortage many people have had to get along from hand to mouth. Coal has had to be doled out in small lots and in 1917-18, I understand, was even expressed in 100-lb. parcels to effect relief in certain localities, and so. on; but speaking generally, we, nationally, have not had anything like the distress respecting fuel which has been extensively experienced by European countries.

Let us begin by briefly surveying certain present world coal conditions, and as we do so kindly bear in mind one fact, namely, that the United States, which furnishes us so large a part of our annual coal supply, has now become much more closely associated with world markets and world conditions. She is rapidly assuming a premier position as a coal exporter, and older European countries are eagerly looking to her for "first aid." In our survey it will be appropriate to

consider coal statistics as applicable in 1913just before the war.

#### Britain a Large Coal Exporter.

The countries of Western and Southern Europe even in normal times are badly circumstanced for fuel. France, Italy, Norway, Sweden and Portugal have been largely dependent for their coal on Great Britain. In 1913, Britain supplied for export to continental Europe about 50,000,000 tons of coal, of which France took 20,000,000 tons Italy 9,650,000 tons, Sweden 4,560,000 tons, Norway 2,300,000 tons, Spain 3,650,000, tons Denmark 3,030,000 tons, Holland 2,010,000 tons, Portugal 1,-360,000 tons, other Mediterranean countries 3,-500.000 tons. In addition Great Britain sent about 9.000,000 tons to South America and 5,000,000 tons to other parts of the world.

Britain's exported coal before the war constituted in point of value 81/2 per cent., and in point of weight 75 per cent., of her total export trade. This coal serves as ballast for outgoing boats and enables them to return to home ports with raw material and foodstuffs. It is evident therefore what prime bearing Britain's coal industry has to her export trade. What are the conditions in Great Britain to-day? At the present time, owing to exhaustion of stocks, to shortened hours of labour, to decrease of transportation facilities, to strikes-including the recent coal miners' strike, alone involving 250,000 men-Great Britain's annual rate of production has fallen about 70,000,000 tons short of pre-war conditions. If the restrictions on her home consumption are removed, it has been estimated that she may have 7,000,000 tons of coal for export during the coming year. If the restrictions are maintained, this amount may be brought up to 28,000,000 tons. But even if all this coal were shipped to Western and Southern Europe, there would for these areas still result a deficiency of more than 25,000,000 tons. This leaves out of consideration South America and other portions of the world previously supplied by Britain.

#### Coal Condition in France.

In France, the coal mines destroyed by the Germans-both wantonly and for military necessity formerly produced 20.000.000 tons per annum. French engineers state that it will take from two to five years to rebuild the operating equipment, and ten years to completely restore the production rate of these mines. France, however, will be able to increase her fuel supplies owing to the occupation of the Sarre District. But she has to replace her former importation where deprived of same. France still faces serious coal shortage.

Italy's condition with respect to fuel throughout the war period has been desperate. In 1913 she was producing less than 750,000 tons of coal per annum and, as we have seen, was importing from Great Britain some 10,000,000 tons. During the war, at great expense, she was able to increase her home production of an inferior grade of fuel by about 1,000,000 tons. This month Italy has ordered that 300,000 tons of her shipping sail for American ports to return with coal.

In Germany, fuel conditions are represented to be exceedingly bad. On August 6th, at the Coal Conference of experts from all parts of Germany to devise means for increasing the production of coal "so that Germany will not freeze or starve during the coming winter," the chief result arrived at in the preliminary meetings of the Conference has been to emphasize the fact that the

German situation also is desperate. It was re cognized, however, that hard and intelligent work alone will contribute to alleviate the distress. Avenues for effort are being determined. Germany has succeeded in inducing France to admit that the supplying of her demand for 40,000,000 tons of coal annually would be a physical impossibility; and Germany further represents that she cannot hope to supply even enough coal for her own most urgent needs. She certainly will be hard pressed to find surplus coal with which to discharge, as she must first do, her obligations to France. German counsellors have recommended that it will be the best to sacrifice some of their national forests. Some industries which formerly used coal as fuel are now attempting to use wood. It is interesting to observe that in the tentative German plans for priority of those who are to receive coal it has been laid down that the first claim will be for the railways in order to ensure transportation of food. The claims of industry will come next, in order that credit  $m^{ay}$ be created by the production of articles of commerce. Next, the mass of the people will receive coal for heating and cooking. It was commented that the prospects for the latter class are exceedingly slim.

The German Minister of Economics, in the course of the recent debate, on the coal situation, told the National Assembly of Germany that the Government was ready to import American coal for industrial purposes, and he indicated that it might be necessary this coming fall to discontinue passenger traffic in order to use all available equip ment to haul coal and move crops.

#### Countries Coerced Respecting Coal.

It is not necessary to extend our survey into the coal condition of the smaller European countries. Norway and Sweden, Denmark, Holland and Switzerland, though neutral during the war, found themselves practically dependent upon the war ring nations for coal and had to submit to the dictation of terms upon which that necessity would be supplied them. Both Great Britain and Germany released coal to these countries in exchange of food. Germany supplied Holland with coal on condition that food, especially vegetables and meat raised on Dutch soil, be sent to Ger many; and you may recall that Germany's de mand for supplying Switzerland with 200,000 tons of coal per month was gold at the rate of 40,000. 000 francs monthly for nine months. Without touching further upon the stressful conditions in these smaller countries, the comments already made, especially respecting coal conditions Great Britain, France, Italy and Germany, clearly prove the very serious conditions existent in Eur ropean countries-and this, may I add, at a time when every effort is being made to rezestablish mercantile and other conditions on bases al proaching what they were prior to the war. Most assuredly this means keen competition for any available coal, and in this respect the govern ments and peoples of Europe are looking for a maximum of relief through coal shipments from the United States.

United States' export coal is a phase of the world coal problem in which Canada is deeply interested, because she yearly imports from 16. 000,000 to 20,000,000 tons of coal-anthracite and bituminous from the States.

#### Countries May Be Forced to Embargo.

Now, in the statement I am about to make in wish to emphasize that it is in no sense my in tention to suggest that it is, or that it would be come, the arbitrary desire of the United States to deprive Canada of the coal which at present is so necessary to life in this country. Of course with their co-operation, we have in measure it come dependent upon their coal fields, and it will be expected that will be expected that the States, in all fairness will facilitate any necessary future readjustment connected with Canada's fuel supply. It is fact portant, however, to take cognizance of the fact

(Continued on page 34.)

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# Scorn Wheat Certificates Some Farmers Are Selling Their Chance of Anything Over

\$2.15 for a Cent a Bushel-Much Building Under Way in Winnipeg

#### By A. CORA HIND.

Winnipeg, September 25 .- Since the crop eslimate was issued there has been very little of interest in connection with the crop situation to report, in fact, there had been very little of anything stirring in the West, the country generally being concentrated on threshing of grain and doing fall cultivation. In the last week or ten days threshing has been somewhat delayed by the broken weather and a few districts are reporting grain sprouted, but on the whole threshing is pro-<sup>Ceed</sup>ing very satisfactorily and yields are proving quite up to the writer's estimate, and in a number of cases going even higher, while the sample <sup>80</sup> far has proved very much better than was anticipated; the percentage of 1 and 2 Northern being quite normal, something that rarely hap-Dens with a rusted crop. Of course, some low grade wheat will probably come in later, but already the movement has been heavy, and as stated, the grade well sustained. The forward movement of oats has been large but a very <sup>considerable</sup> amount of it is being held by the farmers and not going on the market. One of the surprises of the season has been the liberal movement of oats of the 1918 crop. It is the old, old story of the tail end of a short crop, which is apt to prove a long tail. There have been days this last week when there have been as many as 40 cars of old oats inspected. This has mainly taken place in Alberta.

#### British Buyers Holding Off.

There is a good deal of anxiety on the part of the trade as to the future of the oat and barley narket. Our prices are high and the export demand is almost entirely for nearby delivery. It <sup>15</sup> almost entirely for neuron following a band as if the British buyers were following able hand to mouth policy in the hope of being able, with the home-grown supply, to tide themselves <sup>over</sup> until such a time as they can get cheaper grain from Argentina. At the present time Ar-Sentine oats are something like eight shillings a ton lower than Canadian oats. American oats are lower than Canadian, the Chicago price for December running 8 and 9 cents under Winnipeg December. If the British and overseas buyers continue to pursue this policy it may mean a very considerable lowering of prices for the oat and barley crop. This might not be a wholly unmixed evil, as if the prices were less tempting there would be a greater tendency to feed stock, rather than sell feed and sell thin cattle.

With regard to the wheat situation, things seem to be moving fairly well, though there is no doubt huch friction in regard to the operation of the Method of handling the grain. This, of course,  $w_{as}$  inevitable. James Stewart, chairman of the Cana Canada Wheat Board, was in Winnipeg this week not the possibility of week and when asked as to the possibility of <sup>selling</sup> selling our crop overseas, stated, that he was more <sup>concerned</sup> at the moment in getting the wheat for-Ward to'seaboard than about futher sales, which vas rather encouraging. He would not commit himself more definitely as to whether any further sales had been made outside of the 19,000,000 or 20,000,000 to Great Britain. Norway was known to be in the market for wheat, but apparently has And And And Area full requirements from Argentine and Australia. supplied for all domestic requirements. Denmark bears to have sufficient for domestic requirements, but may purchase considerable for the

Holland apparently has done Central Empire. her buying in Australia and Argentine. All of these countries, with the exception of Denmark, are buying through some form of government agency, and it is not difficult to check up where their orders are being placed.

#### Speculating in Certificates.

The relative export surplus in the United States is apparently not going to be very large, and on the whole it is highly probable that there will be a place for all that Canada has to sell. As to what the price will be, that is another question. There has been somewhat of a concerted effort in the West to make farmers believe that anything they will get out of the participation pool over the \$2.15 basis already advanced, will be too small to wait for and there has been speculation in these participation certificates, some farmers being foolish enough to sell them for a cent a bushel over \$2.15. A sharp warning has been issued to all their agents by the Northwest Grain Dealers Association, the United Grain Growers and the Saskatchewan Co-Operative, absolutely forbidding any of the agents to buy participation certificates on any terms whatever, and charging them to warn farmers against the folly of selling them. Whether this will have any effect it is difficult at this time to say.

#### Teaming Across the Border.

Along the borders, of Manitoba especially, very considerable wheat is going across the line in wagon loads. The Canada Grain Board has no objection to this, but merely asks that the man desiring to sell take out a permit form for doing so. The man who can sell across the border gains about sixty cents a bushel on Canadian street prices, generally gets a higher grade, a smaller dockage, and of course, the exchange is in his favor, so that the proposition is an attractive one, but the Canadian millers are not likely to view this move with very great approval. The strip of land along the Manitoba boundary has some virtue apparently not possessed by any other district as for many years the millers have paid premiums as high as 3 cents a bushel for wheat from these districts, and when the market was an open one, milling companies had their spotters in the inspection yards watching for cars from these districts. When questioned as to this matter they have always stoutly denied that there was any special virtue in getting this wheat, yet a miller was always willing to pay a premium to get it, and as no one has ever known a miller to pay a premium out of sentiment, there is no doubt that there is something superior in this wheat for milling purposes.

It seems to be very well understood, that none of the countries overseas are anxious to take flour this year. All are anxious to get the wheat in bulk for the sake of the offal, and the milling companies have probably a less prosperous year ahead of them than has been the case for the last five.

The first frost of the season to do any real damage came on the night of the 24th, a wonderful record for the West; even now only the most tender vegetables and flowers have been touched.

The Commerce Commission sitting in the city for the past ten days has created quite a furore. and a good deal of the work being done by the lawyers representing the Government seems to

be much more calculated to start up ill feeling among consumers than to bring out information about the high cost of living and its remedy. This has been pretty much the case with regard to butter. Creamery man and farmer alike are greatly stirred up over a suggestion of butter being embargoed out of this province in order to lower the price. Farmers are receiving 53 to 54 cents a pound for butter fat for No. 1 cream, and in view of the cost of feed, high wages, etc., this is not an excessive price though it is a profitable one, but the farmers will not go on producing cream if this rate is lowered. If the creameries have to pay this rate to the farmers and are not allowed to ship their butter out of the province, things will come to a standstill. There is sufficient butter in cold storage in Winnipeg to supply the local trade until next spring, and local buyers are not in the market for anything but small lots of extra fancy stuff or for "specials," namely, butter made from sweet cream which is always a limited quantity in the prairie provinces where farms are far apart and cream has to be transported fairly long distances. The province has shipped up to the present time 92 carlots of butter from the country. - This is considerably less than was shipped up to the corresponding date of 1918, due of course, to the serious falling off in make during the six week's strike. The total amount shipped out of the country this year is 2,360,336 pounds which sold at 531/2 cents per pound, and there will probably be from 50 to 60 cars more for sale if manufacture goes on at the present rate. The long continued fine weather has left the pasture very lush and it has been a wonderful year for corn and alfalfa, so that succulent feed for cows is very abundant, but every time a suggestion is made of lowering the price to the farmers, embargoing butter or commandeering butter as was done last fall, it is immediately followed by the offer of various dairy herds for sale. Dairying is one of the branches of farming into which the western farmer goes with the greatest reluctance and out of which he can be stampeded with the least possible effort.

There has been a material lowering in the price of meats in Winnipeg, in fact all over the West, following the lower prices for cattle. Our cattle prices are being considerably affected by the stringent enforcement of the quarantine restrictions to the south making it extremely difficult to ship to South St. Paul and Chicago markets.

In spite of the great delay occasioned by the strike the amount of building that has been got underway and which is being pushed forward to completion is quite large. Labor on the whole is well employed. Every little while there are complaints that returned soldiers cannot get jobs, and on the other hand there are continued complaints from employers that they cannot get sufficient help. There is no doubt that it is very difficult for a returned man to settle back to civil life, and both farmers and employers of labor in the city have had the unpleasant experience of having a full staff at night and waking up in the morning to find that every man has departed without apparently any reason for doing so. Of course, very liberal allowance must be made for returned men, many of them not yet quite normal, but the Great War Veterans should among their many other tasks endeavor to see to it that returned men realize some sense of obligation to their employers for employment which has been held for them and from which efficient men have been turned out to make places for them. There is a very general feeling of reluctance on the past of the public to complain of returned men, and rightly so, but the fact that this reluctance exists should put a man more on his honor in giving service. It is one of the vexed questions that only time and patience will relieve.

#### September 30, 1919.

# The West Indies and the Future

#### "Peacful Penetration" by the United States Raises the Question of Economic or Political Union With Canada in An Urgent Form-Britain Looking to Dominion

#### By HARRY J. CROWE.

In the London Times of March 14, 1917, the writer put forward a suggestion for the political and economic union of Bermuda and the British West Indies with Canada and Newfoundland, as a necessary and immediately practicable step towards the consolidation of the British Empire.

It was then pointed out that the proposal would be better understood after the war, when the strategic and economic importance of the B.W.I. Islands, lying at the point of intersection of two great sea-trade routes—that between North and South America, and between Europe and Australasia, and the East, via Panama—would become apparent in the contest for the tropics and their products, for which there will be the greatest rivalry in the near future.

The Times' editorial endorsement in the same issue was widely quoted in the press of Canada and the West Indies, giving marked impetus to the steadily growing sentiment in favor of confederation, which would immeasurably strengthen the economic and poltical situation of all the regions involved. While the Canadian Government could take not action in the matter, until the Governments of Bermuda and the Caribbean made request for the opening of negotiations, a number of Canadian Ministers, including the Prime Minister, looked with favor upon this consolidation, and have personally expressed their willingness, if Bermuda and the West Indies desired it, to discuss terms of union upon a liberal and Imperial basis. Among the leading men in Canada, outside of Parliament, who have endorsed the proposal, is Lord Shaughnessy, the great authority on transportation, and an untiring Empire-builder.

While Canada has looked southward, the British West Indies have warmly interested themselves in the project, showing general desire for closer relations with Canada, political and, or, commercial. In the Bahamas and Jamaica resolutions have been passed for the appointment of delegates to ascertain the Canadian terms of union.

#### Canada's Responsibilities.

The plan for the erection of one British-American Dominion in place of scattered regionally governed colonies, without cohesive economic management, has been further encouraged by a speech made by the Parliamentary Under-Secretary of State for the Colonies, on August 1, in which he said: "Canada is bound to take her responsibilities in the development of the great "tropical regions." She is ready and able to assume the responsibilities, awaiting only the cooperation of the other partners.

There are those who oppose this project of consolidating the resources of British Possessions in the Western Hemisphere by a Conferedation; but until the terms of union are formulated, no intelligent criticism can be made, and these terms can be ascertained after a discussion, at conference table, by properly appointed representatives of all concerned.

The principal objection raised by critics is with respect to Federal representation. "How," they ask, "can the West Indies have adequate representation in the Parliament at Ottawa without interfering with the Canadian Federal Elections?" This much magnified obstacle can surely be overcome by the proposed Provincial Government of the West Indian Colonies, electing from their members representatives for Ottawa. Such a procedure would obviate a Canadian Federal election in the West Indies, and if the West Indian members

were given seats in the Canadian Senate, the Government majority in the Lower House would not be affected.

Since the Senate must approve of all bills passed by the House of Commons, and the former can originate legislation, this suggestion for West Indian Federal representation should be mutually satisfactory, particularly as the members of the Senate are appointed for life and deemed to be without party politics.

#### U.S. Peaceful Penetration.

Much has happened since my previous article in the Times to prove that neglect of unification is fraught with serious consequences. Recently a petition was addressed to the Governor of Jamaica by one hundred thousand planters and laborers, including returned soldiers, declaring that economic conditions in the Islands were so wretched that, failing immediate relief, increasing numbers of workers would be forced to emigrate, many of those who remained facing starvation. The most important newspaper in the West Indies, the Daily Gleaner, of Kingston, in editorials last month, discussing the United States peaceful (but persistent and most active) penetration now going on in Jamaica, claimed to express the sentiments of the Island in stating: "We frankly admit that we want to see American trade expanding in this Island," and in the same issue, a report from Washington was published that the United States interests intended to capture West Indian trade by placing new steamship lines from New York to cover the Eastern and Western Caribbean Sea with canal connections at Colon. Warehouses are being constructed for United States goods in order to deal directly with the merchants, instead of through agents as formerly. It is well known that the National City Bank of New York intend establishing a branch there, and probably in other islands. The Gleaner lays much emphasis on the prosperity of Cuba, where ten thousand of Jamaica's best laborers go annually for employment, under the United States protection. Annexation to the United States is often spoken of in Jamaica; the Gleaner stated also editorially: "British statesmen who think that stagnant countries can forever be overflowing with loyalty and contentment expect the impossible."

Development of the Island's resources is paralyzed, and these British subjects who have fought in the war, on returning, find no chance of earning a livelihood at home, and many are using the money in their pockets to reach adjacent islands, under alien flags. Here they will work to develop other countries, while their own, equally rich and productive soil is choked with weeds. Tens of thousands of sturdy British workers are thus being lost, as hundreds of thousands have already been lost, to the Empire, while sound economic development remains no more than a hope. To-day the entire group of Islands and colonies in the West Indies produce only 300,000 tons of sugar, although an authority stated in the Times a few months ago that British Guiana alone was capable of producing 4,000,000 tons annually. All the British West Indies are producing only about one-tenth of what one colony can and should produce. Nor is sugar the only tropical product which the world needs, and which the British West Indies should yield in volume ten times as great as that of to-day. The production of petroleum, minerals, citrous fruits, bananas, castor and other vegetable oil-yielding seeds, vegetable dyes, hardwoods, cattle, coffee, cocoa and cocoanut, is capable of an enormous expansion and of placing these rich regions upon a newly prosperous footing, greatly contributing to make the Empire independent of foreign countries for the supply of food and raw materials.

#### Jamaica A Strategic Point.

Having only recently arrived here from Jamaica. I will specially refer to that Island. It possesses a population nearly equal to all the other West India Islands combined, and lies practically at the entrance of the Panama Canal, the gateway <sup>10</sup> Western Canada and the Orient. Jamaica occupies a controlling position in one of the Empire's chief arteries of commerce. To treat this asset <sup>as</sup> negligible is more than folly.

Jamaica's poverty and her almost absolute economic slavery of to-day is due, in a great measure, to a gigantic United States trust, the United Fruit Company.

Unable to compete with cheap beet sugar, when Great Britain began to buy the German bounty fed product, West Indian plantations almost went waste, and a living was eked out in a generous soil and climate, by the production of a variety of tropical raw materials. When, some thirty years ago, the popularity of the banana in the world's market was established, through the use of steamers equipped with cold storage, more than one Caribbean region saw visions of revived prosperity. These visions no doubt, would have been realized, had a healthy competition grown up, and had the planters received fair shares in the market value of their product. But unfortunately, the banana business of the Caribbean is a huge monopoly. strangling both the consumer and the producer. Jamaica for some years has been producing about 15,000,000 bunches of bananas, annually. Attempts to create competition have been ruthlessly crushed by openly autocratic methods, and those planters attempting to escape, have been disciplined in ways well known in those regions. Recent critic isms in the House of Representatives in Massar chusetts have aroused much interest. The charges made against the United States Fruit Company by Representative Fitzgerald are that "when in dependent concerns begin to ship bananas to the United States, this fruit company immediately will dump large quantities of bananas on the market at a low price in order to drive them out of the market. They also say that the company will throw its bananas into the sea rather than sell them at a price which they regard as too low. is also alleged that the company's formidable legal staff will put obstacles in the way of obtaining concessions by rival concerns in the countries in which the fruit company have obtained strong po litical influence." The above is quoted from the New York Sun of June 23.

Mr. Chamberlain, when Secretary of State for the colonies, attempted to neutralize the dangers of this monopoly, and Sir Alfred Jones was granted a substantial subsidy for a line of steamers tween Jamaica and Bristol, in the hope of reliev ing Jamaica from this trust. The British Shipping Company was soon obliged to surrender its inder pendence and the trust triumphed. \* Dominance over the banana industry in half a dozen Carib bean countries has been obtained, one region being played off against another. In Jamaica the plant ers are ground down until they are unable to pay their laborers a limit their laborers a living wage; the average price paid by the United Fruit Company to Jamaica planters for bananas for the past ten years did not exceed 2s. to 2s. 6d. per bunch, and these must have at least one hundred bananas, or the price is reduced one-half. During the past  $f^{eW}$   $y^{ears}$ the wholesale price in New York has been about 14s., and in England 14s., and in England about 20s. or more. To-day one has to pay 4s. to 5s. per dozen for banana in London. The cost of freight can be reckoned at about 5s. per bunch. These facts are surely startling.

(Continued in next issue.)

September 30, 1919.

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# MINING AND METALLURGY IN CANADA

#### "A CONTINENTAL AREA ONLY PARTIALLY PROSPECTED."

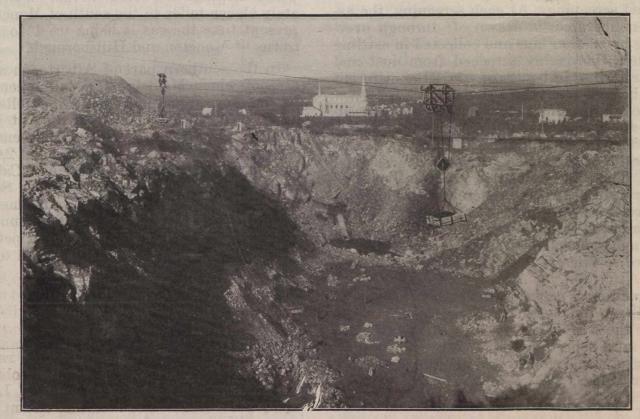
#### ASBESTOS.

Under the name Asbestos, there are several fibrous minerals used in commerce, but the one that <sup>18</sup> best in quality and is of most importance to Canadians is known as chrysolite or serpentine asbestos, since the product of the mines of the Eastern Townships of Quebec are of this variety.

Asbestos fibre may be spun into yarn and rope and woven into fabric, in which form, it finds many uses where a fire resisting material is required. For weaving purposes, a long fibre, both strong and very flexible is desired. At present there are no factories in Canada weaving asbestos and all the long fibre produced from the mines in Quebec is exported. The asbestos manufacturers in this

The controlling supply of asbestos for the world is obtained from Southern Quebec, 150 miles or less north of the international boundary line between Canada and United States and about 75 miles south of the city of Quebec. The principal production is furnished by eight mines as follows:

The Asbestos Corporation of Canada, with mines and mills at Thetford Mines and Black Lake. At Thetford Mines are also situated Bell Asbestos Mines, Jacob Asbestos Manufacturing Company, Johnson's Asbestos Company, Limited, and Martin Bennett Asbestos Mines Limited. The Asbestos and Asbestic Company Limited, is situated at Asbestos, Que., and the mills and mines of the Black Lake Asbestos and Chrome Company Limited, are



An Asbestos Mine.

country make only mill board, paper, shingles, siding and pipe covering, for which purpose the shorter fibres are used.

On account of its low electrical conductivity, asbestos is used as an insulator in electrical instruments. The very short fibre is also ground for paints, particularly a fire resisting paint. The long fibre besides the uses referred to above, is used in making packing and piping joints where high temperatures or acid solutions are encountered.

Asbestic is the name applied to impure very short fibre asbestos. It generally contains a good deal of sand and is used by plasterers and manufacturers of roofing.

situated at Black Lake. There are also a number of smaller plants at Robertsonville and East Brough-

The asbestos mining industry was begun in Quebec in a small way some thirty-five years ago, and has advanced more or less regularly ever since. For the first fifteen years only the "crude" asbestos was recovered, that is, fibre long enough to be extracted by hand cobbing. Although this is still a valuable part of the production, it is now a relatively small part of the total output. After several trials a process of machine separation was begun about 1893. The product from this process is generally known as mill fibre. Although there have been numberless changes in this milling operation, the present practice is a direct development of the first principles of the earliest attempts, and much credit is due to those who originated it. Its effect may be realized when it is stated that at the present time 95 per cent of the quantity and 75 per cent of the value of the total output is obtained by the milling operation.

Except in one mine where underground work is quite extensively carried on during the winter months, the mining or rather quarrying is all open cut work. The ground is cut down in benches generally from six to twelve feet high, which are carried across the floor of the pit so as to afford sufficient working face. Several of the pits have reached a depth of 200 feet and are from 600 to 1,200 feet or even more in width.

Hoisting is done by means of a cable derrick with boxes carrying about a ton each.

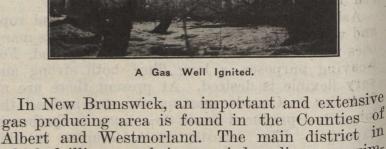
The separation of fibre from the rock commonly begins in the pit. Rock containing "crude" asbestos-that is, veins of asbestos three-quarters of an inch or more in width and of good quality-is sent to the cobbing sheds for hand separation. Dead rock is taken to the waste dump and the remainder, usually from 35 to 60 per cent of all the rock handled, goes to the ore bins or directly to the mill. The milling practice varies somewhat in different mills, but is very similar in all. It consists essentially of coarse crushing, drying and alternate finer crushing and screening. At each screening, the asbestos when liberated, is drawn off through overhead piping by suction fans and collected in settling tanks. When thoroughly screened from dust and classified according to length of fibre, the different grades are bagged ready for shipment.

In the coarse crushing, jaw crushers are used, Gyratories and frequently rolls are used for the fine crushing. The final crushing of rock and separation of asbestos is effected by a specially designed "cyclone." This consists of two "beaters" or fans of chilled iron in shape like a screw propeller of a boat and weighing upwards of 100 pounds, which revolve at a speed of 2,000 revolutions per minute, or more, in a closed chamber. The average recovery of mill fibre is from 3 to 8 per cent of the rock treated.

The production of asbestos has greatly increased during the past four years, and prices are quadrupled over those of 1914. In 1918 the total value of asbestos and asbestic shipped was almost nine million dollars, which compares with a total value of \$2,892,266 in 1914.

#### NATURAL GAS.

The oldest and at the present time the largest natural gas producing district in Canada is the territory bordering on the east and north shore of Lake Erie. This area can at present be divided into several distinct fields, but the intervening areas between these fields are fast being drilled and the results tend to show that in all probability the whole of this district is underlain by gas producing strata. In the counties of Haldimand, Welland, Essex and Kent, large supplies appear to be available. In Essex County a single well drilled 1,020 feet yielded gas at the rate of 10,000,000 cubic feet per day. The gas from this district is piped to all the larger towns in the Southern Ontario Peninsula where it is used for industrial and domestic purposes.



gas producing area is found in the Counties of Albert and Westmorland. The main district in which drillings are being carried on lies approximately eleven miles to the south of Moncton. At the present time the gas is being used to supply the towns of Moncton and Hillsborough.

In the southern part of Alberta, in an extensive area of which Medicine Hat is the centre, natural gas has been found in a number of wells drilled to a depth of 1,000 feet. Wells drilled at Bow Island, forty miles west of Medicine Hat, encountered a strong flow of gas at a depth of about 2,000 feet and this gas is being piped 170 miles to Calgary, Lethbridge, MacLeod and other towns in Southern Alberta. South-west of Calgary, at Black Diamond, natural gas, high in gasoline was found in a well which was being drilled in search of petroleum and gas has been struck in practically all of the petroleum prospect wells of this district.

#### LEAD.

Lead is a heavy gray metal which rarely occurs in the natural state, but is generally obtained from the ore commonly known as galena. Lead is soft, easily malleable and to a certain extent ductile. It can readily be manufactured into piping, sheet lead for roofing, etc., and into bullets and shot. It suffers less than most metals when exposed to the dampness in the soil or atmosphere and hence is extensively used for drain piping and plumbing. It enters into the composition of many alloys such as type metal, pewter, Britannia metal, etc., and having a low melting point is mixed with tin to form soldering metal. Many of its salts are important in the industry for industry for industry for industry the industry, for instance litharge is used in glazing earthenware and makes oil varnishes dry more quickly and thoroughly. The red oxide of lead or red lead is used in the manufacturing of flint glass and for pipe joints. The carbon of lead or white lead is used as a pigment in paints. The chromite of lead is a yellow pigment. Sugar or acetate of lead is used in the drug industry.

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The mining and treatment of Canadian lead ores is almost entirely a British Columbia industry. The ores come very largely from the East Kootenay and West Kootenay districts. They are smelled and the product refined at Trail, B.C.

The production of lead in Canada in 1918 totalled 43,846,260 pounds, worth \$4,055,779, which is worthy of remark as being a record output of lead in Canada, and also a record money value, notwithstanding that the price of lead has fallen from 1917.

#### ALUMINIUM.

White aluminium or aluminum, as it is commonly known in commerce, is one of the most abundant elements in common rocks, but there are few minerals from which it can be economically extracted.

Bauxite, which is the chief source of the metal, is a comparatively scarce mineral of various colors and somewhat resembling clay. It occurs in beds or in pockets in clays.

Bauxite is not found in Canada, but Canada is nevertheless a very important producer of aluminium metal. This is owing to the location at Shawinigan Falls, Que., of a large plant for the treatment of imported ores. The Northern Aluminum Company which operates this plant produces several million pounds of aluminum annually. Aluminum is extracted from bauxite in an electrical furnace.

Aluminum metal is extremely light with a specific gravity barely one-third that of iron. It is quite white in color, does not tarnish and takes a high polish. These qualities render a suitable material for a great many purposes such as making of scientific instruments, kitchen utensils, motor car parts, aeroplane parts, etc. Another important use is aluminum as bronze powders for inks, etc.

Aluminum was extensively used in munitions manufacture during the war, and it is being largely utilised as an alloy and also as a principal material in the manufacture of aircraft bodies and motors.

#### GRANITE.

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Granite is quarried for building and road-making purposes. In building it is used either in large blocks or as crushed stone in concrete. For road making and paving purposes, it is used either in the form of crushed stone or as small blocks about the size of a brick.

Granite is quarried in Nova Scotia, near Halifax, and at Nictaux, in Annapolis County; in New Brunswick in the vicinity of St. George, in Charlotte County, and at Hornstead, in Queen's County; in Quebec it is quarried in the counties of Beauce, Stanstead, Iberville, Portneuf and Argenteuil. In Ontario, granite is quarried in the counties of Hastings, Leeds, Ontario and in the districts of Muskoka and Parry Sound. Trap rock, which is the finest grade of road making material, is quarried by the Ontario Rock Company, in Peterboro County, near the town of Havelock. There is also some trap rock in Northern Ontario. Most of the quarries in British Columbia are on the west coast of Burrard Inlet and on islands conveniently situated for transportation to Vancouver and Victoria.

A valuable series of reports on the building and ornamental stones of Canada may be obtained from the Mines Branch, Ottawa.

#### PYRITE.

The main use to which pyrite is put is as a source of sulphur in the manufacture of sulphuric acid. For this purpose the ore is roasted in specially designed furnaces. The sulphur in the ore goes off in fumes which are caught and treated with water, producing sulphuric acid. The residue from this burning process, often spoken of as pyrite residue, or cinder, is an iron oxide. It is a brilliant red and makes the pigment known as red oxide, or Indian Red. Frequently this residue is smelted for its iron contents or if the original pyrite contained copper, gold or silver values, these metals may be extracted by smelting the cinder or by subjecting it to some other metallurgical process.

Sulphate of iron or copperas is manufactured by allowing water to trickle slowly through a bed of finely broken pyrite. In the presence of the water, oxidation takes place, producing sulphate of iron which is taken into solution by the water. By evaporating the water, the sulphate iron is obtained in crystalline form. Important deposits of iron pyrites or pyrite, occur in Quebec in the Sherbrooke district; in Ontario in the Hastings district and at a number of localities east and northwest of Lake Superior. Other deposits have been found in the northern part of British Columbia at Granby Bay and near Port Essington on the Skeena River.

In Quebec, active mining operations have been carried on continuously for more than 30 years; the first pyrite used in a sulphuric acid plant in America is said to have come from the Eustis Mine in the Sherbrooke district of Quebec Province. At present there are two producing mines in Quebec, namely the Eustis Mining Company, Eustis, Que., and the Weeden Mining Company, Weeden, Que., the total output of which is about 65,000 tons, containing about 42 per cent sulphur. About half of this is burned in the sulphuric acid plant of the Nichols Chemical Company, at Eustis, Que., and the balance is shipped to the United States. The Quebec pyrites contains a small quantity of copper and a little gold and silver, all of which are recovered by treating the cinder residues obtained in the acid works.

In Ontario four pyrites mines are producing ore, two in the Hasting district, namely the Canadian Sulphur Ore Company, Limited, Queensboro, Ont., and the Nichols Chemical Company of Canada, Sulphide, Ont., and two in Northwestern Ontario, namely, the Northern Pyrites Company, Dinowic, Ont., and Lake Superior Power Company, Sault Ste. Marie, Ont. Part of the ore produced in Ontario is burned in the plant of the Nichols Chemical Company, at Sulphide, Ont., and part in the plant of the Grasselli Chemical Company. Hamilton, Ont.

Grasselli Chemical Company, Hamilton, Ont. In addition to the plants of the Grasselli Chemical Company and the Nichols Chemical Company already named, sulphuric acid is manufactured by the Dominion Iron & Steel Company in Sydney, the Consolidated Mining & Smelting Co., at Trail, B.C., by the Algoma Steel Corporation at Sault Ste. Marie, Victoria Chemical Co., Victoria, B.C., British Chemical Company, Trenton, Ont., and Aetna Chemical Co., at Drummondville, Que. the The plant of the British Chemical Company, which was constructed for the manufacture of sulphuric acid for explosive making during the war, is one of the finest plants in existence, and there is a likelihood that it may be utilised for the manufacture of artificial fertilizers.

#### GYPSUM.

Gypsum is a soft, light-colored mineral, best known for its use as land plaster. It is a hydrated sulphate of lime, often white in color, often massive, but sometimes crystaline, and then known as selenite. Massive varieties are generally colored, owing to the presence of impurities, but beds of almost pure white gypsum are sometimes found.

The principal use of gypsum is for the manufacture of plaster of Paris, which consists of partially dehydrated gypsum. On heating finely powdered gypsum, within certain limits of temperature, it gives off part of its water of crystalization, but retains the power of again taking up a like quantity of water, and, at the same time, forming into a solid mass. This property of the calcined gypsum or plaster of Paris finds for it many uses in the arts and trades. A partial list of the uses is as follows: wall plaster and decorations, moulds and patterns for various purposes, casts of art objects, etc., surgical and dental purposes, and as a cement. It is also the base of alabastine, used for tinting walls.

In the manufacturing of Portland cement, gypsum is introduced into the cement for the purpose of regulating the rapidity of setting when mixed with water.

Considerable quantities of ground gypsum and plaster of Paris are used by asbestos manufacturers in the manufacturing of pipe and boiler coverings, mill board, etc.

In the paint making industry gypsum is employed in the manufacturing of "cold water paints," in which it acts as the body or vehicle for the color. It is also used to a lesser extent in the making of paints, mixed in oils. It should be pure white, very finely ground and free from grit.

Finely ground gypsum, when spread upon the soil, has the power of aiding in the decomposition of certain minerals and thus liberating plant-nourishing materials. It also plays a useful part when mixed with manure. It is used, either in its crude state or mixed with paint-nourishing materials, to form certain artificial fertilizers.

In the textile industry, very finely ground white gypsum is used to some extent as a filler for cotton goods.

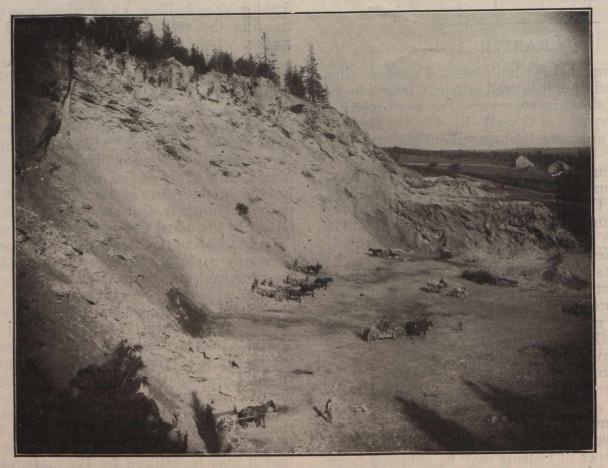
Gypsum is usually mined by open quarry methods, though in some cases underground mining, similar to that of coal mining, is the method employed. The material is hand cobbed to remove objectionable materials. From the pits it goes to the mill, where it is crushed, and ground to the necessary degree of fineness and calcined. The finished product is graded according to purity and color.

Most of the gypsum mined in Canada is shipped to the United States for manufacture into the finer grades of plaster of Paris. The number of plants in Canada for treating gypsum has increased considerably during the past few years. The use of hard wall plaster in place of lime mortar is increasing and will likely lead to more manufacturing being done in Canada.

The quality of the gypsum found in Canada, more especially the white rock found in Nova Scotia, New Brunswick and Ontario, is of an exceptionally high grade.

In Nova Scotia, the principal districts in which gypsum is found are in Hants county, near Windsor; in Cumberland county near Amherst; in Victoria county near McKinnon Harbor; Baddeck, and St. Anne; and in Inverness county near Cheticamp. Gypsum also occurs in large quantities along the coast of Cape Breton island, in the interior, and along the shores of the Bras d'Or lakes.

In New Brunswick the principal deposits occur in Albert county in the district around the town of Hillsborough; near Petitcodiac in Westmorland county; and in the northern part of the province on the Tobique river at Plaster Rock, in Victoria county.



A Gypsum Quarry in Nova Scotia.

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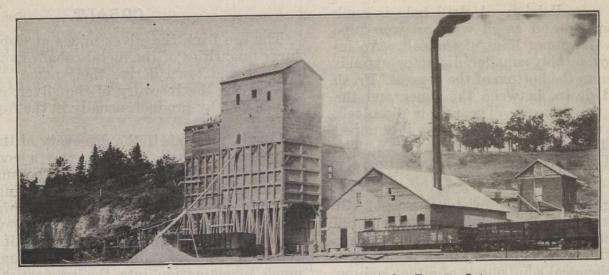
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Trap-rock Crushing Plant of the Ontario Rock Co., Toronto, Ont.

In Ontario, gypsum deposits are found in Haldimand county along the banks of the Grand river, the occurrence being in beds averaging about 4 and 11 feet in thickness. A small annual output, which is mostly calcined, has been maintained for many years. Occurrences have also been noted in the northern part of the province along the banks of the Moose river in the Hudson Bay basin about 30 or 40 miles south of Moose Factory.

In Manitoba large workable deposits of gypsur occur in an area about 8 miles square situated about 170 miles north of the city of Winnipeg. These deposits are being operated and the rock transported to Winnipeg, where it is calcined.

#### ZINC.

Zinc is one of the most useful metals. With copper it forms the alloy brass and for this purpose it is greatly in demand. Large quantities are also used in galvanizing iron plates. The metal smelted from the ore is called "spelter" and zinc is generally quoted in the markets under this name. Spelter is nothing more than bars or pigs of zinc.

The use of the term, which is derived from the German "spialter," has now been abandoned by the trade in the United States, and henceforth it will not be used in market literature.

Zinc can be hammered out into sheets and in this form is used for roofing. It is also used for engraving plates. In galvanizing iron, the iron sheets or other pieces of iron are dipped into molten zinc. Zinc oxide forms the pigment known as zinc white. Zinc sulphate, generally known as "vitriol" is used in calico-printing, in varnishes and in medicine.

The world's production of spelter in 1913 was 1,-093,635 short tons. The following were the principal producting countries:

United States	346,676
Germany	312,075
Delgium	217,298
France and Spain	78,289
Great Britain	65,197
Holland	26,811
Austria and Italy	23,928
Norway	10,237
- orang	8,339
Austrolia	1 105

 in 1913, and in 1917, had risen to 116,489 tons, calculated to contain 64,655,713 pounds of metallic zinc.

The close association of zinc blende (zinc ores) with galena (lead ores) and its wide distribution have made its treatment one of the economic problems of mining in Canada and its history is interwoven with the history of silver lead mines in British Columbia. The Dominion Government in 1905 appointed a Zinc Commission to investigate and report upon the zinc resources of British Columbia and their commercial possibilities. The exhaustive report of the Commission was published in 1906. An electric smelting furnace was erected at Nelson, B.C., in 1908, but did not go into commercial operation. At the present time the Hewitt, Noble Five, Ruth, Slocan Star, Standard, Van Roi and Whitewater mines are producing hand-picked zinc or concentrates as a by-product from the milling of the silver lead ores.

In the Province of Quebec the Weeden Mining Co. has recently put into operation a plant for the concentrating of the complex lead zinc ores of Notre Dames des Agnes, Quebec.

Ontario possesses a number of very promising zinc deposits, but none of them are being worked at the present time.

Until a few months ago, all the zinc ore, or blende, produced in Canada was shipped to the smelters of the United States, but since the Dominion Government decided to pay a bounty on zinc refined in Canada, the Consolidated Mining and Smelting Company at Trail, began the erection of a smelter and refinery for the treatment of zinc ores.

#### SALT.

Salt occurs in nature in large quantities in aqueous solution, as the brine of the ocean, salt lakes and springs, and also in the solid form, called rock salt.

The salt of commerce is obtained both from brines and from rock salt deposits.

In some cases the deposits of salt lie at the surface of the ground with little or no overburden and may be excavated by ordinary open-cut methods. Where the overburden of soil and rock is too great to warrant stripping, underground methods may be used similar to those employed in coal mining, but if the overburden be very great, or if for other reasons it is advisable, the salt is won by dissolving it in situ and pumping the brine to the surface. The last method is the one employed in winning the salt in the Ontario salt district. A drill hole is sunk through the deposit and cased with an iron pipe down as far as the upper limit of the salt. An inner pipe of considerably smaller diameter extends from the surface to the bottom of the deposit. Fresh water is forced down, between the inner and the outer pipes, to the deposit. The salt is dissolved, forming a very strong brine. The brine is pumped to the surface through the small inner pipe. The salt is obtained from the brine by evaporating the water.

The following is a list of the principal uses of salt in the Canadian industries, arranged roughly in order of the amount of salt consumed — preserving meats, fish, butter and hides; making hydrochloric acid and other chemical compounds of either sodium or chlorine; in soak making; glazing drain tile, etc.; refrigeration; and in certain metallurgical processes.

Extensive beds of salt or salt producing springs are found in nearly every province of the Dominion of Canada.

The largest and at present the only producing district is situated in the southwestern peninsula of the province of Ontario, bordering on Lake Huron, the St. Clair river, Lake St. Clair and the Detroit river. The salt here exists as beds, covered by upwards of 1,000 feet of other strata.

A deposit of rock-salt of considerable thickness is being now opened up near Malagash, Cumberland Co., Nova Scotia. This is the first known discovery of rock-salt in the Maritime Provinces, and the first in Canada to be discovered at a depth sufficiently shallow to enable it to be won economically by actual mining.

The imports of salt into Canada are at least as great as the Canadian native production, so that a large market exists within the Dominion.

In this district, the principal plants are located at Windsor, Sarnia, Sandwich, Goderich, Clinton and Kincardine. A prominent feature of the salt produced from the brine in Canada is its remarkable purity and also its freedom from other salts detrimental to its use in the production of caustic soda and bleaching powder. At Sandwich, a plant has been recently erected for the manufacture of caustic soda and bleaching powder from the brine.

#### COBALT.

The ore from the silver mines at Cobalt contains large quantities of the metal cobalt, from which the district and town derive their name. In smelting the ore for the recovery of the silver, cobalt is obtained as a by-product, usually in the form of cobalt oxide.

Cobalt, previous to the discovery of the cobalt ore deposits at Cobalt, Ontario, was a comparatively rare metal and had few uses. The small amount produced was used chiefly as a coloring agent, cobalt blue being well known to manufacturers of china, glass, inks, etc. But the discovery of the metal in large quantities in the Cobalt District of Northern Ontario reduced the price and instituted much investigation into the properties of cobalt and its compounds with the purpose of discovering new uses for these substances. Until a few years ago the refineries of Europe held a monopoly on the metal, but at the present time the Canadian producers control the markets of the world for the metal and its oxides. The refineries of the Coniagas Reduction Company at St. Catharines, Ontario, and of Deloro Mining and Smelting Company at Deloro, Ontario, are now producing metallic cobalt, as well as the various cobalt oxides.

Metallic cobalt resembles nickel in appearance, but is somewhat more lustrous. It alloys in a great variety of preparations with nearly all the important metals. Castings of cobalt metal may be readily turned with the ordinary lathe tools. The metal may also be rolled and forged in a manner and to a degree very similar to nickel. It has about the hardness of wrought iron.

Alloys containing cobalt have been found much superior to the best self-hardening steels for use as lathe tools. One of these alloys known as "stellite" now manufactured by the Deloro Mining and Smelting Co., Deloro, Ont., is rapidly coming into general use for cutting tools. An alloy known as cobaltchrome came into prominence during the war.

Another most promising field for cobalt is the plating industry. It has been demonstrated that cobalt is much superior to nickel for plating many materials. Cobalt for plating purposes may be had from either the Coniagas Reduction Co., or the Deloro Mining and Smelting Co.

Recently, Mr. T. W. Gibson, Deputy Minister of Mines of Ontario, has advocated the use of cobalt

Granby Smelter, Hidden Creek, B. C.



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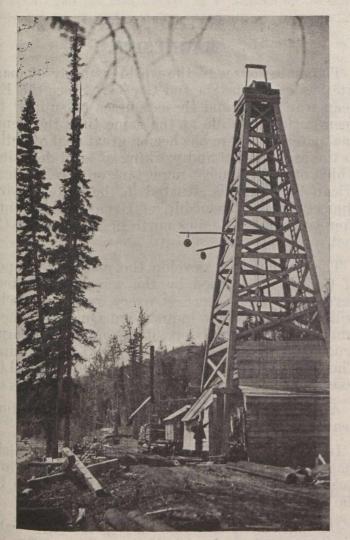
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metal for coinage. It might very advantageously be used instead of our small five-cent silver coins.

An investigation of cobalt and its compounds has been carried on at Queen's University for the Mines Branch at Ottawa, by Dr. H. T. Kalmus and his assistants.

#### PETROLEUM.

The principal oil fields in Canada are situated in the peninsula of south-western Ontario, between Lake Huron and Lake Erie. The first oil was found in Lambton county in 1862, and active production has been continued ever since. Until 1907 the Lambton county fields, in which there have been about 11,000 producing wells, were by far the largest



McArthur No. 3 now being drilled at Peace River.

producers; since then several new districts have been opened up, the most prominent ones being the Tilbury district in Kent county and the Onondaga district in Brant county. When the wells are first drilled, the natural pressure is usually sufficient to force the crude oil to the surface, sometimes producing what are known as gushers. After the flowing period, the oil has to be pumped. While some of the smaller districts became exhausted in a few years, others have continued to furnish oil for a long period.

Four refining companies are operating in Canada, distilling about 10 million gallons of Canadian crude oil per year, but the greater part being distilled at these refineries is still being imported from the United States.

In New Brunswick, in the district lying 11 miles to the south of Moncton, oil is being pumped in small quantities from the holes which produce the gas of this district. Although the production so far is not large, drill holes are continually being sunk, and it is hoped that very shortly a stronger and more continuous yield will be the result.

In Alberta prospecting is being carried on vigorously. Seepages of oil have been found in several parts of the province. In October, 1913, a light oil (about 90 per cent gasolene) was struck at a depth of about 1,550 feet in a boring that was in progress near Black Diamond P.O. Drilling was continued and on May 14, 1914, a second strike was made of an apparently similar grade of oil at a depth of 2,700 feet.

In connection with the oil industry in Canada, mention should be made of the existence of extensive deposits of bituminous shales and tar sands. Beds of bituminous shales, are found in Gaspe, New Brunswick, and Nova Scotia. Those in New Brunswick are without question the most important. They occur in the counties of Albert and Westmorland and extend in an easterly and westerly direction over a distance of 40 miles. Extensive exploration by means of diamond drilling and surface work, has demonstrated not only the quantity but the quality of these valuable deposits. It is anticipated that in the near future a plant with a capacity for an initial daily treatment of 2,000 tons of shale will yield approximately 80,000 gallons of crude oil per day. Tar sands are known to occur in Alberta along the Athabaska river for a distance of upwards of 100 miles north and south of Fort McMurray.

Prospecting is being most vigorously carried on at the present time in the North-West Territories, and large British interests are competing with United States and Canadian subsidiaries for all lands.

#### CHROMITE.

Chromite or chrome iron ore is an oxide of iron and chromium. It occurs in serpentine rocks, in irregular masses or disseminated in small grains which must be won by crushing and concentrating. It is also found in sand resulting from the disintegration of these rocks.

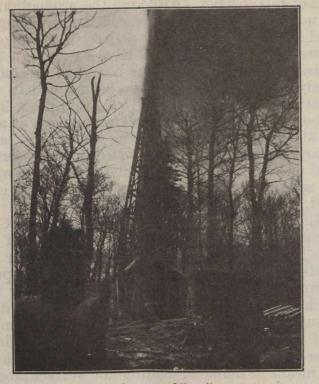
Chromite is used in the chemical industry for making chromic acid and the various salts of chromium, which in turn are used for making paint and ink pigments, and other purposes.

It is also employed as a source of chromium in the manufacture of chrome steel. In this case the iron content is also utilized.

Chromite is very basic in chemical reaction and highly refractory, suiting it to the manufacturing of fire bricks for certain metallurgical purposes, and also for the lining of basic open hearth steel furnaces, the only use to which it is put in Canada at present.

Chromite deposits occur in the Coleraine and Black Lake districts, Quebec. Some ore was shipped in 1910 and 1911, but not during the following years. During 1915 increased demand resulted in renewed activity, and a considerable amount of ore was shipped.

The production of chromite in the Eastern Townships of Quebec has been greatly stimulated by the demand created by the war for use as a refractory lining in steel furnaces and in the manufacture of ferro-chrome. The cutting off of supplies from



Shooting an Oil-well.

Austria and Greece and the restrictions through shipping shortage of the quantities available from Rhodesia and New Caledonia have resulted in the development of chrome deposits in America, particularly in California and Quebec. The War Trade Board took special action to stimulate chrome production during the war, and a special representative of the United States was in residence at the Quebec Mines with a mission to assist production in every possible way. While, since the Armistice chrome production has declined, there is every reason to believe that it will remain as a permanent addition to Canadian mineral products.

In 1918, British Columbia, for the first time produced chrome ore, from Cascade, near Rossland.

#### ANTIMONY.

Antimony is used in the manufacture of alloys, much of it being made into type metal.

Ores of antimony consisting mainly of stibnite or sulphide of antimony have been found and worked in a number of localities in eastern Canada, chief among which are the mines at West Gore in Hants county, Nova Scotia, and in the parish of Prince William, York County, N.B. In both cases mining operations have been intermittent in character. The ore at West Gore is auriferous, although the presence of gold was not recognized in the earlier shipments, which consisted of high grade ore carrying 50 per cent and upwards of antimony. A mill for treating low grade ore was built in 1907 and 1908. The industry is now dormant.

#### ARSENIC.

Arsenic is one of the chief constituents of the silver ores of the Cobalt District, Ontario, and since the discovery of cobalt, the production has more than met the demand for arsenic. In the roasting of the silver ores, arsenic is driven off in the form of fumes of arsenious oxide. These are caught in condensing chambers and sold in the form of white powder. The two companies producing arsenious oxide at the present time are the Coniagas Reduction Company, at St. Catharines, Ont., and the Deloro Mining and Smelting Company, at Deloro, Ont. Previous to the discovery of the cobalt ores, arsenious oxide was being produced by the burning of arsenopyrite or mispickel ores, which are found abundantly in Eastern Ontario, particularly in the County of Hastings. These ores, particularly at Deloro, in Marmora Township, County of Hastings, carries some gold. The existence of these ores accounts for the location of the Deloro Mining and Smelting Company at Deloro, Ontario.

White arsenic, or arsenic oxide, is a highly poisonous substance, and is used largely in the manufacture of insecticides, particularly that insecticide commonly known as paris green.

#### MAGNESITE.

The main source of the world's supply of magnesite has been Austria and Greece. Since the European war began and these sources of supply have been curtailed while at the same time the demand has increased, there has been a great deal of activity in the exploitation and working of local deposits, of which one of the most important on the North American Continent is situated in the eastern part of Quebec, in the Township of Grenville, Argenteuil County, about ten miles north of the town of Calumet.

The necessity to develop the magnesite deposits of Canada occasioned by the war has resulted in developing what there is every reason to believe will be a permanent industry in Quebec. The ore from the Argenteuil deposit is sold in the form of crude ore, or as calcined and dead-burnt clinker. The total shipments in 1918 were valued at \$1,016,-765.

An important deposit of this mineral is situated near Atlin, B.C.

In the basic method of metal-smelting calcined magnesite is used as a furnace lining, either in the form of bricks or shaped within the furnace from the ground material.

During calcination the ore gives off carbon dioxide, equal to about half its weight. Where the calcining is done in retorts, this carbon dioxide may be saved and stored in iron cylinders under pressure, for use in aerating soda water, and so forth.

The pure metal magnesia, which is extracted from magnesite ores, is used to give light for signalling and in photography. The metal is now extracted from the ore by an electrical process at Shawinigan, Quebec.

The Shawinigan Electro-Metals Company has recently developed a magnesium alloy which gives promise of becoming important in the construction of aircraft and motors of all kinds, being one-third lighter than alloys of aluminum used for similar purposes.

In medicine the sulphate of magnesia is commonly known as "epsom salts." Some extensive deposits of almost commercially pure "epsom salts" are found in land-locked lakes near Clinton, B.C. To be continued next week. Nails, per ton, 2,240 lbs.....

Pipe fittings, iron, per ton, 2,240 lbs.....

Pipe, 4-in. or under, outside measurement,

Rails-See steel rails.

iron and steel, per ton, 2,240 lbs.....

Pig iron ..... Special

Pig lead ..... Special

Plate, up to 30 ft. in length ..... Special

Rods, wire, iron or steel..... Special

13.00

13.00

13.00

## Ocean Freights Become Easier

Canadian shippers are studying closely the ocean rates from United States North Atlantic to United Kingdom ports. The situation recently has been that the lines operating from New York, Boston and Philadelphia, have been competing for business with the lines operating from Montreal. It is apparent that the shipping situation is much easier for certain commodities. The principal Weakening in rates recently has been on metal products, and some concessions have been made  $^{t_0}$  get this business. The attitude of the United States Shipping Board in reducing rates as a method of stimulating business will be very wel-<sup>come</sup> to Canadian as well as to American shippers. Recently a list of tariff changes were issued by  $^{\mathrm{the}}$  U.S. shipping Board on shipments to French and Dutch ports. This has been followed by a Corresponding list for shipments to the United Kingdom.

The new tariff, giving a number of reductions and a few slight increases, is as follows:

 Aluminum ingots, per 100 lbs.
 \$ 1.00

 Auto trucks and chassis, per cubic foot.
 .65

 Automobile, pleasure, per cubic ft.
 .65

 Barbed wire—See wire.
 .65

Bars, black, 30 fet. in length, per ton, 2,240 lbs. Special

Baryton	
Bollen + 2,240 Ibs	15.00
Those man ton 9.940 the	13.00
Bolta and	
	14.00
	1.00
	1.00
	13.00
	15.00
Copper -	
	Special
supressed to less than 90 cubic it.	
ber 100 lbs	1.00
Hemp	1.00
	. 2.00
Hoops, steel—Sea steel hoops.	
Lead billets—See pig lead.	

#### CUNARD'S GO-AHEAD POLICY.

It is really small wonder that the shares of the Cunard Company should be held in high esteem, for the past year has seen the development of a strongly progressive policy on the part of the directors, which will undoubtedly be of enormous value as competition becomes more keen. The company has strengthened its connection in Canada by the acquisition of an interest in the Reford Company of Montreal, while it is also in a positi position to take immediate advantage of a favorable turn of events in Russia by its agreement with the Eastern Company of Petrograd. The Cunard is now understood to be developing a big program for the supply of new tonnage, which will equipped for oil fuel. This is still another step forward.-London Financier.

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#### TOO VIGOROUS HEADLINES.

At the National Industrial Conference held in Ottawa Senator Robertson, chairman of the conference and Minister of Labor, complained that the headlines in some of the reports of the proceedwrong impression of the strife and bitterness and accurate but the captions were very fair crease the aggressiveness of some agitators. Canada \$6,200,000 per year to distribute newswere throughout the mails and if the people tion they should have it. He asked that the press co-operate to the fullest extent to this end.

Roofing slate, loose, per ton, 2,240 lbs.... 15.00 Scrap iron, per ton, 2,240 lbs..... 13.00 Screws, per ton, 2,240 lbs..... 14.00 Sheets, up to 30 ft. in length ..... Special Skelp ..... Special Spelter ..... Special 13.00 Spiegeleisen, per ton, 2,240 lbs..... Staples, per ton, 2,240 lbs..... 13.00 Starch, in bags or boxes, per 100 lbs..... 1.00 Steel billets ..... Special Special Steel, cold rolled, in boxes..... Steel hoops, in coils, per ton, 2,240 lbs.... 14.00 Steel rails, light, not over 30 ft. in length.. Special Structural material, up to 30 ft. in length and 2 tons in weight, including angles, beams, channels, girders and tees, not 13.00 fabricated, per ton, 2,240 lbs..... Tin, per ton, 2,240 lbs..... 15.00 Tubing-See pipe and boiler. Wire, barbed, per ton, 2,240 lbs..... 16.00 Wire., rolls and coils, copper, per ton, 20.00 2.240 lbs.... Wire, packed in barrels or cases - Eliminate. 1.00 Wire, piano, per 100 lbs..... Wire rods and coils, copper, per ton, 2,240 14.00 lbs. ..... Wire, plain steel, packed in barrels or 15.00 cases, per ton, 2,240 lbs..... Zinc, per ton, 2,240 lbs..... 15.00

TI	H	E	C	ON	IT	A	L	N	E	R	

Zinc ashes, per ton, 2,240 lbs.....

Zinc dross, per ton, 2,240 lbs.....

"What's the difference between ammonia and pneumonia?"

"One comes in bottles, the other in chests."-Yale Record.

#### RUBBER'S EVEN PRICE.

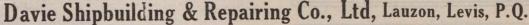
For reasons good and sufficient, all important commodities, with the single exception of india rubber, have doubled, trebled or quadrupled in price in the last four years. Why the apparent indifference of the great gum elastic industry to the high cost germ? It is thus explained:

The real beginning of crude rubber expansion was in 1876, when the British Government succeeded in establishing a small orchard of Para rubber trees at Heneratgoda Gardens, Ceylon. This was followed by the discovery of "wound response." In plain words this means that the Para tree, the **Hevea**, can be milked daily, while other rubber trees and vines must rest after milking for months and even years.

With cheap and docile coolie labor it was soon found that plantation rubber could be produced cheaper and of as good quality as wild rubber. And numerous plantations in Ceylon, the Straits Settlements, Federated Malay States, Java and Sumatra were established. Just as the best of these came into bearing the automobile began its spectacular career. The demand for rubber became so great that from a normal price of \$1.25 a pound it sold as high as \$3.00 a pound.

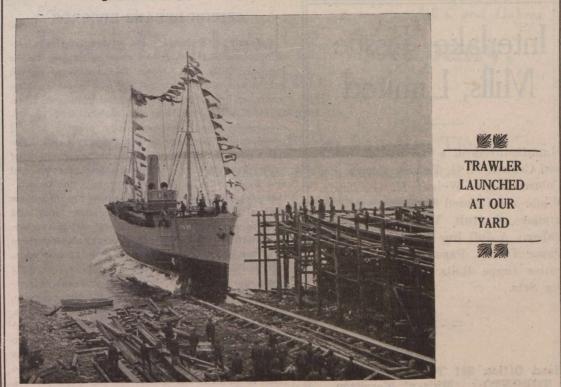
In the light of such a market almost any merchants other than the farsighted English would have held the customers up for higher prices. To be sure the big users were already posessed of big stocks, forward sales had been negotiated and there were vast supplies of reclaimed rubber available.

It was plainly seen that it was the part of wisdom to make it to America's advantage to buy in the Far East. For should that supply for any reason be withheld or fail a very few years would suffice to install great plantations, perhaps in Mindanao, P. I., where soil and climate are ideal, and plenty of seed available. Or the great American Castilloa plantations in Mexico, which were about to be replanted with Para trees in the time of Diaz, might be suddenly available were present condition reversed. If not there, perhaps in Guatemala, Honduras, Panama, Columbia, Venezuela or Brazil. With proper governmental guarantees from the countries named and a reasonable amount of sympathetic support from one's own government great planting projects could easily be installed. Indeed, they doubtless would be if the necessity arose.



14.00

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Manufacturers of a full line of White and Colored M. G. Tissues, Brown and Colored Light Weight M. G., Kraft, White and Colored Sulphate Wrap, all grades of fruit Wraps, Dry Proof Paper. A full line of Toilet Paper, Paper Towels, Paper Napkins, Decorative Crepe Rolls, Lunch and Outing Sets.

Head Office, 331 Telephone Building TORONTO Mills at Merritton

## News of Pulp and Paper Industry

#### RIORDON PAPER BUILDS HOUSES.

The Riordon Pulp and Paper Co. are erecting a number of new workmen's houses at Hawkesbury, Ont., a contract for thirty having recently been let. Other houses will be built next year.

#### NEW PAPER PRODUCTS.

The Rolland Paper Co., Limited, of Montreal, have placed two new Canadian paper products on the market in Rolland antique linen and Rolland antique vellum. Both are made on a 20 and 24 pound basis. The former, which is made in white only, is of pleasing and distinctive appearance, and is also strong and durable with a clear, even texture. Both papers are suitable for high class printing or lithographing.

#### SPANISH RIVER OFFICERS.

The many friends of T. H. Watson, of Toronto, are congratulating him on being elected a director of the Spanish River Pulp and Paper Mills, which took place at the annual meeting held in Toronto last week. Col. Thomas Gibson, D.S.O., C.M.G., of Toronto, who has been a director and secretary of the company for some years, has returned from overseas and been appointed Vice-President along with P. B. Wilson of Sault Ste. Marie. Joseph G. Gibson, of Toronto, who has been acting secretary for a considerable period, has been made secretary of the company.

#### PROGRESS AT MATTAGAMI.

Clarence Hillsmith, of Boston, managing director of the Mattagami Pulp and Paper Co., Smooth Rock Falls, Ont., was in Toronto recently on business. The third digester at the mill is now completed and a new drying machine will be installed in the near future when the digester will be put in operation. The company is turning out about ninety tons a day of unbleached sulphite and making heavy shipments, G. W. Saunders, formerly of the Toronto office, who has been for some months at Smooth Rock Falls, going there when the accounting department was removed from Toronto, is now the treasurer of the company. Several new water mains have been laid at Smooth Rock Falls in order to increase the fire protection of the company's plants.

#### ABITIBI BREAKS RECORDS.

Recently all records were broken at the newsprint plant of the Abitibi Power and Paper Co. at Iroquois Falls, Ont., when 247 tons were turned out in one day. Parts of the new paper making machines are arriving daily at the Falls and, when these are in operation, the output will be increased by about 170 tons daily, making a total production of over 400 tons daily, which will make the largest pulp and paper plant under one roof in the Dominion. A wrapping paper machine will also be installed in the near future. The foundations for the new building to house the four new Walmsley Fourdriniers are now under way and will be completed by the middle of November. The addition which joins the new finishing room built last year, is 269 feet long and 156 feet wide, and the concrete foundations are four feet wide and eleven feet deep. The floor and superstructure are supported on 112 piers of solid concrete. ten of which will support the new paper machines. These ten are eleven feet deep and have a loading capacity of 163 tons each. They are brought up to within a foot of the floor and iron columns resting upon them will be concreted in through the floor to prevent vibration. Twenty piers with a loading capacity of ninety tons each will carry

the framework and roof of the building, which will, when finished, form part of the old mill. The engine and rope drives in the present paper mill are being duplicated in the addition.

#### IMPERIAL FORESTRY CONFERENCE.

An event of the greatest importance of the Empire will be the Imperial Forestry Conference which has been summoned by the British Government to meet in London next December of January at the same time as the Empire Timber Exhibit. The idea of such a conference was suggested by Robson Black, Secretary of Canadian Forestry Association and has been eagerly taken up by the forestry leaders and Sir John Stirling-Maxwell has summoned representatives from all parts of the Empire.

The conference will consider the forest conservation situation of other Dominions as well as the British Isles and it is probable that a British Empire Forestry Association will be formed. The opportunities for such an association to collect information relative to forestry problems and practices and to promote inter-imperial trade in forest products, are evident from a moment's consideration of the dependence of some parts of the Empire on timber imported from other parts or from foreign countries. Enormous quantities of spruce. pine, fir, hemlock and similar woods are imported by England and Australia from Canada, while <sup>it</sup> is possible for Australia and India to supply other kinds of timber for export as well as for home use. It is possible to increase by proper forestry measures the home production in the various dominions of a large percentage of the timber used, but the fact that this cannot be accom plished at once, nor in some cases even in a large measure, makes all the more important such a meeting as will make possible a more complete understanding of the entire forestry situation in each part of the Empire.

An Empire Forestry Association would have been of uncalculable value during the period of reconstruction and expansion upon which we have just entered .- Pulp and Paper Magazine.

#### AUTUMN IN ALGONQUIN PARK.

Algonquin Park is situated 200 miles north of Toronto, and 170 miles west of Ottawa. Average elevation about 1,500 feet above sea level, at some points 2,000 feet. Area over two million acres. It is one of the largest, the wildest and most inter esting forest réserves in autumn, winter or sum mer accessible to the people of Eastern Canada The Highland Inn, equipped with modern plumb ing, large bright sleeping rooms, cosy lounging rooms, a spacious rotunda and dining room thoroughly modern in every particular, is owned and operated by the Grand Trunk Railway and will be kept open for the reception of guests this autumn and the coming winter. It is steam heated. There is a writing room, music room and billiard room. The cuisine is given personal super vision and patrons can depend upon satisfactory service. Rooms should be reserved in advance as accommodation is limited. No cases of tuber colosis received. Autumn attractions, fishing tennis, bowling on the green, etc. Winter attract tions, tobogganing, snowshoeing, ski-ing and skating. For reservations, rates and all particulars write to N. T. Clarke, Manager, Algonquin Park Station. Ontario.

#### ANSWERED.

Little Dorothy-Daddy, what did you say to mother when you made up your mind you wanted to marry her?

Mr. Meek-I said, "Yes, dear."-Pelican.

## Sulphite and Sulphate Distinguished

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A reader of the Pulp and Paper Magazine has asked for an explanation of terms "sulphite" and "sulphate." As others may be similarly puzzled, the Magazine reply to the inquiry will bear repeating:

Sulphite pulp gets his name from the fact that the chemical used in every case to separate the <sup>cellulose</sup>, which is the fibrous constituent, from the other portions of the wood, is a salt of sul-Phurous acid. All such salts are called sulphites. The most common is calcium bisulphite, which is made by the action of sulphur dioxide (formed by the burning of sulphur) on limestone In the presence of water or by bubbling the gas through lime water. In most cases there is some magnesium bisulphite in the liquor due to impurities in the lime or limestone. The action of the sulphur dioxide gases is first to dissolve in water and form sulphurous acid which then attacks the lime or limestone and forms calcium sulphite. As  $m_{ore}$  and more of the sulphur dioxide is fed into the apparatus we find the calcium sulphite, which <sup>b</sup> <sup>b</sup> <sup>p</sup>actically insoluble, gradually converted to Calcium bisulphite, which is very soluble in water <sup>Containing</sup> sulphur dioxide. In carrying out the process there is sufficient sulphur dioxide gas <sup>upplied</sup> to produce not only the bisulphite but to furnish a very considerable amount of free <sup>sulphurous</sup> acid. The furnished liquor, or "acid" as it is called, usually contains about 1 per cent. of its weight in sulphur dioxide combined with lime and 4 or 5 per cent. as sulphurous acid. Both of these substances enter into the action which  $c_{auses}$  the separation of the cellulose fibres from the other portions of the wood, although the reaction is a very complicated one.

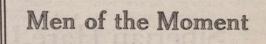
The digestion of the wood, which is reduced to the form of chips, is carried out in large vertical digesters that are lined with acid-proof brick to resist the action of the liquor. The cooking takes on an average from 8 to 14 hours and the pulp is then washed and screened so as to remove any uncooked portion of the wood.

<sup>Sulphate</sup> pulp is manufactured in a similar way as far as the chipping of the wood is concern-<sup>eq</sup> but the digesters are smaller than for sulphite and and are not lined, since a steel shell is not affected by the alkaline liquor which is used for the  $c_{00king}$ . The effect on the wood is the same as in the other cases. The time of cooking is very much less and the fibres are longer and of a dishely brownish color which is not so easily bleached as the greyish tint of the sulphite pulp. The sulphate process gets its name from the set and the sulphate process gets its name from the fact that the chemical which is used is sulphate of <sup>sodium</sup>, commonly known as salt cake, a byproduct from the manufacture of hydrochloric the manufacture of manufacturing the process for manufacturing the process for manufacturing <sup>cooking</sup> liquor sodium carbonate is treated with lime and sodium hydroxide or caustic soda <sup>1%</sup> formed. This is the basis of what is known s the soda process by which pulp is made largely the manufacture of book papers. In the ligester the caustic soda combines with a portion of the wood substances and dissolves, leaving the <sup>cellulose</sup> fibre. The liquor which is washed out trom the pulp contains a considerable amount of these solutions and the bulp contains a considerable amount as it hese sodium compounds. This black liquor, as it s called, is concentrated in evaporators and is  $l_{hally}^{auled}$ , is concentrated in evaporator. Because of some of the Because of an unavoidable loss of some of the alkali during the process of causticising and urning it is necessary to add some sodium salts  $t_0 \frac{1}{replace}$  it is necessary to add some sourcess this is  $d_{0ne}$  by ione by adding soda ash to sodium carbonate, but in the sulphate process salt cake or sodium but in the sulphate process salt cake or sodium sulphate process salt cake or sodium <sup>authe sulphate process salt cake of sulphate is added. As this material comes mixed</sup>

with the dried and burning black ash in the furnace and in the melting pot the sulphate is mostly changed to sulphide and in this form passes on into the cooking liquor. The burning converts the sodium compounds from the wood into sodium carbonate which was the chemical originally added and so, when the burned black ash is treated with water we have a solution containing sodium carbonate, sodium sulphide, and a little sodium sulphate. When this is treated with quicklime we have our cooking liquor for the sulphate process containing sodium hydroxide (caustic soda), sodium sulphide and a little sodium sulphate.

There is distinct difference between the qualities of the pulp made by these two processes. In the first place sulphite pulp is made from selected wood of high grade. The principal woods used are spruce, balsam fir, Douglas fir and hemlock, all of which have a comparatively low content of rosin. For sulphate pulp it is possible to use wood of a lower grade and especially woods containing considerable rosin such as jack-pine and southern pine. The sulphate cooking liquor dissolves the rosin which is not true of the sulphite liquors.

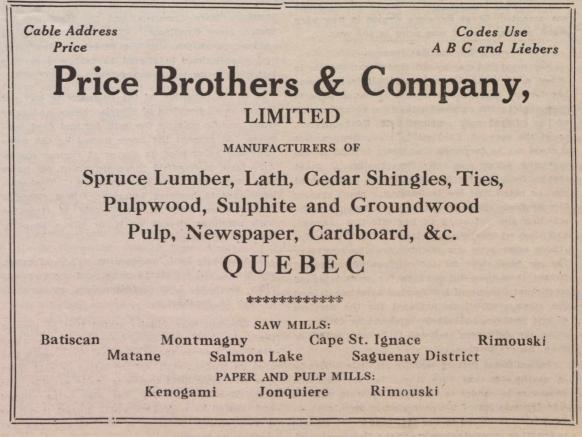
The chips for sulphate pulp run somewhat larger than for sulphite and for this reason as well as on account of the milder chemical action the fibres produced are considerably longer and are more flexible. This strength and flexibility of the fibres as well as the length tend to produce a paper of the highest strength and on this account kraft wrappings, as papers made of sulphate pulp are called, give very satisfactory results, in length weights for wrapping papers, bag manufacture, etc. There is usually not very much difference in the market prices of unbleached strong sulphite fibre and sulphate fibre in the pulp form, but sulphite pulp can be readily bleached to a fine white color suitable for use in the highest grade of papers.



THEODORE P. SHONTS, who died in New York a few days ago, was the well known head of the Interborough Rapid Transit Company and one of the outstanding men in BIg Business in the United States. He was born at Pennsylvania in 1856, and as a young man worked as an accountant and as a bank clerk, later studying law. His law practice brought him in touch with railroad interests, and as a result young Shonts became closely indentified with traction undertakings. He was connected with a dozen or more important railroads, trusts companies, and other big undertakings and also served for some years as chairman of the Isthmian Canal Commission.

SIR WILLIAM HEARST, who is "going to the mat" with the Liberals and United Farmers on October 20th, has been Premier of Ontario since the death of Sir James Whitney, which occurred some half dozen years ago. Previous to assuming the Premiership he was Minister of Lands, Forests and Mines in the Whitney Cabinet. He was born in Bruce County 55 years ago, educated at the University of Toronto, and Osgoode Hall and then practiced law at Sault Ste. Marie. He was first elected to the Legislative in 1908. Hearst is a prominent Methodist, has been active in temperance work, and goes to the country on the same date as Ontario is asked to vote on the prohibition question.

THE HONORABLE FRANK COCHRANE, who died in Ottawa last week, was one of the best known public men in the Dominion. He was born at Clarenceville in this Province in 1852, but as a very young man went to live in Northern Ontario. He lived as a pioneer in the North Country and in many respects retained many of the rugged pioneer characteristics, even after he became prominent in political affairs. After some vears as a lumberman, miner and clerk in a store he went into the hardware business at Sudbury. When Sir James Whitney was forming his first cabinet in Ontario he picked on Frank Cochrane as the man to develop Northern Ontario and made him Minister of Lands, Forests and Mines. He remained in that post until Borden became premier when he was taken to Ottawa and made Minister of Railways. When the Union Government was formed he remained in the cabinet as minister without portfolio. Mr. Cochrane was very popular on both sides of parliament, never letting political affiliations interfere with his personal friendships.



# Britain's Strength Unimpaired

#### Sir George Paish Gives Remarkable Facts About Financial Conditions in the Empire. France, Italy and Germany

Sir George Paish, for many years editor of the Economist, has a most informative article in the Contemporary Review, on "The Economic Outlook in Europe." He gives some remarkable facts about the financial conditions to-day of Great Britain, France, Italy and Germany. Note the cheerful tone in which he writes of Great Britain's financial strength and credit.

"The financial strength and credit of Great Britain are still undiminished," he says. "Prior to the war the nation's wealth was calculated at about £16,000 millions of which some £4,000 millions consisted of foreign and Colonial securities. During the war Great Britain has lent to her Allies and Dominions a sum not far short of  $\pounds 2,$ -000 millions, while, on the other hand, she has sold a moderate amount of her previously held foreign investments, and has borrowed abroad about £1,500 millions.

#### Own £3,000 Millions Abroad.

"Placing the new debt against the new investments her foreign investments are nearly, if not quite, as great as they were prior to the war, At the moment the money she has lent to Russia is lost. This amounts to about £600 millions. She has also lent over £500 millions to France and nearly £400 millions to Italy, as well as nearly  $\pounds400$  millions to the Dominions and to minor European Powers. Even were the whole of the new investments to be disregarded Great Britain will still possess foreign investments of nearly  $\pounds\,4,000$  millions against the loans she has incurred abroad. A reasonable estimate is that Great Britain now owns foreign investments to the nominal value of over £5,000 millions, against which she owes about £1,500 millions abroad, and that after allowing for the repayment of her foreign debt and writing off her doubtful investments the net and real value of her foreign investments is at least £3,000 millions.

"In other words, on the basis of pre-war valuations Great Britain possesses net wealth to the value of at least £15,000 millions. If current values of land, houses, and property of all kinds are accepted, Great Britain's wealth is now very much greater than it was prior to the war.

#### Not Beyond Her Income.

"Nor must it be supposed that Great Britain is living much beyond her income. It is true that her foreign trade shows a vast excess of imports over exports, the excess for the first seven months of the current year amounting to £402 millions, or at the rate of £690 millions per annum. But it must not be forgotten that Great Britain is still receiving, either nominally, or actually, a great income from her foreign investments, and it must also be noted that she is deriving a much greater income from shipping than ever before, notwithstanding the reduction in her effective tonnage, and that when the gross income from her ships (those coming to this country are charging over 700 per cent. more for the carriage of homeward freight than they did prior to the war) is added to the net income of her foreign investments and the sums received in payment for the services of her bankers and others rendered to other nations, the deficiency is found to be very small, or even non-existent.

"Indeed Great Britain would have little difficulty in paying her way were it not for the help she continues to render to the other Entente nations. The depreciation of the sovereign in certain countries is entirely due to the fact that Great Britain is granting very large credits to the Continent, and,

therefore, must herself obtain credits from America and other countries. From the very beginning of the war until the present day Great Britain has paid her way.

#### Disastrous To France.

"Upon the well-being of France the effect of the war has been exceedingly serious. It has destroyed the value of the greater part of her pre-war investments, which had been distributed over the surrounding nations, and more particularly in Russia, amounting to some £1,500,000,000. It has destroyed a considerable portion of her factories, her mines, and her farms. It has cut off for the time being her great tourist income, and it has brought about a severy contraction in productive power by reason not only of the physical damage to property which can be restored, but of the great loss of and injury to her manpower, which cannot be repaired. In this situation she has to reckon with the fact that the Central powers are in no position to make redress or even to provide funds for the work of reparation, excepting over a long period of years. Beyond all this France has been compelled to incur a debt abroad during the war of over £1,200 millions, and is getting deeper into debt day by day.

#### What France Needs.

"The remaining wealth of France is, however, very considerable, and if it were possible for her to rebuild her factories, restart her mines, reestablish her farms, and re-open her ports to tourists, she would, in a very short time, be able to pay for all the produce and the goods she needs without running further into debt. It is

calculated that the food production of France in the current year is not much more than half of what it was prior to the war, and beyond requiring to make good his deficit by purchases abroad she requires great quantities of foreign raw material as well as of materials for the rebuilding of her ruined cities, factories and farms.

"It is of the very greatest importance, not only to the welfare of France, but to the well-being of the whole world, that the French people should be supplied with all the food and material they need in order to regain their prosperity. Unless they can obtain the additional credit they will want in the coming twelve months their condition will indeed be deplorable. In the first four months of the current year the imports into France were at the rate of  $\pm 960$  millions a year, while the exports were at the rate of only £162 millions per annum, the excess of imports being, therefore, at the rate of no less than  $\pounds 798$ millions per annum.....

"But if the condition of France and of Italy is deplorable, how much worse is the situation in Germany and in Austria.

#### A United Loan.

"While no single nation, not even the United States, is strong enough to supply Europe with all the credit it needs in the next twelve months the League of Nations, which would comprise practically the entire world, would possess all the economic and financial strength required to supply Europe with additional credit. With the final restoration of peace and with all nations acting in co-operation, the security for a League of Na tions loan would be so good that it would readily accepted in payment for all the food and all the material for which payment could not  $b^{e}$ made in kind. Furthermore, the credit , which the League of Nations would enjoy would be so great that no difficulty whatever would be experienced in providing France with all the funds she needs to undertake the work of restoring her damaged factories, mines, and farms without further delay, and thus enabling her to resume her normal rate of production."

## Siberian Hare Industry in Canada

An interesting new incorporation in Hamilton, Ontario, is the Wentworth Hare and Fur Company, of which D. McCormick is president. It is a merger and expansion of the Delaware and Northern Hare Company, and the Canadian Siberian Hare Syndicate. The new company is anxious to absorb also the Siberian Hare farm, and negotiations in regard to taking over this latter company are now pending.

It is the intention of the company to buy out all the small breeders of Siberian hares, and raise these prolific animals for both fur and food purposes. At present the hares owned by the company are being kept on shares at various places. At a farm in Canfield there are about 200 hares and considerable number elsewhere. The company expects, however, before very long, either to rent a large farm in the vicinity of Hamilton with buildings already on it, or buy a property suitable for the purpose.

The animals kept for breeding will be of select, pedigreed, and registered stock, and the company aims to have 1,000 breeding does at as early a date as possible.

A Siberian hare fancier stated that at present the pelts of Siberian hares were being clipped and dyed and put on the market as "near-seal," and even as Hudson seal. Of the latter he said there was now very little that was really genuine. The grey Siberian hare fur was also being clipped and treated to a process which turned it out as a very clever imitation of the popular and expensive moleskin.

One of the virtues of Siberian hare fur was the thickness and roughness of the skin. This hare coming as it did from the arctic regions of Sibe ria, was endowed by nature with thick, tough skin, and with thicker hair than was usual the the rabbit tribe. This tough skin held both the hair thread and the hair. Raw pelts in good condition should be worth \$1.50 each, according to a local furrier.

The Siberian hare was good also for food. rabbit farm in California had 5,000 breeding does of common rabbit of common rabbits. Meat was shipped to New York in carload lat York in carload lots, and the skins sold at cents each. At present even there were packing rabbit houses in Canada which would take all the rabit meat that was shipped to them, particularly por Toronto and Montreal. After paying for found be and labor, the profit on rabbit meat should per

It was expected that the breeding of the Him layan white rabbit and the Blue Imperial  $\frac{1}{1000}$ also be taken up later by the new company. But these breeds provide these breeds provide beautiful pelts for the might riers' trade. Even skunks-for their fur-might be added to the menagerie as a profitable animato breed.

A black Siberian doe would produce during the year an average of about 20 to 30 young and this after eliminating the two hottest months range the two coldest months of the year.  $D_{18}^{oes}$  p<sup>s</sup> about 12 lbs, in wet about 12 lbs. in weight and bucks about 18 reprint the set of the These figures revealed the possibilities for cheat meat to be found in the Siberian hare.

#### September 30, 1919.

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# COMMODITY MARKETS

#### BRADSTREET'S MONTREAL REPORT.

Bradstreet's Montreal report for last week says. There seems to be quite an improvement in the wholesale trade. Some of our cotton manufacturers have cut down their range of samples, and are taking orders on the higher grades, as they are already heavily booked ahead in these lines. Quotations on English print goods are somewhat higher than a year ago, which is contrary to the expectations of the trade here. Carpets rule high, prices quoted being the same as in the Spring. Travellers state that advanced lines of dry goods

are selling well for the Spring trade. The hard-Ware trade is active, except for building material, which is slow selling. Stocks are light. In the Brocery market, the refined sugar situation is easing off gradually. The exports of confectionery from Canada are increasing. Canadian chocolate is taking well in the English markets; this trade was formerly in the hands of the Ger-

Canned salmon is also going over in large quantities. Some slight advances have been noted in the local grocery market, such as teas, cereal foods, dried fruits, molasses and some lines of canned vegetables.

A number of our Canadian manufacturers are making new connections abroad, and our export trade in a number of new lines is showing an increase. Live stock markets are lower and meats of all kinds show a falling off in prices. Butter is fractionally easier. The export trade in eggs shows an increase. Quite a lot of American eggs are passing through this port for export. There is very little cheese moving for export, all the receipts going into storage.

The retail trade is active, collections are good.

Butter.-An easier feeling continued in the local market. Receipts were smaller but ample, as there is still an absence of any important demand for supplies from outside buyers. There was a little more business done for export account, and several sales of finest creamery in 500 and 1,000 backage lots were made at 53 1/2 per lb., but apart from this the trade was principally of local character. At the auction sales the offerings amounted to 2,356 packages, and the pasteurized ereamery sold 1/4 c to 3/4 c per lb. lower than last Week at 54% c to 54% c; finest % c to 5% c at 531/2 c to 53%c, and fine  $\frac{1}{4}c$  to  $\frac{1}{2}c$  at 52%c to 53c, while at cat Gould's Cold storage there were about 1,000 Packages offered of which 150 packages pasteurized creamery sold at 54% c. per lb. delivered here and finest at 521/2c per 1b. f.o.b., country points, and at 53c to 53% c delivered here.

Live Hogs.-Chicago expects live hogs to sell down to \$12 per 100 lbs. The Canadian market continued to weaken and prices at Toronto closed <sup>50</sup>C per 100 lbs. lower than a week ago at \$18 weighed off cars, and at \$17.75 fed and watered, and on Friday packers prices for Saturday's load $t_{0,b}$  relay packers prices for Saturday 100 lbs.  $t_{0,b}$  country points were \$16.25 per 100 lbs.  $f_{0,b,.}$ , which means another decline of 50 on  $M_{0ndo}$ , in the Mon- $M_{onday}$ . The net reduction in prices in the Mon-treat  $t_{real}$  market for the week was 50c to \$1 per 100 lbs. Supplies were not large but they were ample to  $m_{eet}$  all immediate requirements and a fair trade  $w_{a_8}$ was done with sales of selected lots at the close at \$17.50 with sales of selected lots at the close at \$17.50 to \$18 per 100 lbs. weighed off cars. The Winning Winnipeg market ruled fairly steady all week at \$17 per to an end off cars. <sup>317</sup> per 100 lbs. for selected lots weighed off cars. The feat The feature of the week in the market for smoked meats meats was the weaker feeling which prevailed h sympathy with hogs and prices for hams and

bacon were reduced 3c to 4c per lb. and the prospects are they will go still lower in the near future.

Eggs .- A feature of the egg trade of late has been the large movement for export account from this port, the shipment last week being 14,349 cases which made a total up to September 20th, of 79,788 cases, as compared with a grand total for the season of 1918 of 69,253 cases. The prospects are that they continue heavy for the balance of the season from this port as one firm alone has 30.000 cases of American eggs to go forward, which accounts for the large receipts here for the past two weeks. The bulk of the stock being shipped is from the United States which were bought by Canadian dealers some time ago for fall shipment. Local prices were firmly maintained at the advance effected early in the week owing to the high prices being paid in the country for supplies and the smaller percentage of finest stock coming forward on account of the falling off in the production at this season of the year. The domestic consumption continues large and the market is active with a large volume of business passing in a jobbing way. Strictly newlaid 68 cents, selected 64 cents, No. 1 stock 57 cents, No. 2 stock 52 to 54 cents.

Grain .- Considerable weakness was displayed in the Winnipeg market for cash grain and prices for oats show a decline of 334 cents to 5 cents and barley 7% cents to 1% c per bushel, while, on the other hand, the option market closed strong with a net gain of 1c to 1%c for oats except for the October option, which closed 14c. lower, and barley at an advance of 1/2c to 1%c. The Chicago corn market for the future options was strong and prices closed 234c to 278c per bushel higher, and oats 1½c to 1%c, while oats and barley in the Winnipeg market were also strong at a further rise. There was no important change in the condition of the local market but the feeling was firmer in sympathy with the above markets. The demand from foreign buyers showed no improvement and the tone of cable advices received were very discouraging to exporters. The demand for local buyers for car lots was steady and sales of No. 2 Canadian western were made at 961/2c, No. 3 C. W. and extra No. 1 feed at 95,1/2c and No. 2 feed at 94½c per bushel ex-store.

Flour.-Business is very quiet. European buyers have been looking for large quantities, but for some reason secured their requirements elsewhere. The mills here are all very busy with domestic business and export orders for Newfoundland and this, they expect, will continue for at least another month, when it is more than likely the output will have to be curtailed unless some business of volume is put through in the meantime for export. The domestic and country demand for spring wheat flour continues very good and the market is active with a large volume of business passing at firm prices.

Cheese .- There was greater activity due to the steady increasing demand from continental Europe buyers for supplies at much better prices than those offered from other sources. This has created a keener demand from exporters here for the offerings at the boards throughout the country, and especially so for colored goods, consequently the prices paid show advances in some instances of 3-16c to 34c per lb, with sales at 25% c, 25% c, 25 16-16c, and 26c per lb. and white sold at 25c to 25 7-16c. The offerings at Gould's Cold Storage were about 10,000 boxes, which sold on the basis of 25c to 26c per lb. for No. 1 grade, delivered in store here.

Millfeed and Rolled Oats .- A good steady business continues to be done in millieed and, as the production has increased to some extent of late, millers are filling orders more promptly and the movement is larger. The tone of the market is very firm with sales of car lots of bran at \$45 and shorts at \$55 per ton, including bags, ex-track, while broken lots of bran in mixed cars have sold at \$46 to \$46.75, and shorts at \$56 to \$56.75 per ton, including bags, delivered to the trade, all less 25c per ton for spot cash. The condition of the market for rolled oats is somewhat unsettled and prices are irregular owing to the fact that some millers are selling car lots of standard grades in jute bags of 90 lbs. at \$4.45, and in cotton bags at \$5 ex-track, while others quote car lots at \$4 90 ex-track, net cash, \$4.95 with terms, and at \$5 delivered in store with terms for prompt delivery, and 15c per bag less for October shipment.

#### PAPER EXPORTS GROW RAPIDLY.

Canadian exports of paper and paper products of all kinds for July show an increase in value of \$1,007,984 as compared with those in July, 1918, although the value of the pulp and pulpwood exported during the month shows a decrease that of pulpwood alone falling off by \$1,019,357. The details shows:

July	1918.	1919.
Paper, etc\$	3,631,241	\$ 4,639,225
Pulp, chem	2,754,010	2,654,333
Pulp, mech	459,868	436,604
Total\$	6,845,119	\$ 7,730,162
Pulpwood	2,253,884	1,234,527

\$ 8,964,689 Totals .....\$ 9,099,003 The quantity of newsprint paper, the industry's chief staple, exported during the month amounted to 57,323 tons, valued at \$4,064,303.

For the first four months of the fiscal year exports of paper and paper products show an advance in value of \$3,045,299, as compared with the corresponding period in 1918, and \$6,321,373 as compared with 1917. There was a falling off of \$5,225,530 in the value of chemical pulp exported during the period as compared with the 1918 returns and of \$991,454 as compared with those of 1917. Mechanical pulp also fell off slightly while the value of pulpwood exported in 1919 was about half that for the same period in 1918, the figures heing as follows

being as ronow	0.		
Four months	1917.	1918	1919.
Paper, etc\$	11,211,136	\$ 14,487,110	\$ 17,532,409
Pulp, chem	6,284,843	10,518,919	5,293,389
Pulp, mech	2,254,064	1,701,773	1,631,201
			and the second second
Totals\$	19,750,043	\$ 26,707,802	\$ 24,456,999
Pulpwood	2,591,353	6,232,254	3,260,241
Totals\$	22,341,396	\$ 32,939,056	\$ 27,717,240

OF THE ORIGINAL members of the Cabinet formed by Sir Robert Borden in 1911 Mr. Cochrane is the only one who has died in office. Mr. Monk died some time after resigning office. Only seven of those original members are still in the Cabinet. These are Sir Robert Borden, Sir George Foster, Sir Edward Kemp, Sir James Lougheed, Hon C. J. Doherty, Hon. J. D. Reid, Hon. Martin Burrell. Members who have dropped out are Sir Sam Hughes, Sir George Perley, Sir Douglas Hazen, Sir Thomas White, Hon. Robert Rogers, Hon. L. P. Pelletier, Hon. Bruno Nantel, Hon. W. J. Roche, Hon. T. W. Crothers, Hon. F. D. Monk, and now Hon. Frank Cochrane has passed to his rest.

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## Bank Advertising is Improving Fast

sessions of the Financial Advertisers' Association in connection with the Associated Advertising Clubs of the World Convention at New Orleans last week and some important suggestions were put forward by Canadian as well as American delegates, which are worthy of careful consideration by Canadian financial advertisers.

Changing conditions growing out of the war, including the high cost of living, have made effective advertising to increase savings accounts more profitable and more necessary, D. Mc-Eachren, secretary of the Huron & Erie Mortgage Corporation, of London, Canada, declared.

People learned to save during the war, in Canada as well as the United States, he showed, yet just at this moment, the savings bank should advertise with uncommon skill and vigor, because the high cost of living is a constant temptation to forget the savings account. In part, he said:

"Judging from newspaper space and from the frequency of insertions many important financial advertising appropriations have of late been heavily increased, while the tone of the appeal is noticeably warm, positive and full of good argument.

"Coupled with this awakening to the possibilities of good advertising is to be seen the opening of new savings branches in all parts of the country-wherever a foothold for such business can be secured.

"A general all-round recognition of the Savings Department has taken place in Canada. The focus of the successive Victory Loan campaigns was of necessity upon the saver, and the vigorous, although belated, Government campaign on behalf of thrift stamps has undoubtedly made a deep impression upon the Canadian public."

#### "Tombstone" Advertising.

R. S. Hecht, president of the Hibernia Bank and Trust Co., in delivering an address of welcome to bank advertising men and women from every section of America, said:

"The so-called bank advertising of twenty and fifteen and even ten years ago, with a very few brilliant exceptions, was so absolutely inane as to be positively pitiful. I have heard it described as 'tombstone' advertising, and certainly no more appropriate adjective could be used, for it produced just about the same results as to the inscriptions that you will read in the average well-organized and well-conducted cemetery.

"With the birth of the Financial Advertisers" Association there was sounded the death knell of the 'Steenth-National-Bank-Capital-and-Surplus-\$50,000-Transacts - a - General - Banking - Business style of bank advertising, and there was ushered in the modern twentieth century style now employed by practically all live banking and investment institutions."

#### Copy Should Be Newsy.

The newspaper advertisements of a bank should be "newsy," according to F. D. Conner, of the Illinois Trust and Savings Bank, Chicago. "Your newspaper copy should be 'human interest' copy. There is enough happening every day in your own institution. The newspapers are publishing live subjects out of which 'human interest' advertisements can be written. The experiences of others are great guide posts, showing what is right or what is wrong. The fact that you are the oldest or the largest institution in the city, county, or state, is no longer argument why any person should patronize your bank.

"I remember some time ago, an old farmer was killed in a railroad accident. Among other things, the papers stated that he had made a will many years ago, and after a diligent search it was found. However, many things had happend in the meantime which complicated matters greatly.

"I got an inspiration from that story to run an advertisement in behalf of our Trust Department.

There was much interesting discussion at the The headline was. 'He Made A Will-But'-and went on and related the circumstances about the will that was hidden away and was not up-to-date A few days afterwards an old gentleman came into the Trust Department with this advertisement in his hand. He said, 'This strikes me very forcibly' I am guilty.' The result was that his will was rewritten and our institution was named as executor of the estate which involved about \$500,000."

#### Getting at the Small Investor.

John Milton McMillin, of the bond department of Henry L. Doherty & Co., of New York, suggested that whatever can be done to give people an in terest in corporation management by getting them to invest in securities, will have a strong tendency to create a less biased point of view in discussions of corporation affairs.

The working man, the farmer, the shopkeeperall of us, in fact—are inclined to consider lightly the needs of the railroad or other corporation which finds it necessary to increase its rates though each of us would have a different point of view if we were directly interested. In that event we would want to see justice done.

"Many of the gas and electric companies," ht said, "are now fully alive to the value of security holders among the customers of their service. The organization of which I am a member has on more than one occasion put aside an opportunity to sel securities involving very considerable sums well-to-do investors, able and willing to pay promptly in cash, choosing instead, the molt tedious process of selling the issue in question, few shares at a time, on extended terms of pay ment, to a large number of people of moderate means. Their aggregate good will was deemed to be a consideration of equal importance to that of raising the necessary capital for physical improve ments."

He showed that the ordinary formal announce ment of an issue of stocks was of little value in obtaining such results, as they attract only the professional investor, and gave specific examples of methods employed of methods employed to reach the smaller investor



ERVICE.-This Bank, for the past 45 years, has done its share in the development of the business of the Dominion. Our experience and equipment are at the service of every customer.

THE STANDARD BANK OF CANADA MONTREAL BRANCH 136 ST. JAMES STREET MANAGE E. C. GREEN. . .

#### September 30, 1919.

#### MANAGER IN MEXICO.

The Canadian Bank of Commerce announces that T. S. Leitch, manager at Dawson branch, has been appointed manager at Mexico City in place of D. Muirhead, who has resigned from the service. D. C. Thomson, who has recently returned from military service, has been appointed manager at Dawson.

#### BANK OF MONTREAL CHANGES.

G. S. Henley, manager of the Edmonton branch of the Bank of Montreal; president of the Edmonton Board of Trade, and prominent in city affairs, has been appointed to the foreign office of the Bank of Montreal and will take up residence shortly in Montreal. Mr. Henley is succeeded by F. S. Ridley, inspector of the western division of the bank, with headquarters in Winnipeg.

The Bank of Montreal announces the appointment of Mr. Dudley Oliver, as Associate Manager, of the Ottawa branches of the bank.

Mr. Oliver, who recently returned from England, where for five and one-half years he was manager of the Bank's branch in Waterloo Place, has already arrived in Ottawa where he has taken over his new duties.

In certain details of the financial administration of the Canadian forces overseas, Mr. Oliver played <sup>a very</sup> prominent part, and is personally known to a great majority of officers and men of the Canadian Army all of whom maintain the highest appreciation of his service in their behalf.

#### MAPLE LEAF MERGER PASSED.

The shareholders of the Maple Leaf Milling Co., Limited, showed themselves to be perfectly in accord with the management in all the proposals that were put forward at the special general meeting last week.

Power was granted to purchase a controlling interest, approximately 11,000 shares, in the Campbell Flour Mills, Limited, to increase the capital stock by an additional issue of \$1,000,000 preferred, to fix the quorum at meetings of the directors at

#### MARCONI WIRELESS APPARATUS

Installed—Operated—Maintained Contractors to Canadian, Newfoundland and British Governments

MARINE SWITCHBOARDS Made and installed

THE MARCONI WIRELESS TELEGRAPH COMPANY OF CANADA, LIMITED, 173 William Street, Montreal. less than a majority and to pay dividends in speeds.

The capital of the Campbell Flour Mills—\$650,-000 preferred and \$650,000 common stock, and 80 per cent of both the securities are in the hands of the estate of the late Senator Campbell. The terms of purchase are par for the preference stock and 90 for the common.

The capital of the Maple Leaf Milling Co. will now aggregate \$6,000,000, divided between \$2,500,-000 common and \$3,500,000 preferred.

By the merger just consummated the Maple Leaf Milling Co. will become stronger in its Canadian connections, the Campbell Milling Co. having done most of its business in the Dominion, while the first mentioned concern has sent most of its products abroad.

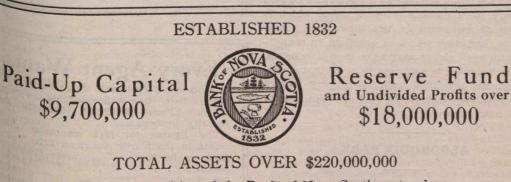
The total milling capacity of the Maple Leaf Milling Co. will be 18,200 barrels a day. Its six mills—at Port Colborne, Kenora, Thorold, Welland, Dresden and Brandon—have produced 15,009 barrels per day, while the Campbell mills have produced 3,200 barrels per day, 2,200 at West Toronto, 800 at Peterboro and 200 at Pickering.

The directorate of the Maple Leaf Milling Co. has been composed of seven members, and all except one—Mr. Hedley Shaw—are resident outside Toronto. It has consequently often been difficu't to secure the four necessary for a quorum. Less than a majority will now be required.

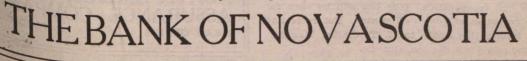
#### F. O. B. AND F. A. S.

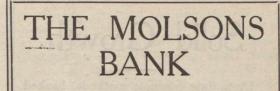
A correspondent writes: "For some time the United States shippers have been quoting f.a.s. New York. We write at this time asking you to give us as much information as you can about this term. In Canada and a good many other countries we either quote f.o.b., c.a.f. or c.i.f. When ask-New York. We write at this time asking you to of these three mentioned conditions, the reply always comes back with the quotation f.a.s. Any information you can give us will be greatly appreciated."

The letters f.a.s. mean free along side. When they are used in a contract for the sale of goods they place upon the seller, in consideration of the amount named in the contract, an obligation to deliver the goods free of expense to the buyer alongside the vessel. When there is no such stipulation in the contract of sale the buyer may be required to take the goods from the warehouse of the seller and carry them to the vessel at his own expense. But in a sale on f.a.s. terms the seller obligates himself to make delivery of the goods upon the dock and at the vessel's side, ready for loading. Any expense of loading will fall upon the buyer as it would not in a sale on f.o.b. terms.



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 business of every description.





Incorporated 1855. Capital and Reserve, \$8,800,000. Over 100 Branches.

If your business is small but thriving a consultation with the Manager of the Molsons Bank may be the means of developing it to larger proportions.

Managers of the Molsons Bank Branches are always accessible and at the service of the public.

E. C. PRATT, General Manager.

## The Dominion Bank

160 St. James St.

Careful attention is given to Foreign Exchange Business Cable and Mail Transfers, Drafts and Letters of Credit issued. A General Banking Business transacted.

> M. S. BOGERT manager.



Letters of Credit and Drafts issued to over 1,500 principal points in the United Kingdom and the world-wide British Empire, and countries of Europe and Asia not under the war ban. The service is most complete and of unexcelled efficiency.

The Home Bank of Canada Branches and Connections Throughout Canada Transportation Blg. 120 St. James Street 2111 Ontario St. East Cor. Davidson Street 1318 Wellington Street, Verdun

#### NO ACCOUNTING FOR NAMES.

As it comes to us on the official note-paper of the Guaranty Trust Company of New York, we venture to print, with all possible reserve, the following news item. (It may be true at that): "The Guaranty Trust Company of New York has

been appointed Registrar of the Preferred and Common Stock of the Piggly Wiggly Corporation."

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# Solid Growth

Up-to-date business methods, backed by an unbroken record of fair-dealing with its policyholders, have achieved for the Sun Life of Canada a phenomenal growth.

Assurances in Force have more than doubled in the past seven years, and have more than trebled in the past eleven years.

To-day they exceed by far those of any Canadian life assurance company.

> SUN LIFE ASSURANCE COMPANY OF CANADA HEAD OFFICE-MONTREAL

#### 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:
164 ST. JAMES STREET, MONTREAL.

ALEX. BISSETT - Manager for Canada.

#### UNION ASSURANCE SOCIETY LIMITED OF LONDON, ENGLAND

FIRE INSURANCE, A.D. 1714. Canada Branch, Montreal: T. L. MORRISEY, Resident Manager. North-West Branch, Winnipeg: THOS. BRUCE, Branch Manager. AGENCIES THROUGHOUT THE DOMINION.



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INSURANCE
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#### SUN LIFE INSPECTION.

Superintendent of Home Agencies James W. Simpson, of the Sun Life Assurance Company of Canada, leaves this week for an extended tour of the company's divisions in Western Canada. Mr. Simpson has just returned from a tour of inspection in the State of Michigan.

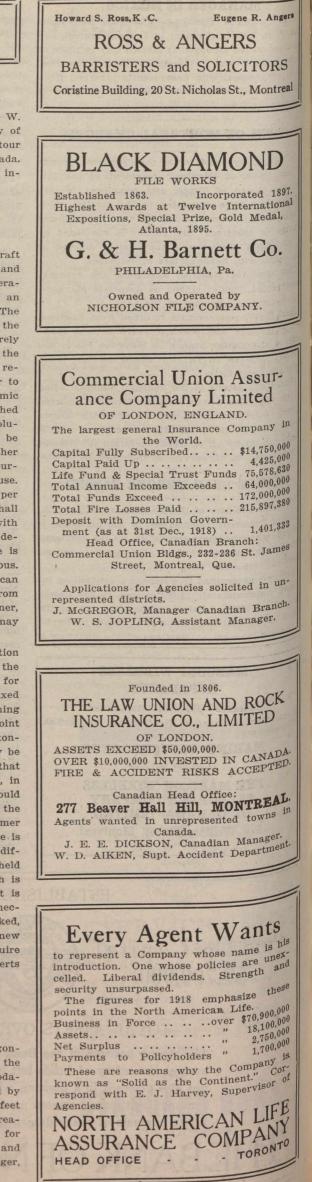
#### COLLISION WITH SEAPLANE.

Sooner or later a collision between an aircraft and a seaborne vessel was bound to occur, and the first recorded instance is worthy of consideration with regard to the problems which such an occurrence presents to the insurance market. The case referred to occurred at Toulon, where the steamer Manteau is reported to have been severely damaged by a seaplane, though no details of the extent of the damage appear to have been re-These details are immaterial, however to ceived. the consideration of the case from an academic point of view, and until practice has established an answer to the questions now requiring a solution, discussion of any other nature would be valueless. The first point to be raised, is whether a seaplane is "another craft or vessel" for the purpose of the application of the franchise clause. This clause eliminates all claims under three per cent of the insured value, unless the vessel shall have been stranded, on fire or in collision with another ship or vessel, and the necessity for determining whether the last part of the clause is operative when aircraft is concerned is obvious. If the plane is a ship or vessel, underwriters can be asked to pay for small damage resulting from a collision, if not the claims falls upon the owner, or upon any "small damage" insurance he may have effected.

The next point to be considered is the question of the limitation of liability on the part of the plane. Under British laws a statutory liability for collision damage done to another vessel is fixed at £8 per ton of the vessel at fault. Presuming this law to be applied to a seaplane, the point arises as to the method of determining the tonnage of the aircraft. Secondary to this it may be argued that the floats alone are vessels, and that the rest of a plane is exempt from this law, in which case the liability of a colliding float would work out at an infinitesimal figure, and the balance to be borne by the damaged steamer would be enormous in proportion. Then there is the question of blame, though at present it is difficult to see how a steamer on the sea could be held to blame for a collision with an object which is capable of movement in two dimensions. It is possible that other pertinent questions in connection with such claims may have been overlooked, but the foregoing is sufficient to show that a new problem has presented itself, which will require careful consideration on the part of claim experts in the near future.

#### ALGONQUIN PARK.

The autumn months are delightful in Algonquin Park. The "Highland Inn," situated on the shores of Cache Lake, offers splendid accommodation at reasonable rates. Owned and operated by the Grand Trunk Railway. Altitude 2,000 feet above sea level. Just the place for rest, recreation and recuperation. The Inn will be open for the reception of guests all winter. For rates and all information apply to N. T. Clarke, Manager, Algonquin Park Station, Ontario.



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#### THE JOURNAL OF COMMERCE

#### INSURANCE, THE STABILIZER.

Dr. Roland P. Falkner, the Managing Editor of the Alexander Hamilton Institute, who paid a visit to Montreal recently and made a great impression on the Canadian Pulp and Paper Association members who attended the Saguenay excursion, has just written a memorandum on the study of Insurance which puts the commercial value of that institution in very striking light. It is entitled "Safeguards of Insurance":

An eastern man visiting the west had been listening to rattle snake stories when he asked, "Is there no cure for a bite?" "Sure," said the Westerner who had been holding the floor. "Take a stiff drink of whiskey." "Well, do you take this cure before or after the bite?" "Stranger, as a cure you take it afterwards, as a preventive You take it before, and something tells me this would be a good time to take a preventive." And they did so.

Now when people tell you that insurance is the only sure cure for a great variety of business misfortunes, don't fail to remember that you should take it beforehand.

Insurance is the stabilizer on the airplane of business. Of course business is not always flighty, and lacks some of the thrill of aviation. But there is no end of risk in it. The prudent aviator knows that he takes great chances, and is glad of anything that can be done in advance to lesson them. The business man takes fewer chances but perhaps he is by nature more prudent, and therefore will be more eager for precautions.

If you have never thought about it you might well be surprised at the variety of business risks which experience has shown can be met by the insurance principle.

I would not have you get the idea that embarking in business was anything like crossing a commercial "no man's land." It is not a shell swept area, with death and destruction running rlot. The dangers of business are more like those of the western mountains where rattle snakes are not numerous but deadly. Anyone who has lived In New Jersey knows that it does not take a swarm of mosquitoes to annoy one. A single lusty specimen expert in the practice of his art can cause considerable discomfort and the profanity which is the mark of a mind that has slipped its trolley. Business losses through misfortune of one kind or another are infinitely varied, but they are <sup>hot</sup> inevitable. They are neither as certain as death nor as frequent as taxes. But they are frequent enough to represent fateful contingeneles that hang like the Sword of Damocles over every enterprise.

The Talk (an A. H. Institute publication) points out how their effects can be minimized through insurance and tells why. It shows how a small outlay by thousands of persons can meet all the losses that occur to the few of them. Nor should we forget the emotional side of the question. Everyone in business as elsewhere can do his best when he has peace of mind. Remove apprehension, banish worry, and we all know how much more we can accomplish. Insurance not only stabilizes the enterprise, but imparts to the man who conducts it the confidence which is the corner stone on which success is built.

## A COMIC OPERATIVE BRIGADE.

The other week there was a fire alarm at a village not twenty miles from Manchester, and it sociated with the wild west of Ireland or with musical comedy. It appears that in the village is given a bell shall be rung to assemble the brigade whilst two men proceed to the railway station, proceed to the fire station and hitch the horses is the fire engine and then the start to the

scene of action commences. In view of the fact that the railway station is the best part of a mile from the fire station, and that cab horses are not given to undue rapidity of movement, we may take it that a start for a fire will seldom be made under one-half to three-quarters of an hour. But the other week a new hitch occurred. The local authorities, to improve matters, bought two army horses. When the alarm was given the horses were, for the first time, introduced to the fire engine and then it was found they were far too fat to go between the shafts! A long time was spent trying to squeeze them in, but it proved quite impossible! so, in the end, one or two men with some hose, etc., were despatched in a cab to the fire, which, in the meantime, had been extinguished by the owners of the property; but only after considerable damage had been done, for which the insurance offices had to pay. Manchester (England) Policy Holder.

#### NATIONAL INDUSTRIAL CONFERENCE. (Continued from Page 13.)

and children. At this point Mr. H. B. Butler, Assistant Secretary to the British Ministry of Labor, who was on his way to arrange the League of Nations Labor Conference at Washington, made a few remarks of a general nature.

#### Dr. Strachan on Brotherhood.

A battle royal was anticipated over the next item, which concerned the right to organize, collective bargaining and the recognition of unions. The forecast was not wrong, and a keen and prolonged discussion ensued. Mr. W. L. Best of the Locomotive Brotherhood presented the Labor case and he was admirably seconded by Mr. R. A. Rigg who gave a most interesting account of the history and aspirations of the trade union movement. Mr. C. H. Carlisle for the employers spoke well, but Messrs Shaw and Parsons were not helpful. The best speech of all came from Dr. D. Strachan, who abandoned the pulpit to become social welfare expert for the Imperial Oil Company, and is a man of enlightened views and progressive sympathies. He favored collective bargaining and declared that the main need of the age was to put the word "brother back in brotherhood."

Mr. F. P. Jones objected to the closed shop and Mr. A. Roberts, a Nova Scotian, gave the third group's viewpoint. But no agreement could be reached and the Resolutions Committee after strenuous debate was likewise found to be divided with three reports.

There was a vigorous debate on Joint Industrial Councils which Dr. Strachan initiated in an admirable speech, giving some account of the plan adopted in the Imperial Oil Co.'s organization. Then followed a brisk duel between Mr. Tom Moore and Mr. Mackenzie King. Mr. Moore, who favored the idea of such Councils, however, attacked the Rockefeller plan as being inimical to trades unionism. Mr. King, who accepted some responsibility for this plan, replied at some length and with great vigor refuted the accusation that the plan was in any way designed to damage the organized labor movement.

#### THE BANK OF NOVA SCOTIA. DIVIDEND NO. 199.

Notice is hereby given that a Dividend of four per cent. on the paid-up Capital Stock of this Bank has been declared for the quarter ending September 30th, and that the same will be payable on and after Wednesday, the first day of October next, at any of the offices of the Bank.

The Stock Transfer Books will be closed from the 16th to the 30th proximo, inclusive. By order of the Board,

H. A. RICHARDSON,

General Manager. Halifax, N.S., August 15th, 1919.

#### PROFESSIONAL

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#### Speeding Up Business.

By Thursday evening it was plain that the programme was running far behind schedule and it was agreed that the various resolutions committees should tackle the remaining items, thresh out some sort of resolution and bring it to the main body for discussion and if possible acceptance. As a result there was already a great speeding up in evidence on Friday and Saturday and the programme was eventually completed before 6 p. m. on the latter day. The resolutions drafted by the various committees were the subject of keen discussion; the opening speakers were allowed 20 minutes as before but there had of necessity to be some curtailment. The Committee managed to present and the Conference to accept unanimous resolutions in connection with a number of minor reforms which are very desirable. There were passed recommendations that the Federal Government establish a bureau to promote the establishment and development of joint industrial councils, that the merits of proportional representation should be inquired into, that compulsory education should prevail throughout Canada, that housing schemes should be pushed vigorously forward, and that full freedom of speech and the press should be restored. The proposal that the findings of the Mathers Commission should be put into effect as an experiment on all work controlled by the Government where the principles of democratic management could be applied did not find favor with the employers and was not endorsed.

#### Some Advantage Gained.

It was unfortunate that a better modus vivendi could not have been reached upon the questions of prime importance like collective bargaining, the recognition of unions, the eight-hour day and the minimum wage, as these constitute the main sources of industrial strife. But it was obvious from the speeches delivered and the general tone of the discussion that capital and labor have a long road to travel in Canada ere they meet upon the same plane of thought. After the first two days the proceedings were marked by complete good temper on both sides, save for Mr. S. R. Parsons unfortunate remark about "paid agitators." which Labor resented and which was eventually expunged from the records of the proceedings.

The intellectual honors of the debate lay with Labor, whose delegates had, as the attacking side, come with their cases fully prepared and also had the benefit of greater experience in public speaking. Mr. Tom Moore led his side with great tact and ability and was ably backed up by Mr. Rigg and Mr. Best. Miss Gutteridge, the only woman delegate who spoke, shewed a notable grasp of industrial problems. As has been hinted, the employers group were handicapped by the manner and non possumus attitude which some of their earlier spokesmen adopted. But Mr. Monro Grier and Mr. Strachan saved the situation and led their side to a temper of sweet reasonableness and judicious deliberation. Messrs. Anglin and Ashdown were helpful in the same direction, and Col. Carnegie, besides contributing much useful information, often acted as a timely mediating force.

One result of the Conference is a large legacy of suggested commissions, bureaus and inquiries which people have now begun to distrust. But the Government can scarcely avoid putting proportional representation into force in some measure; they will proceed to unify the laws, a minimum wage for women will be established and a bureau set up to promote industrial councils. These are the centain gains of the conference.

That the leaders in the worlds of labor and capital should have improved their knowledge of one another by personal contact, and that the case for and against the legislation now desired by labor should have been presented in an intelligent form and put in record, is a less visible but possibly a more valuable gain.

#### CANADIAN COAL SITUATION. (Continued from page 14.)

that a nation, pressed by the demands of its own people, may be compelled, under certain conditions, to deprive other nations-in part at leastof even the necessaries of life until the needs of its own citizens are met. No country can be expected to send out of its confines that which is is essential to the very existence of its own people. Personally, I do not believe that the United States or any other country with a large outlook on present world affairs, will allow whole nations, especially those with whom they have been allied, to suffer direct distress with respect to fuel without seeking to alleviate it to the greatest possible extent.

When communities in Canada and the States during previous coal shortages have been in need of coal, certain communities adjacent to other sources of supply, such as wood, softer grades of coal, etc., were compelled to use these in order that the supplies elsewhere available could be distributed to those in greatest need. Correspondingly, it would not be surprising if a country like Canada, with vast fuel resources, were directed to speed up its utilization of its own fuel, and would not be left undisturbed, so to speak, in its enjoyment of burning what is now one of the luxuries of the world, namely, anthracite from the coal fields of Pennsylvania.

#### Coal Conditions in the United States.

Let us next note what in general are the conditions in the great Republic across our border. Coal production in the United States has dropped substantially behind what it was during the war years. If the present rate of production of bituminous coal is maintained for the remaining 21 weeks of the coal year, the production will about equal the output of 1913. The production of anthracite is increasing over what it was a few weeks ago, but is still short of the demand. The coal stocks of the United States have been depleted. There is great demand for transportation. Car shortage will accentuate itself with the demand for cars to move the grain crop. The exit of miners back to Europe, serious strikes, and other factors, have contributed to curtail coal production and distribution in that country. If more serious strikes should occur in the States, it will tend to make the supplying of coal to other countries, including Canada, still more precarious. Canada cannot afford to overlook how her own interests may at any time become involved by serious coal strikes in the States. These strikes are an ever-present menace. Speaking in the United States on August 8th, Senator King, of Utah, stated that he had heard "that there was a programme to organize a great strike now, tie up the transportation system and take over the railroads, then next winter, when the people were shivering for want of coal, organize another strike in the mines, cut off the country's fuel supply, and take over the mines." The Senator expressed the hope-and which we all share that government authority will be able to prevent such extremes being reached. I simply, quote the Senator's statement as indicating possibilities which he thought of sufficient importance to bring formally to the attention of his colleagues. It is clear, therefore, that coal production in the United States must necessarily fall short of meeting even the most pressing demands.

#### Common National Aims and Sympathies.

Canada is indeed exceedingly fortunate in being neighbour to a country whose national aims and sympathies are so akin to its own. During the war both countries have manifested special interchange of courtesies. In the past coal shortage, for example, the Fuel Controller, Dr. H. A. Garfield, announced that recognition of Canada's needs for coal would be on the same basis as though she were one of the states of the Union. Our own Fuel Controller, Mr. C. A. Magrath, rendered signal services to both countries. I like to recall the sentiment manifested by our neighbours when great distress has arisen due to necessity corresponding to that begotten of the Halifax catastrophe-and such sentiment has been reciprocated by Canadians when conditions have been reversed.

Obviously, so long as such sentiments govern men's actions, the people living on this continent cannot be deprived of that which is essential to their existence. Nevertheless, with the growing scarcity of coal, the United States, no matter what her good will or desire towards Canada may be, may not be able to cope with her own and with the prevailing world need. There is no doubt that in the spirit and disposition manifested in the statements just quoted our neighbour will see that Canada is fairly dealt with. We should not, however, trespass unduly upon friendly accommodation

#### Canada Must Bestir Herself.

As we have now seen, the present need of coal is urgent and world-wide. If the United States, either in the interest of her own people or in the interests of peoples whom she may conclude to be more needy than Canada, should decide that it is more necessary to supply such nations with coal, with the result that Canada's normal supply be substantially reduced, who may reasonably find fault with such a course? Even apart from governmental action, could anyone find fault with the United States coal merchants if, in their efforts to capture as much as possible of the 160,000,000 tons of annual international coal trade, they sought to deal where they could do so most advantageously? If, under such circumstances, Canada be judged to be not the best market for the United States coal dealer, from whence does Canada hope to supplement any substantial lack in supply of her coal demand. Let me emphasize the fact that there is nothing new in these possibilities so far as Canada is concerned. The handwriting on the wall has for years been legible. The whole problem has been one calling for ablest statesmanship and not for political of other temporizing and expediency. The problem will never yield to any makeshift policy. I have often marvelled that so little has actually been accomplished with respect to its permanent solution.

It is gratifying to realize that serious effort is now being made towards the development of our lignite and peat resources; also, towards the increased utilization of our coal fields in the East and in the West. I understand that work preparatory to the construction of the carbonized lignite briquetting plant to be erected under the direction of the Honorary Advisory Council for Scientific and Industrial research for the Dominion Government is being pressed ahead with despatch. This is to have a capacity of 30,000 tons of briquettes per annum. It would take over 600 such plants to replace our present coal importation from the States. However, we are very glad that this start has been made.

From the foregoing comments it is evident that an intelligent outlook upon world conditions shows scarcely any aspect of them to be of more serious moment-immediate or prospective-than this coal problem. During these warm days we should be careful to take our counsel and warning from an intelligent outlook upon these conditions and what they betoken for the future, rather than from our feelings based upon the present state of the thermometer. Whether conditions of curtailed fuel supply for Canada be delayed from materializing this coming winter or next winter, or until some time in the future, nevertheless, as I stated before, I am firmly convinced that there is no menace to Canada's economic and general welfare at all comparable to the fact that she is at present so largely dependent upon a foreign country for her fuel needs. Without this foreign supply Canada most assuredly would be put to desperate straits. Gentlemen,

is not the fuel problem of this Dominion one of magnitude and great gravity?.

#### Canada's Water-Power Heritage.

Canada, it is true, is richly endowed with water powers, but she can never depend upon this asset as a sole source of heat. We have about 19,000. 000 estimated 24-hour low-water horsepower of which less than 2,500,000 horsepower has been waterdeveloped. By no means may all the powers be economically developed.

For many years past I have been emphasizing the comparatively limited use which can be made of electric energy as a wholesale substitute for coal for heating-including the heating of build ings. There is no use whatever entertaining hope that hydro-electric energy as a heating agent may become an adequate substitute for coal for the citizens of Canda, and consequently a realization of this fact will facilitate the concentration of effort upon sources from which real relief may be derived.

#### Canada's Coal Reserves.

What, then, is to be done? In a word, we must develop our own coal reserves. Considering the country as a whole, Canada in respect of qual tity, quality and accessibility for mining purpose5 possesses coal deposits which compare favourably with those of the greatest coal mining countries of the world. Speaking in round numbers, she has nearly 1,000,000,000 tons of semi-anthracite coal, 315,000,000,000 tons of bituminous coal, and 10,000,000,000,000 tons of sub-bituminous coal and lignite.

I shall not dwell on these enormous reserves. I seems out of place to emphasize how much we have latent when alongside of it we are not able to show how beneficially these assets are being used both for our own support and for the as sistance of other needy nations. When the population lation of the Prairie Provinces are insured against yearly fuel shortage, we shall be more interested in hearing emphasis laid upon the enormous fuel reserves of these provinces; and when Canada produces more than her present amount of 2 per cent. of her total annual oil consumption we shall be more interested in hearing emphasis placed upon the statement that we have the biggest of fields in the world.

Canada's only sane policy is to develop, and that as rapidly as possible, both her own fuel and power resources, and by co-ordination of transportation and other cognate agencies to provide for the distribution and storage of fuel in all communities of the Dominion. In some respects it is more important to move coal and  $ha^{ve}$  it adequately stored and distributed throughout Canada than it is to remove the grain out of the country.

#### The Gas Industry and Research.

You, Gentlemen here assembled represent great and nation-wide industry. I know of none which offers greater results in connection with the economical usage of coal-and let it be under stood that greater economies in the burning coal are going to be absolutely demanded in the future. I know that the art of gas 'manufacture' has made great strides. I am not aware whether your organization has any central research labo atory, where your more technical problems solved, and from which you may derive expert counsel— a kind of common clearing house that more highly specialized technical information which when tion which, when applied, will efficiently build up your industry and fit it for world competition With such a laboratory you might be able discover methods for further refining some your by-products, or for dealing with them other ways so as substantially to enhance your profits and at the same time not unduly trespart upon other fields of commercial activity. ever, this is not the prime subject of discussion but I thought it was worth while just to express this personal view with regard to the great future that lies before you.

(Continued on page 35.)

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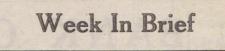
#### CANADIAN COAL SITUATION.

(Continued from page 34.) Wisdom More Than Money.

In concluding may I disgress a moment, for there is one aspect of this fuel situation which I con- $^{\text{Ceive}}$  to be of essential importance, and I feel it desirable just to mention it. In so doing I know you will not feel that I am seeking to impose upon you any view foreign to the main theme of our discussion.

A few years ago I attended an Irrigation Conference in Western Canada. At that time great development was taking place in the irrigation areas, and in the enthusiasms of these circumstances the the official programme of the Conference bore this motto:"Intelligent men no longer pray for rain- they pay for it." At the time I felt that this <sup>suggested</sup> an ill advised spirit in which to undertake irrigation or any other work. Probably those who selected the motto did so somewhat unwillingly and did not stop to consider what it may imply. Man certainly could pay for the digging of the ditches and for the construction of other Physical structures incident to irrigation development, but man does not own the water nor can he, by payment command the rain to replenish it. For a number of years my work in London took me past that busiest spot in the world-the Royal Exchange—and I used to observe upon its pediment the motto selected by Prince Albert from the Scriptures of Truth: "The Earth is the Lord's and the Fulness Thereof."

Now, what I wish here to suggest is: that in any problem, especially in one of the magnitude and seriousness of the fuel problem of Canada, We cannot afford to deal with it solely on the basis that we, of ourselves, are alone sufficient best to solve it. The Creator has placed coal and other resources in the earth beneficently to serve the needs of man, and in certain ways man, of himself, has not the control over all essential factors germane to these resources nor the full wisdom how best to dispose of them. If, for example, man could simply have paid for the rain or its equivalent, we may assume that we would not be experiencing the distressing conditions of dryhess which this season have stimulated settlement in our Northwest. Correspondingly, I wish to suggest that in the development of Canada's fuel fuel resources for the need and general benefit of the people there certainly is required more Wisdom than has hitherto been manifested in con-<sup>nection</sup> with this problem, and this wisdom,



Chatham is to take over the electrical business of the Chatham Gas Company.

The Chief of Police of Brantford, in which city ten fires have occurred in as many consecutive in as many consecutive days, has received two threatening letters from the firebug.

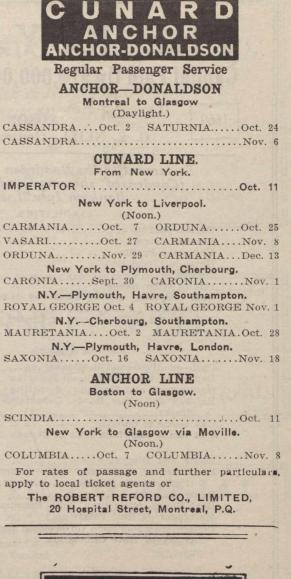
Winnipeg ratepayers will be asked to vote on a by-law authorizing the expenditure of \$600,000 for buying dairies at the civic elections on November 28. The proposal has been to acquire the plants and business of the Crescent Creamery Co., and the City Dairy Co., which control most of the Winnipeg business.

Charges that the Winnipeg Electric Railway Company's capitalization has been inflated to the extent of over \$3,000,000; cost melon cutting in the year 1912 cost the company \$3,450,000; and that there was an issue of \$2,000,000 worth of bonds of which investigators can find no record, were made at a meeting of the transportation committee of the Winnipeg city council by O. A. Hunt, K.C., counsel for the city.

#### J. G. M'GREGORY DEAD.

James G. McGregory, senior member of J. W. Carmichael & Co., died at New Glasgow, aged 69 years. He was a director in the Nova Scotia Steel and Coal Company, the Eastern Car Co., and T. Matheson & Co.

A STORY TOLD of Bishop Greer of New York illustrates the plain nature of the man. On an occasion when he was to confirm a class, a carriage was sent for him in charge of an English coachman who had been imported by a wealthy American. Bishop Greer walked unaccompanied and in non-clerical dress from his front door to the carriage and entered it-but the driver did not move his horses. After waiting for a moment the Bishop asked the man why he did not drive on. "I'm waiting for the Lord Bishop of New York, Sir," the proper person replied. "Well," said the Bishop, "I'm it. Drive on."





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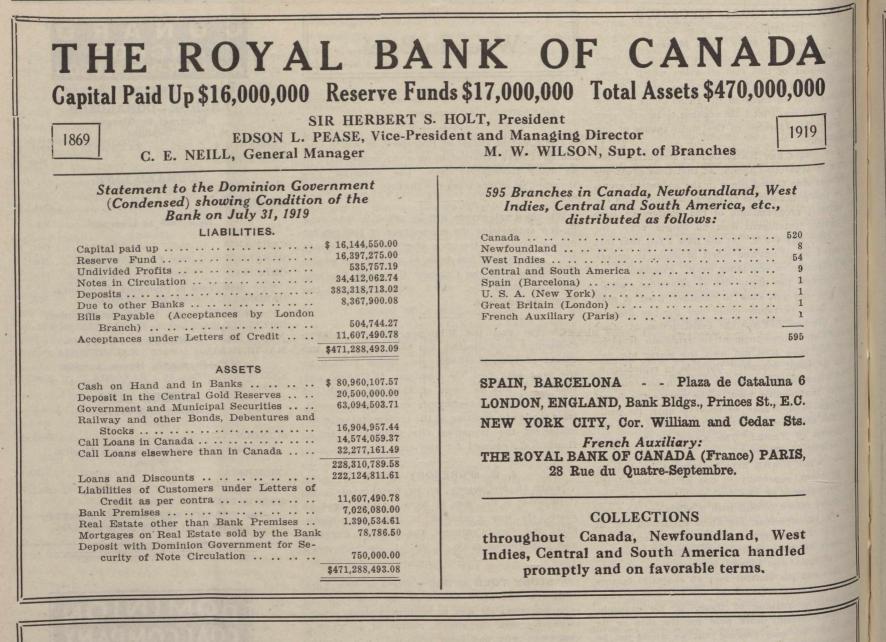
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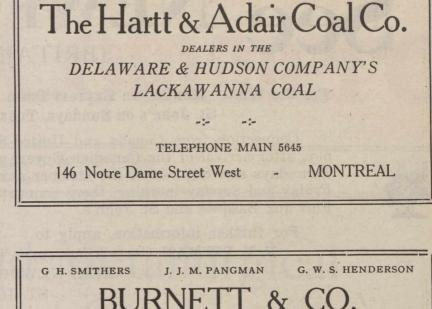
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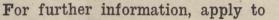
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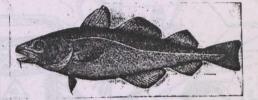
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Newfoundland is the home of the cod fish and this forms the largest item in her fish production. But the island also produces large quantities of herring, salmon, lobster and many of the lesser fishes.

Heretofore these have come on the markets of the world in the drysalted and pickled condition. But the frozen fish industry is rapidly developing. The latest reports from the British markets affirm that "the recent arrival of Newfoundland frozen fish was superior to the fresh fish often received from the Iceland grounds."



Newfoundland's forest wealth is large. The mineral resources are only partially known, although the iron mines on Bell Island have an output of 1,500,000 tons, and the industrial possibilities are attractive from every point of view. The Government of Newfoundland gives generous aid to agricultural development. The value of agricultural products now approximates over \$4,000,000. Sheep raising is being encouraged and the pregress in that direction is remarkable.



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Upstairs or down, it warms any room, any time, without trouble or inconvenience. There are no ashes or coal to bother with, and the house doesn't become uncomfortably hot and stuffy.

The Perfection Oil Heater is well made and good-looking. Its brass burner insures years of service and turns every drop of Imperial Royalite Coal Oil into elean, odorless heat. The wick stop prevents smoking.

Nickel trimmings, with the drum black japanned or blue enameled.

Ask your dealer to show you a Perfection Heater, with the triangle trademark.

For sale by de ters everywhere.

#### IMPERIAL OIL LIMITED Power Heat Light Lubrication Branches in All Cities.



40