THE IMPERIAL OIL REVIEW

S.S. Imperoyal at Levis P.Q.

Discharging the first cargo at the new plant described in this issue.
The Fuel Oil Situation

With a daily consumption of more than a million barrels of crude in the United States and Canada, a reserve that can be maintained against emergencies is never more than a bare four or five months' supply. With such a precarious margin of safety, it is the oil trade's continuous problem to maintain something of a balance between the production and consumption of petroleum products, and despite all foresight there has always been and probably always will be, alternating periods of plenty and penury. A newly-discovered area may glut the crude market, and to absorb the surplus, additional use for the manufactured products must be seized, creating an additional exhaustion of oil pools; or, as in a recent instance bearing only indirectly on the war crisis, the political troubles of a foreign Government, may without warning materially curtail the crude output and an era of famine continue until resultant higher prices stimulate the discovery and development of such fields. These ever-recurring phenomena of the oil industry, in combination with other factors, underlie the fuel oil situation as it exists to-day.

After the Armistice

The armistice, which disemboweld so many barrels of crude, within a week turned back the great flood of fuel oil and gasoline which during the war poured into Europe from the American Continent. The war consumption vanished in a night and huge stocks of fuel oil piled up behind the dam at the seaboard. Tankers released from war service in the Atlantic found employment in the Mexican oil trade, augmenting the over-supply and further depressing the market. The price dropped as low as $1.53 per barrel at Harlem.

The agencies of the industry for the relief of such a situation came at once into play. Large manufacturing and power plants were induced to contract the fact that the consumption of this product, the continued, was fact exceeding the natural production of gasoline. To meet this demand for gasoline, much larger quantities of crude oil had to be produced through pressure stills, the effect being to reduce to a correspondingly extended output of gas and fuel oils.

The Mexican Situation

When at this juncture former President Carranza's soldiers brought to a standstill all drilling operations in Mexico, they abruptly frustrated plans of the oil companies operating there to provide against a decrease in production resulting from the advent of salt water in many of their wells. Salt water is a relatively costless hazard, but it has already ruined a very considerable part of Mexico's production, which it was hoped new areas then being drilled would replace. The first large well to suffer was the Bosca, drilled in 1918. The next was the Portero del Lazo, which yielded more than 100,000,000 barrels of oil and suddenly began producing salt water. Almost simultaneously a similar fate overtook the wells on the Aztec and Hacienda field. In the Tepeague field, water showed itself in March last year and successively one well after another ceased to produce oil. In the southern field, salt water reduced the potential production by more than 340,000 barrels per day since December 1, 1918, a loss of about fifteen million dollars for the southern field.

The eastern seaboard of the United States and Canada are almost entirely dependent upon Mexico for its fuel oil. The great proportion of crude produced in the United States, being easily refinable, is too valuable to compete with coal and is therefore sufficiently enough being produced to take care of refinery requirements. Consequently, when Carranza stopped drilling operations in Mexico, most of the Atlantic seaboard and gulf district companies found themselves oversold on existing contracts for fuel oil, and some of them, being forced to buy more than they could market to replace the Mexican crude, upon which they had depended to carry out their fuel oil obligations, experienced heavy losses. The conditions are well illustrated in the fact that the United States shipping board's and Navy Department's request for bids to supply something over 30,000,000 barrels of fuel oil in 1920 fell far short of the quantities ordered. This attracted public comment here as well as in the United States and there has been, perhaps, a tendency to exaggerate the effect which a possible shortage may produce upon the trade.

Some Relief Now Apparent

There are, in fact, certain aspects of the situation which would seem to indicate relief from the acute shortages of the past few months. Carranza, during the last weeks of his administration, issued temporary permits under which the holders of lands were given permission to resume and production stimulated. It is expected that the Mexican Government will do everything possible to encourage further development of the oil resources of Mexico.

The latest figures obtainable at the time of writing indicate a decided increase in Mexican exports. The March export figures being the highest figure in the history of the industry, amounted to the total of 10,335,813 barrels which compares with 8,726,000 barrels, the former high record of October, 1919. The increase affected all tankers and reduced the potential potential production by more than 340,000 barrels per day since December 1, 1918, a loss of about fifteen million dollars for the southern field.

The eastern seaboard of the United States and Canada is almost entirely dependent upon Mexico for its oil. The market, for instance, the intersection of major Canadian trade routes, is to a great extent dependent upon the Mexican oil field, for the value of the total output of oil produced was greater than the 16,000,000 barrels produced by the United States, and the oil produced exceeded in value to 2,000,000 barrels.
The Source of Petroleum Crude Oil

The First of a Series of Instructive Talks on Oil Production

By Superintendent D. M. Allin, Jr., Halifax Refinery

PETROLEUM crude oil is found in certain rock sand at various depths below the earth's surface. How the oil originally located there is a question that has been debated by many geologists and mineralogists, many of them taking different views.

For instance, some believe that in prehistoric ages many lakes and rivers, through erosion, were swallowed up; the fish and sea vegetation from these, through ages of decomposition and chemical action became what we now term petroleum crude oil. Others claim that deadened animals and vegetation is the true source. Still another group claims that a certain rock sand produces petroleum; while many other eminent men to use a slang phrase, "Leave it to George" to solve.

Finding Oil Areas

The question of locating the proper place or spot to drill a well for oil is decided after many anxious days and weeks, and after traveling many weary miles far from railways, highways or footpaths in company with some noted geologist who is qualified as such after years of careful study in the science of the interior structure of the earth. He is also guided in a measure by the topography; in other words, the "lay of the land."

There is what is commonly called in an oil country, the "drill." The "drill" is the centre of the oil bed and is generally found by locating where the strata cuts out to the surface. This cropping out may take place in a radius of miles, more or less. The centre of this cropping out is the much-looked-for "drill" where drilling first begins.

Drilling a Well

The average well is somewhere about 1,000 feet deep. An expert driller is a valuable man as it requires muscle, daring and good judgment to overcome the numerous obstacles to success. When the drill penetrates the oil strata and the oil flows to the surface the most anxious moment has arrived.

The hope of all those interested is that the well will prove a gusher. In other words, they are looking for a "dry hole." Should anything go wrong with the drilling, it would be advisable to keep in mind the possibility of the "dry hole."

Testing Crude Oil

The quality of the oil is tested by taking the gravity. Samples from new oil wells are generally forwarded to a laboratory where a distillation test is made, separating the various products at the different fractions, thereby arriving at its true value.

The crude oil stored in tanks located near the wells can be and is pumped through pipes lines hundreds of miles to a refinery or to the seaboard. This is made possible by locating storage tanks and high pressure pumps (stages as they are called) so many miles apart. For instance, pumping stations located eighty miles apart will deliver through a ten-inch line at a pressure of one thousand pounds per square inch at the pumps, and 575 barrels per hour, which equals 6,600 barrels per day.

Many Wells Together

Crude oil wells are drilled in many cases within one hundred feet or therabouts of each other, and as a great many wells after time, begin to show up, it is a common thing to see a worse or more of them connected by triangle and cable, and driven by a single oil engine. This engine is operated by one engineer who has in all likelihood a number of these to oversee, probably visiting each pumping unit once daily.

When visiting Wyoming near the border of Montana, you will see a large number of these wells connected together as outlined, but they had pumped dry and both wells and equipment were abandoned.

We may say here that the average well costs from $2,000.00 to $2,500.00 to drill, and many wells are drilled that do not produce oil. In other words, they are known as "dry holes."

Should anyone wish to become a millionnaire they would do well to study the oil business as it is conducted and test the possibility of the "dry hole."

The Only Canadian Asphalt Plant

By Superintendent J. L. Finley, Montreal East.

The present asphalt plant at Montreal is situated at the extreme end of the refinery, covers about eight acres. It consists of six 1,000-barrel stills, filling buildings, loading rack for tank cars, pump house, receiving house and storage plant as well as numerous storage and receiving tanks.

In order to keep pace with the ever-increasing demand for Imperial Asphalt products it has been necessary to increase the still and filling capacity of the asphalt department.

New Construction

At the present time we have under construction four 1,000-barrel stills, another large filling building, storage and running tanks.

We manufacture in this department all grades of paving asphalt, lag oils, re-dressed asphalt, binders, and oxidized asphalt used by manufacturers of prepared roofing. During the year 1909 we shipped from this department mechanically, upon completion of the mixing building, which we expect will double the production, which mixing building will take care of our asphalt plant and cold patch products.

Capacity to be Nearly Doubled

The present capacity of the Asphalt Department is about 1,450 tons per day, and with our new stills in operation we expect to increase our capacity to over 3,000 tons per day.

In connection with this department we have a well equipped Drum Plant for the manufacture of Steel Drums used for shipping our asphalt. This department can turn out 700 drums daily.

Wide Use of Imperial Asphalts

Our products are shipped in wooden and steel packages and heater pipe type tank cars to all parts of the Dominion, and wherever you see new roads being laid with asphalt you will most always find "Imperial Asphalt" used.

It is very interesting to go through the Asphalt Department and follow the crude oil through the many operations in connection with the manufacture of the different asphalt products, and any employee of Imperial Oil Limited visiting Montreal should not fail to pay a visit to our Asphalt Plant.
Our New Plant at Levis, P.Q.

Another Important Link in the Imperial Chain of Stations

By Mr. Thomas Montgomery, Chief Engineer, Sarnia.

ONE of the plants of Imperial Oil Limited, constructed during the summer of 1919, is located at Levis, Quebec, and constitutes what is termed a bulk cargo storage station for the storage of gasoline, refined oil, and fuel oil.

Situated in a cove which, on account of the rocky bluffs which extend along both shores of the river, is practically the only available spot for several miles along the St. Lawrence, it is ideally located for the handling of bulk cargoes of oil in tank steamers, and for the fueling of ocean-going boats. It is the only station between Montreal and Halifax at which boats are able to replenish their supply of fuel oil.

The Pier to Deep Water

A pier extends 400 feet from shore to deep water, and which at low tide accommodates vessels with a draught of 28 feet. This pier was constructed several years ago by the Canadian Government, from whom it was purchased by Imperial Oil Limited. Upon this pier are pipe lines which extend from the unloading connections on the face of the pier back to the storage tanks on shore, a distance of nearly half a mile. The refined oil and gasoline are handled through two-inch lines, and the fuel oil through a twelve-inch line. There are four 35,000 barrel storage tanks, two of which are used for fuel oil, and one each for refined oil and gasoline. In each fuel oil tank are two four-flat coil heaters and three box coil heaters. It is necessary in cold weather to keep the fuel oil warm on account of its low gravity that it may be more readily handled by the pumps. The steam for these heaters, as well as that used for heating the various buildings, is furnished from a 14 feet by 32 feet by 10 inch boiler which contains a 54 inch by 14 feet H.R.T. boiler.

Splendid Pumping Equipment

The pumping equipment is housed in a commodious brick building and consists of two vertical Gould's Triplex Piston Pumps, each with a capacity of 750 gallons per minute, for pumping the fuel oil, and two Cameron No. 10 "DIV" Centrifugal Pumps, each with a capacity of 3,000 gallons per minute, which are used for the refined oil and gasoline. The pumps are belt-driven and a 30 h.p., 60-cycle, 3-phase, induction motor furnishes the power for operating them.

The Levis plant includes a two-story stable, a wagon shed and two burlapping and filling tanks to accommodate the tank wagon service of the marketing department in Levis and the surrounding communities. There is an office, and also a loading rack for the filling of tank cars, which at one end will accommodate four cars. All of the buildings are of modern brick and concrete construction, typical of the other buildings which are being erected by Imperial Oil Limited throughout the Dominion.

Construction Supervised by Sarnia

The construction of the Levis plant was carried out by the mechanical department of the Sarnia Refinery, under the supervision of Mr. H. F. Whipple, Mr. James McLaughlin installed all the oil, steam and water lines, and Mr. Fred Abrait had charge of the erection of the storage tanks. In the erection of these storage tanks, Mr. Abrams made a record for himself as the four tanks were completed and tested by filling with water in 41/2 actual working days, which is "going some."

Trustees of Co-operative Investment Trust

The Board of Trustees of the Co-operative Investment Trust of Imperial Oil Limited are: Chairman, Victor Ross, Head Office, Toronto; Vice-Chairman, T. C. McCobb, Sarnia; Treasurer, E. W. Kennedy, Sarnia; Office: Members, W. N. Hampton, Avondale Plant, Sarnia; Refinery, and T. S. Palen, Princess St. Yard, Toronto.

They Use Our Products

We are glad to say that all these mines use Imperial Products. Imperial Capitol Cylinder, Imperial Pedarite, Imperial Prairie Harvest, Imperial Atlantic Red, Imperial Solar Red, Imperial Arctic Engine, Imperial Winter Black, Imperial Royalite Coal Oil and large quantities of Imperial lubricating greases are all giving splendid satisfaction.

Another prospective large user of Imperial Products seems to be the United States, now established in the midst of these mines is a briquetting plant. This plant will be under this system by the Dominion Government, and will be controlled and operated by the Lignite Utilization Board of Canada. The initial cost of this plant will likely be $200,000 and it is expected to have a briquetting capacity of 200,000 tons annually.

The Briquetting Process

Briefly, the briquetting process consists of binding the coal dust and crushed pieces of coal with a binder, such as asphalt, coal tar, or other bituminous binder and of pressing the mixture into briquettes, two of these having their own locomotive for switching full and empty cars to and from the different lines of railway.

The Lignite Fields of Southern Saskatchewan

Briquetting Plants Will Increase the Already Extensive Use of Imperial Products

By Mr. H. C. Sanberg, Estevan, Sask.

Eastern people have been heard to ask what device under the sun the Westerner resorts to for a mid-winter time-killer. They admit that the seeding, growing and harvesting seasons are filled with interest and activity, but with no real splitting in January and February and no sugar making in March, the problem of existence during the winter is beyond their comprehension.

If our Eastern friends could visit the large coal areas of southern Saskatchewan they would discover that the winter months are not months of dreams, conventions and idleness, but busy months where hundreds of farmers and practical miners are engaged in mining lignite coal for local consumption and for distribution throughout the prairie provinces.

Rich Coal District

This rich coal-bearing area of Southern Saskatchewan is located about 200 miles southeast of Wascana, and about 20 miles north from the international boundary. The towns of Bienfait, Estevan and Shand are principal centres of this activity. Experts estimate that there are over nine billion tons of lignite coal in this district, running in seams from three to eighteen feet in thickness and at a depth of twenty to eighty feet underground—the deeper the seam the better the quality.

There are six large mines operated by modern mining machinery and a large number of small mines worked by the old-fashioned method of pick, shovel, borax and car. The largest mine has an annual output in the neighborhood of 120,000 tons, the second largest 90,000, and the balance ranging from 80,000 down to 2,000 tons annually. These larger mines are operated by steam power and are lighted by electricity, each mine having its own electric plant. Two of these have their own locomotive for switching full and empty cars to and from the different lines of railway.

They use our products.

LIGNITE COAL MINE AT BIEFNAIT, SASK.
One of the Principal Centres of Coal Mining Activity.

Government Demonstration

It is not the intention of the Government to enter the business of (Continued on page 18).
Our Plant At Ottawa
Many Improvements and Increased Accommodation in the Capital

By Mr. A. G. Greenfield, Agent, Ottawa, Ont.

Early in 1871 a service was operated by the Central Canada Railway between Ottawa and Carleton Place. In 1883 the Canadian Atlantic Railway, connecting with the main line of the Grand Trunk Railway at Ottawa Junction, established the first through service from Montreal.

Marketing Oil Products
The inception of the oil industry in Ottawa dates from the year 1860, when a branch of the Samuel Rogers Oil Company was opened by the district salesmen of the company at that time, Mr. W. D. Morris. The business continued to progress, and in 1864 the Rogers & Morris Company, Limited, was formed, which afterwards transferred its interests to the Queen City Oil Company, who later merged into Imperial Oil Limited.

In 1906 it was found necessary to provide larger premises, and the warehouse was transferred to the present location at the corner of Percy and Catherine Streets. Within ten years the business had outgrown this plant, and in the spring of 1910 it was decided to purchase some adjacent property and construct a commodious and modern plant in keeping with the company's standing.

A Fine Plant
The result is the City of Ottawa has today one of the finest distributing depots of its size in the Dominion of Canada. A modern office building with Service Station attached, has been erected; a three-storey, fireproof warehouse constructed; a steam-heated lubricating oil tank building with ten 250-barrel tanks installed; an up-to-date garage and stable built, and numerous improvements added.

The plans for the general construction were compiled under the supervision of Mr. T. Montgomery, chief engineer of the Company, at Sarina. The office building and service station plans were drawn up under the supervision of Mr. E. P. Hultkr.

Construction Work Handicapped
The demolishing of the old plant and work of reconstruction was commenced on March 21st, 1919, under the immediate supervision of Mr. Howard Kirby, of Sarina. Very unfavorable weather was experienced during the early period of construction. Business had to be carried on as usual and other adverse conditions, owing to a strike in Ottawa at the time, further delayed the work.

In the face of these difficulties, however, and the largest volume of business in the history of the Company ever handled by the Ottawa Branch, the entire reconstruction of the plant was practically completed and the staff in their new quarters on the first of November. This is a record for the amount of work accomplished in view of the obstacles encountered. In every detail the plans and construction work are a credit to the Company. Our illustration will verify this.

A Modern "Pied Piper"
The Opening of the New Schoolhouse at Imperoyal

The School Parade from the old to the new schoolhouse at Imperoyal took place on May 7th and will stand out as a red letter day in the history of the community.

The procession which was quite a lengthy one consisted of pupils, teachers, superintendent of the plant and many other interested people. Starting from the old schoolhouse at the camp the procession was headed by Chief McKay, as the bug "drum major."

The "Pied Piper"
Close behind him and playing the bagpipes was Mr. Brand, wearing the uniform of the Northfield Highlanders, and following the piper was the standard bearer carrying the Union Jack. Then came the children all care free, happy, shouting from real joy, waving their flags, cheering all the time, as in the old legend of the "Pied Piper of Hamelin."

Past the vehicle offices, through the heart of the plant, past the pump house, whose sweet blowing shrill note gave them an air of cheer and hope for success in their beautiful new quarters, the procession wound its way in true military fashion, the teachers acting as officers on the left of the column, while such persons as Mr. D. M. Allan, "Doc" James, Mr. B. C. Leaver and Mr. F. C. Mclachlin brought up the rear. Reaching the main office a band was called in front of the building.

Fine Quartermasters
The new building represents another step forward in the history of Imperoyal. Here the children will have more conveniences and much more comfort than they had in their temporary quarters in the camp. The teaching staff has also been increased by the temporary appointment of Miss A. O'Brien, who will be succeeded by Miss Jean Dunlop.

The formal opening of the school took place on the evening of May 7th and the children themselves giving a most enjoyable entertainment. Addresses given by men interested in education proved both interesting and instructive.

An "At Home"
Another interesting event in connection with the new school was the I.A.A. "At Home" on April 20th. This proved to be a huge success, nearly 400 persons attending. A charge was made far admission, the proceeds to furnish a fund for the school library.

The programme was opened by an address from Mr. D. M. Allan, Jr., Superintendent of the plant, who also acted as chairman. He spoke of the necessity for the building. The fast growing population of the district fully warranted the supplying of extensive school accommodation. He also read a telegram from the medical assistant at the oil plant, W. Clarence James, male nurse, who donated twelve volumes to the library of the new school.

Supper and Dancing
After the concert programme was completed the party sat down to supper. The remainder of the evening was taken up with dancing. The concert committee which comprised (Continued on page 144)
EDITORIAL

1920 Possibilities

There is every reason to believe that when the sales records for 1920 are finally compiled it will be shown that we have done the biggest year's business of our history.

Despite some difficulties in getting all the crude oil we want, our refineries are turning out a tremendous gush of lubricating and the Marketing Department is calling for more, more, more.

In the farming districts our old customers are depending on us for their supplies, while many hundreds of new farmers and many thousands of new automobiles must also be supplied.

In individual fields, other plants like our own are working full time and overtime to meet the demand for their products. Many of these plants now depend on Imperial products exclusively. Many more are gradually moving more and more of their business with us. In every branch of our business prospects are bright.

The co-operation of all Imperial employees is required to make the possible real. We must be careful that we can depend upon this co-operation. Stopping leaks, keeping equipment in good working order, doing the right job correctly the first time these are factors which help.

Nothing is Impossible

Many of the realized facts of to-day were the dreams of yesterday and the impossible things of a few short years ago. The modern motor car is a far-off dream no more.

1920 is going to be a big year for Imperial. We face a bust in the South, a baby boom in the West, a rush of orders from the farms. We are in the position to meet the situation.

The Spirit of the Force

We are approaching the end of another fine, fair, exhibition and local parade season. Imperial Oil Limited will do its full share in representing the company. Last year Imperial exhibits won several gold medals, diplomas and purple ribbons.

Yesterday our cars travelled on occasional and prairie schooners to-day he is rushed along by railroads and motor cars; he soars out power-driven wings from continent to continent and talks around the world. To-morrow he may draw upon forces yet unknown, may converse with and even visit the planets. Nothing is really impossible.

With courage that refuses to accept defeat, with ambition that inspires us to achieve, vision to perceive the possibilities of the future and stamina to keep everlastingly at it; some things may be harder than others but, after all, nothing is really impossible.

The man or the woman who refuses to recognize the impossible is constantly doing the impossible. The can't-be-done jobs are being done every day.

Imperial Service

It is very gratifying to The Review, as well as to its readers, to know that we are able to publish so many stories and incidents illustrating the giving of Imperial Service to the users of our products.

We will continue to publish these stories and we urge that Review correspondents and all others continue to send us accounts of occasions where men and women are rendering or have rendered an Imperial Service which would make a credit to our Organization can profitably pattern.

We believe that every person who drives cars or uses Imperial products is entitled to the very best of service. Everybody in our Organization, from refinery men, stenographers, accountants and clerks, as well as those in the Marketing Division, have important parts to play in the giving of Imperial Service.

If you know the story of any Imperial Service worthy of publication send it to The Review, call the attention of your Review correspondent to the incident or send in the story direct.

Co-operative Potato Raising

Just as the Twin Cities are going to do, a story arrives from Sarnia of a 25-acre potato field now being planted by the first men to the Imperial refinery and general office employees.

A man has been hired to do the planting, and much of the work of planting and cultivating will be performed in the spare moments of the members of the Potato Club. The number of bags of potatoes which the members of the Potato Club will produce should be a big factor in keeping down the H.C.L. in the houses of the members of the club.

A complete story of the Sarnia Potato Club and the progress of the work will appear in our July issue. The Review requests the co-operation of all. We are always on the lookout for interesting subjects for future issues.

Imperial Refinery Schools

A very practical plan of education in modern refinery practice, through a series of lectures on refining methods, has been instituted at Sarnia and Imperial Refinery School.

Superintendent Alton is personally addressing various groups of men at frequent intervals of a two-hour meeting each, on a broad and constructive manner.

A novel feature is that the demand for refinery assistants has enlisted the aid of Assistant Superintendent Hauffey and others in giving a similar course.

The idea and plan of working these courses should be of practical value to men attending. We are growing fast and cannot have too many men preparing for the greater responsibilities, which our bigger business of to-morrow, will thrust upon us.

Large Shipbuilding Yards

We also have two ship yards where some of the largest and most up-to-date steamers, varying in size from the small ocean-going traveler to the largest lake freighter and passenger boats, have been built. It may be mentioned that the "W. Grant Morden," which has a carrying capacity of 145,000 gross tons and is 562 ft long, was built at Port Arthur. The fine passenger boat "Noronic," whose massive picture adorns the walls of many railway stations in the west and offices of the Canadian National, was completed at Port Arthur. One of the largest oil-refining works built in Canada was constructed at Port William, where there is also a large car manufacturing plant employing many men in building and repairing box cars and other rolling stock.

Where East Meets West

The Twin Cities at the Head of Navigation on Lake Superior

By Mr. A. N. MacKinnon, Port Arthur, Ontario.

F

ROM a passing glance at the map, Port Arthur and Fort William would seem to be two cities away in the interior a considerable distance from our eastern and western centres of industry. Being situated, however, at the head of the great lakes, the extreme western part of Lake Superior is both easily reached and enviable position in the commerce of Canada. Three great transcontinental railway lines converge here linking up with the wonderful advantages of rail transportation of commerce with boat or rail transportation.

In other words, these parts are situated at a pivotal point of vital interest in the development of our eastern and western industries. It is at these points that the grains of our western provinces break bulk, as well as the products of our eastern industries, on their way to western trade.

Excellant Harbor Frontage

The two cities adjoining one another give a harbor frontage of over twenty miles this is deep enough to accommodate large vessels. It is not unusual for some of our elevators to deliver 60,000 bushels of grain per hour to steamers. Considerable consideration of the open waterway of Lake Superior, is the present condition of the port. No waterway connecting the lake with the sea, the only depth of water in the Great Lakes.

Beautiful Surroundings

The surrounding country is liquid in the small timber and jute woods grows in plenty but it is dotted with schools of small lakes and rivers where fish such as trout and salmon are abundant in plenty. There are a few very pretty falls through agriculture is strictly limited.

A motor drive to Kakabeka Falls on the Kaministikwia river, a distance of 22 miles, is wonderful. There you may rest and admire the beautiful woods of spruce trees, watching the water raging a precipice of a foot to a foot into a deep gorge below. The banks of the river are sprayed for some distance with a heavy mist. Taking it all round, nature has adorned the entire district with wonderful surroundings.

At Port William, our Company have a commodious station with extensive tankage accommodation. There is a dock of sufficient depth to allow the largest vessels to the lakes, and the other oil supplies. A direct lake communication is maintained at the same stage and with the other oil supplies. A direct lake communication is maintained at the same stage and with the other oil supplies. A direct lake communication is maintained at the same stage and with the other oil supplies.
The Fuel Oil Industry

The Fuel Oil Industry (Continued from page 3.)

The Halifax office, the object of which club is to hold similar entertainments from time to time.

"The Imps' Joy Club" (Good back trade oil storage tanks into one of the many clubs in a large way are part and parcel of Imperial Oil Limited, and which do so much to keep alive the spirit de corps in work as well as in play.


card.

The Committee had a splendid idea in the dance cards, the title of each dance being preordained by the names of various Imperial products. Perhaps a hidden virtue rested here, giving to everybody's "point" an essential sense of furnishing, urging them on in "high" as the "Queen" and "Premier" were not to fail to do when it came to their turn on the floor.

The success of the dance has had as its most pleasing result the formation of a social organization in the Halifax office.

The Oil Has Been Offered without a Social Club for a long time, presently on account of so many of the staff feeling the necessity of one as the majority have had their homes here; but the "keep together" spirit of the times has at last taken hold and the staff will now get together once a week for the joy of themselves and others.

The officers of the "Imps' Joy Club" for 1920 are: Mr. D. F. Harris, President; Mr. M. M. Kelly, Vice-President; Miss Frances Phillips, Secretary; Mr. A. H. Booth, Treasurer. Mr. and Mrs. N. S. Shadbolt were elected honorary members.

A full list of members is already assured and as soon as the committee are formed they will begin active preparations for a full programme covering both winter and summer activities.

Many Imperial Customers

The plant of these concerns, in addition to many others, have been for years and are now under contract with us for their supplies of petroleum products.

Numerous other large industries, also under contract for Imperial products, will draw their supplies from our new and up-to-date distributing plant.

The delivery equipment of the Ottawa Branch at the present time consists of three motor truck tanks, a three-ton motor truck, five 150-gallon and gas tank cars, a fuel tank wagon, a flat ferry and two express cars, which are kept continually on the move during the busy seasons.

Since the original Company was established in 1888, it has been represented in Ottawa by—

Mr. W. D. Morris—1889-1900.
Mr. C. S. Smith—1915-1916.
Mr. A. C. Green—1917-1931.

The oil industry in Ottawa continues to flourish and the new house of Imperial Oil Limited will no doubt continue to be the scene of activity in the oil business for many years to come.
Harvesting a Short Crop

Necessity is Indeed the "Mother of Invention"

By Salesman Mr. H. W. Balmer, Regina.

方法 of preparing the land for crops and methods of farming in the western provinces is very much the same.

The lack of sufficient rainfall normally makes it necessary for a system to be employed by which moisture can be conserved for the coming crops. This process is commonly known as dry-farming, and the system of summer-fallowing is employed.

Summer-fallowing is preparing the soil and cultivating one year to make ready for seeding the following spring. The idea being to keep the soil in a loose condition so that what moisture does fall is kept from evaporating and by keeping the top soil worked after each rain this is accomplished in a large measure.

Very Little Rainfall

This method of farming has proved itself to a degree in the southern part of Saskatchewan, where the last three years have been unusually dry. In 1916 farmers were favored with an unusually heavy rainfall which also provided for a fair crop in 1917, a year with very little rainfall. The years 1916 and 1917 had very little rainfall also, and on account of this succession of dry years, very poor crops were general, and the only farmers who had any crop to speak of, were those who followed the dry-farming process closely.

The illustration is of a common hay mower arranged with a small platform and reel driven from one of the drive wheels, and arranged so that the very short growth could be cut and saved. The platform was allowed to fill and the man following the mower with a hand rake would pull it off in bunches that could be picked up, and taken to the stack or threshing machine. The Common Binder Header or Reaper could not get low enough to take care of this unusual short crop, and many of these improvised machines were used.

"Next Year's Country"

Even with these bad conditions to contend with the people are still optimistic, and feel that they will make good in time. As has often been said this is a "Next Year's Country," everybody is looking forward to a good crop in 1920.

We of the Imperial Oil Limited, are also following the people with this same feeling of optimism, and are extending our service and equipment to meet the increasing demand for Imperial Products, so that when the time does come, we will be ready and able to give real "Imperial" service then, as we are endeavoring to do now.

Reconstruction

By Mr. C. A. Higgs, Regina.

Take it as one word or two words. As one word it is applicable to a world-wide problem in which all of us are interested and appreciative of the fact that the world is recovering and being reconstructed.

As two words, "reconstruction," we get closer home. The construction being done by Imperial Oil Limited is one of the biggest things going on in the Dominion to-day. Do we as employees realize the full significance of the constructive policy of the Company?

"Construction" means to build, whether it is a tank, a 20 x 30 warehouse, a pair of tanks or a service station, and Imperial Oil Limited is certainly doing its share of constructive work throughout Canada. Especially is this true in the prairie provinces, where it has a far-reaching effect.

Where a small town (and there are lots of them) is favored with an Imperial Oil Limited tank station, it means that the Company thinks enough of that community to spend a few thousand dollars to better Imperial Oil Service in that locality and we should use this fact wherever possible as an argument for more business because increased business development following such enterprise will come just as surely as the night follows the day.

This argument is one that grows in power as each division grows. You cannot wear it out any more than expansion can be contracted. Let us use the advantage the Company is giving us, take it to ourselves, make it our very own and in proportion to the efforts we put forth, will results be obtained.

A Modern Pied Piper

(Continued from page 9)

included of A. Hart (chairman), Mrs. Jas. Skinner, Mrs. F. W. McKay, Mrs. P. Selfors, Mr. W. C. Young and Messrs. Murphy, Carter and Crawley, are to be congratulated for the efficient manner in which the whole affair was arranged. Director Very little rainfall also, and on ac- count of this succession of dry years, very poor crops were general, and the only farmers who had any crop to speak of, were those who followed the dry-farming process closely.

The illustration is of a common hay mower arranged with a small platform and reel driven from one of the drive wheels, and arranged so that the very short growth could be cut and saved. The platform was allowed to fill and the man following the mower with a hand rake would pull it off in bunches that could be picked up, and taken to the stack or threshing machine. The Common Binder Header or Reaper could not get low enough to take care of this unusual short crop, and many of these improvised machines were used.

"Next Year's Country"

Even with these bad conditions to contend with the people are still optimistic, and feel that they will make good in time. As has often been said this is a "Next Year's Country," everybody is looking forward to a good crop in 1920.

We of the Imperial Oil Limited, are also following the people with this same feeling of optimism, and are extending our service and equipment to meet the increasing demand for Imperial Products, so that when the time does come, we will be ready and able to give real "Imperial" service then, as we are endeavoring to do now.

Reconstruction

By Mr. C. A. Higgs, Regina.

Take it as one word or two words. As one word it is applicable to a world-wide problem in which all of us are interested and appreciative of the fact that the world is recovering and being reconstructed.

As two words, "reconstruction," we get closer home. The construction being done by Imperial Oil Limited is one of the biggest things going on in the Dominion to-day. Do we as employees realize the full significance of the constructive policy of the Company?

"Construction" means to build, whether it is a tank, a 20 x 30 warehouse, a pair of tanks or a service station, and Imperial Oil Limited is certainly doing its share of constructive work throughout Canada. Especially is this true in the prairie provinces, where it has a far-reaching effect.

Where a small town (and there are lots of them) is favored with an Imperial Oil Limited tank station, it means that the Company thinks enough of that community to spend a few thousand dollars to better Imperial Oil Service in that locality and we should use this fact wherever possible as an argument for more business because increased business development following such enterprise will come just as surely as the night follows the day.

This argument is one that grows in power as each division grows. You cannot wear it out any more than expansion can be contracted. Let us use the advantage the Company is giving us, take it to ourselves, make it our very own and in proportion to the efforts we put forth, will results be obtained.

A Modern Pied Piper

(Continued from page 9)
The above photograph is of the aeroplane used by Col. Hartley and Capt. Douglas on their international flight last month. It was taken just before they left Ottawa on the return journey to Washington when they travelled via Toronto.

Before leaving they took on supplies of Imperial Queen Gasoline and Gaygoyle Motor Oil and they made excellent time, arriving at Toronto in two hours and five minutes.

Both aviators before leaving the Capital expressed their appreciation of Imperial Oil Service.

Save Gasoline

The chart appearing below has special reference to the article appearing on page 3 of last month's Review and entitled "Why Gasoline Now Costs More." This chart shows the relation between the production and the consumption of gasoline since 1900. The white columns indicate production; the black, consumption.

In 1916, 1917 and 1918, more gasoline was consumed than was produced. Last year a very slight reserve was built up, but during 1920 it is estimated that the demand for gasoline will be far greater than the possible production.

The chart shows graphically the reasons why strict economy must be practised in the use of gasoline and refined oils. We must not only practice economy ourselves, but must put forth every effort to induce others to pattern our example. We must lead the way for all Canada to follow — the way that leads to economy and plenty.

Hockey Champions at Imperoyal

The close of the hockey season found the Ironworkers at the head of the Plant Hockey League at Imperoyal. In addition to league honors, they also won the Marion and Thompson silver cup which is seen in the illustration.

The Royalites gave the winners a very close run for the championship but the "iron men" eventually proved themselves superior. The Cup now adorns the desk at the superintendent's office of the plant.

The line-up of the Ironworkers team was as follows: Matthews, goal; Mawdy and Page, defence; London centre; Purcell and Jackson, wings; Patterson, cover.

Winnipeggers Celebrate

The remodelling of the Winnipeg office has just been completed, the entire building where the old office was situated now being taken over by the office staff.

To celebrate the opening, a house-warming was arranged and the committee in charge are to be congratulated on a very successful social evening.

Mr. J. A. Boyd was present, Mr. and Mrs. J. A. D. Webb were also there, in addition to members of the staff, warehouse and filling-station staffs, and also several old employees, including Mr. Sam. B. Blackhill.

The first part of the programme was a whistle drive, and prizes for the highest score were won by Miss Mabel Loch and Mr. G. Begg; the "boozy" prizes fell to Miss Caphand and Mr. J. Thomson.

Dancing followed the whistle at 10 p.m., and kept on until 1 a.m.

The committee in charge of general arrangements were: Misses Johnson, Boyle, Barnet; Messrs. T. McGill, R. J. Connor and W. Allan. The whistle drive was under the supervision of Messrs. Hunt and Mordland.

A Fine Record

Since the introduction of the Insurance and Sick Benefits Plan, the term "continuous service" seems to have become quite an everyday phrase, but when it comes down to "continuous service" in the full meaning, Montreal office think that the record of one of their employees would be hard to beat.

For the last 26 years, Mr. Geo. H. Dickinson has never lost one day from the office. Illness of any sort has never caused him a single day's absence.

"Dick," as he is familiarly called, entered the service of the Vacuum Oil Company in Montreal in 1892 as a general clerk, when that company had a small warehouse on St. Paul Street.

In 1900 he was transferred to the position of "insurance agent" with Imperial Oil Limited and has continued as such to the present time.

Many changes have taken place in 20 years—old faces have gone, new faces have come, but Dick, like Tennyson's "Buck," still goes on forever. The investing department has grown considerably, there are assistant invoice typists, comptometer operators and the like, but Dick still retains his position.

Mr. Dickinson, although still a young man in years, is the Montreal accounting department's oldest service employee. Notwithstanding this, he has been accustomed (as long as the next "oldest inhabitant" can remember) to come in and start his day's work, summer and winter alike, by six o'clock every morning at the latest, because, to use his own expression, "the invoices must be got out."
Honoring an Imperial Oil Veteran

In connection with the Imperial Honor Roll for long service employees now appearing in this Review from month to month the following interesting incident comes to our notice.

Mr. John Conway of the Halifax Sales department whose photograph appeared on page 20 in the March issue of this Review recently completed thirty-four years of service. He also had a birthday and celebrated his sixty-fifth anniversary. The occasion being propitious, Mr. Conway's fellow employees seized the opportunity to present him with an address and a comfortable chair as a token of their esteem and well wishes.

The address reads as follows:

To Mr. John Conway: We, the Imperial Oil Limited employees connected with the Halifax Sales Office, beg of you to accept this chair on your sixty-fifth birthday, with our hearty wishes for many Happy Returns of the Day, and as a slight token of our great regard for you.

"Although you have the enviable distinction of being the only member of the staff known to all the ladies by your Christian name, the only member of us bears no ill-feeling but with the ladies that you may be known to us as one of the Imperial Oil family for many more years to come, as "Ours." Like all other large families, would be lacking without a formidable John."

The Lignite Fields of Southern Saskatchewan

(Continued from page 7)

briquetting, but rather that the expenditure of this money will demonstrate the commercial possibilities of this coal area. If this experiment succeeds, there will be dozens of others. The plant is being built merely to demonstrate to all mine owners the advantages of briquetting and will only manufacture a small quantity of the coal briquettes, so that in no way could it supply the entire demand of the Prairie provinces.

This Government plant will turn out, say, 10,000 tons next year. The people will buy it and learn by experience that it is capable of taking the place of anthracite and is much cheaper. Mine owners will naturally see the results and know what to do at once without experimental loss. In this way and in a short time, if this plant succeeds, we may expect to see Southern Saskatchewan dotted with these briquetting plants, which will furnish steady employment to a large number of men. It will require at least forty and probably fifty of such plants to meet the entire demand, and these will spring up wherever there is coal.

"Our Club"

By Mr. G. H. Ferguson, Calgary, Alberta

On Tuesday evening, May 11th, "Our Club," which has recently been organized in Calgary, held its initial gathering in one of the local halls.

The feast, which was preceded by a white drive and followed by musical numbers by several members of the staff, went to show that the efforts of the organizers of the Social Club in Calgary were crowned with success.

In speaking of such social events the term "Pleasant time was had" is seldom if ever omitted. It is hardly necessary to emphasize the point here—we had! As the social spirit amongst the Calgary boys and girls is one that we regret to say has lacked any such organization heretofore, and as the efforts of the Club are to promote further social gatherings and to partake in sporting activities, we look forward to a busier season, not only this summer, but for all times.
A Bigger Dollar’s Worth

To get a bigger dollar’s worth, we must in turn give a bigger dollar’s worth. To reduce the high cost of living, we must first reduce the high cost of producing.

The cost of living is regulated entirely by the cost of producing. Time lost, energy lost, and, therefore, efficiency lost — all have direct effects in maintaining high prices.

If we of Imperial Oil Limited so organize our work that two men or women can do the work which is now done by three, we will have increased our production capacity by 50 per cent.

Join your efforts to the efforts of those who see in greater production the only solution to the cost of living problem. By so doing, you contribute your share to giving a bigger dollar’s worth.

Ultimately it means getting a bigger dollar’s worth.