In this Issue:

THE IMPERIAL FLEET
A Real Snow Storm

WHICH the reader of this article is物价，under the heat of the summer sun and mentally consoling heaters, stoves, fans even and the sun to regions where they belong, a glance at the accompanying photographs may act as an antidote and make him feel cool for once.

There was sometimes imagine he has a big pull in the world by which he can bear anything and everything to his bull, but Done Nature occasionally puts her foot down in rebuke saying "For to-day I have my own way."

Spring in the Air

This was admirably illustrated on March 14th, 1920, when according to reports from “old timers,” we experienced the worst blizzard since 1889. The day previous to the storm—Wednesday—was a beautiful day. It was one of those soft, balmy, sunny days that occasionally look in to remind us that there is such a thing as spring in spite of the seeming endlessness of winter. At our Regina office, men forsook their work to look up the most desirable spots in their gardens for pansy and aster beds, and retired that night with the call of spring in their hearts to dream of sylvan glades and frolicking nymphs in the woods. But morn brought them back to stark reality, when the bowing of the blizzard outside made them creep down deeper into the comforters and wonder of the storm windows were securely fastened.

The Storm Centre

Why Esker in Southern Saskatchewan should be chosen as the centre upon which the storm would wreak its vengeance is hard to understand, unless it was on account of its proximity to the "Stakes" where all things are done on a large scale. Or possibly the activities of our salesmen, Stevens and Sander, had something to do with it.

These two loyal salesmen had the temerity to persuade folk to buy Imperial products for summer use and in spite of the terrific wind, ever-increasing in its intensity, not to mention the blinding snow, rose early as usual to "catch the early worm." However, such an early hour on such a morning was no place for even the most amiable of birds, and no self-respecting worm would crawl out in such weather.

Stranded

When our strenuous "knights of the grip" eventually succeeded in fighting their way through the raging storm to the station, an examination of the track soon convinced them that the old sales-”udge "Work your town thoroughly” was an admirable one to follow during a prairie blizzard, and they therefrom proceeded to "work the town," leaving outside points to anyone sufficiently optimistic to expect the locomotive to get through.

The train, but not our salesmen, pulled out about four hours late, taking about 40 passengers, many of whom were ladles. Locomotion ceased about six miles out and efforts to back up proved futile. The wind increased in violence and snow piled up in huge drifts around the train. These huge drifts broke off at the top thus forming miniature snow slides, which scattered the coach windows and added cold to the passengers’ discomforts. The occupants were finally manoeuvred into the baggage and express cars where they had to spend two nights, as they were entirely surrounded by high snow drifts and relief was not forthcoming.

Snow-Bound

Owing to the fact that all the available snow shovels had to be used to open up the main lines, the little snow-
Northern Ontario and Its Industries

Interesting Facts of an Interesting Country

By M. B. Jenkins, Salesman, Cobalt, Ont.

Twenty years ago, that part of Ontario which stretches out north of the C.P.R. was an unknown wilderness. Miles upon miles of trackless forests lay in wait for the coming of man to develop its resources—minerals, timber, and agricultural lands. The only method of travel in those days was by canoe on the numerous lakes and streams which traversed that country and the only travellers to penetrate these wilds were Hudson Bay traders, lumbermen, hunters and Indians.

The stories of the marvellous fertility of the Great "Clay Belt" about one hundred miles north of the C.P.R., eventually induced the Ontario Government to investigate its possibilities for agriculture. The investigation soon uncovered the truth and the result was the construction of the T.W.O. Rail- way to encourage the colonization of this section.

During the construction of the railway, native silver was discovered by a blacksmith named La Rose. The investigation and development which followed soon proved that both silver and cobalt in paying quantities were here for the taking.

A wild stampede followed. Men squatted on by the stories of sudden riches, and "rich strikes" rushed in a wild scramble for claims. It was a mining boom, with all its accompanying haste and excitement. A mushroom town of hastily erected shacks, tent cities and mining camps with necessary mining equipment soon followed. Mills were hastily constructed, and in an incredibly short time, silver bars were being shipped out to the markets of the world.

Naturally, where mines and mills are working there also goes Imperial Service. Where there is a demand, Imperial Oil Limited furnishes its supply. Warehouses were constructed at the mines, and both Cobalt and Imperial Service carried out their mission of furnishing lubricants of uniform high quality, the same here as anywhere else in the Dominion.

It is interesting to know that many of the mines in this district have always used Imperial Products exclusively, which speaks well for both the quality of our goods and the service of those few men who did the pioneering in this field.

Methods of Mining

The process of mining the silver ore in this region is necessarily a scientific subject and only the cursory review can be given here.

The ore, which is blasted by means of rock drills, and explosives, is hauled to the surface and carried by small tugs to the mills. This ore which in the form of rock is first crushed and passed over a belt where all the high grade ore is picked off by hand, and treated separately. All the low grade ore is passed on to the stamp mill where it is crushed to a powder. A series of screens pass to the tube mills where it is reduced to a fine powder. The silver is then extracted by the cyanide process. After the silver is solution the whole solution is passed through the plate press, which separates the silver into a "concentrate." This concentrate is about 90 per cent silver. It is finally poured into a furnace and melted to molten silver, then ladled into molten, then ladled into moulds where it is cooled into bars, weighing approximately 79 pounds each.

Discovery of Gold

As construction of the railroad ad-

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covered northward, and prospectors worked further afield, gold was discovered at Quizzom Lake. This produced another mining rush and mining equipment had to be brought in. The mining machinery and supplies for this district had to be hauled over a bush road from Kewa, a distance of about 30 miles. Here also a new Imperial Oil warehouse was constructed to supply the new demand.

But further development soon proved that like the silver mines of the south, the gold mines of this district would also numerous and enduring. Here was found the new camp.

In 1911 a forest fire, which is no respecter of either persons or property, swept over this district, destroying much property and many lives, and incidently cleaned up our little warehouse at Kewa. A larger warehouse was again built at South Porcupine and upon the completion of the railroad to Timmins an additional warehouse was built at that point.

Are discovered in the construction of the Grand Trunk Pacific Railway, a new field of settlement was opened up, which necessitated the building of a warehouse at Cochrane, the junction of the T.W.O. and the G.T.R.

The warehouse at South Porcupine having served its purpose there, was torn down, loaded on flat cars and reconstructed at Cochrane. From this point shipments are now made East and West, indeed, many of our barrels find their way even down to "salt water" at James Bay, for both Timmins silver and Cochrane ore are sent to London and the "height of land," hence the river here flow northward to James Bay.

Natural Resources

Other promising mining camps have been established at Gowganda, Kirkland Lake and Larder Lake, every one of which will require a warehouse in the near future. At present the demand for our products in the last named places is supplied by means of hunting over bush trails—a distance of some thirty miles or more. Naturally, with such a wealth of timber at hand, pulp and paper mills have sprung into prominence. At Iroquios Falls and Smooth Rock Falls, where sufficient power is always available, two large up-to-date plants are now in operation.

Agriculture

In a country where the seasons are three in number—July, August and winter—the farming possibilities are accordingly very limited, for winter in this country means temperature ranging from 30 to 30 degrees below zero. However, the summers they do have are splendid, and the growth of vegetation during that season is more than ordinarily rapid. Having the possibility of a summer frost, exceptionally good crops can be raised.

The short duration of summer calls for hurried cultivation, therefore farmers are about the only means by which fields can be cultivated in time. Tractors are therefore the popular power for farmers in the north, which opens up a new market for Imperial Petroleum Oils and fuel oils.

Future Prospects

The coming years should bring forth great developments in this section of the province. The full natural resources of this north country are as yet only partially discovered. Future developments in mining, lumbering and agriculture should make this a very rich and productive country.

Imperial products and Imperial service has ever played a predominant part in the development of new countries. Power, heat, light and lubrication are agents that convert the wild into civilized communities. Thus in the north country, our organization has contributed its share in the work of progress. There is not a road or trail or river that hasn't laid its quota of Imperial products laced or portaged over them, and there is not an industry or individual that hasn't directly or indirectly been benefited by the advent of Imperial Oil Service.
Natural Gas

Its Uses and Future Possibilities in Canada

The phenomenon of natural gas can be traced through pages of history both sacred and profane, back to the ancients; the awe-inspiring "Fires of Baku," which were deplored by the Zoroastrians, and perhaps the first record of burning petroleum wells. But it was only some thirty years ago that natural gas began to be developed on a commercial basis.

The development of the natural gas industry during the past thirty years has enhanced its value until today it takes a place beside its big brother, petroleum, as the finest of all domestic fuels. Like petroleum, it is being constantly put to new uses, and in like manner the demand continues to grow. Larger and larger investments are being placed into the development of this industry, while pioneering and experimental work has been, and is being carried out to a greater extent.

Natural Gas in Canada

Though the natural gas industry has been as yet only slightly developed in Canada, it is by no means an unfamiliar one. Both in the East and the West, natural gas has furnished the fuel for the cook stoves of innumerable Canadian kitchens, while the astounding calculating powers of the "gas meter" has furnished material for the everyday man through the ages.

That natural gas lies hidden in the untraveled strata of Canada, is an accepted fact. The industry is young, and until recent discoveries in the West, was wholly centered in Lanark County, Ontario. The peninsula extending from Lake Huron to Lake Erie is rich in natural gas, and in recent years has been extensively developed, its natural gas being used for both domestic and industrial uses in the municipalities and cities of that territory. The total production value of natural gas in Ontario reached $2,927,799 in 1928.

Gas in the West

The vast undeveloped and unexplored areas of the Canadian North-west is as yet an unknown quantity. Pioneers in the petroleum industry are ever lured by the call of the unknown, and in their search for petroleum, natural gas wells have been tapped times without number, which in many instances would prove of inestimable value as a source of power if properly utilized.

All over the Province of Alberta traces of natural gas have been found, and in many cases already furnish power, heat and light for municipalities and industries of various sorts.

The gas wells in the vicinity of Medicine Hat, Alberta, form a leading industry of that city. The city of Medicine Hat has drilled 87 wells, three of which have been handed over to industries, and all-airing 12 are operated by the city, which has established 2,535 services with pipe mains extending to the length of over twenty miles.

Many other municipalities in the province have likewise drilled and in many cases obtained sufficient fuel for heating and lighting purposes.

The total production of natural gas in Alberta in 1928 was valued at $1,200,000, or more than half of the output of the fully developed wells of the Ontario fields. What future developments of natural gas will bring forth in the West is purely a matter of conjecture, but every indication seems to show that natural gas will prove a helpful factor in the solution of Canada's future fuel supply.

Chemistry of Natural Gas

Though natural gas from various localities may differ as to its composition, they are all a modification of hydro-carbons of the paraffin series, nitrogen, carbon dioxide and helium.

The natural gas of the Eastern field is entirely made up of hydro-carbons of the paraffin series; the natural gas of the West is very high in nitrogen and helium (gasolene) content; while some of the gas of the Pacific coast contains a large amount of carbon dioxide.

The paraffin hydro-carbons usually found in natural gas are—methane, ethane, propylene, butane, pentane, hex- ane, heptane, and octane. Methane (CH4) and ethane (C2H6) are the fixed gases of the series and can be liquefied only at very low temperatures under heavy pressure. Propane and butane are normally gases, but are intermediate in character, their properties lying between those of a fixed gas and a true liquid. They are commonly re-manned as a mixture of four are liquids at normal atmospheric temperature and pressure. Methane is the principal ingredient of natural gas, its composition being approximately 90 per cent methane. Octane occurs only to a very small extent.

All the hydro-carbons of the paraffin series are very inactive, in other words they are inert and not affected by air, which makes it admirably suited for use in balloons.

When used in a balloon filled with gas, hydrogen is so much lighter than air, which makes it admirably suited for use in balloons. But for this gas for bal- loon filling purposes has interested capital to such an extent that there is considerable talk about establishing such an industry in the western gas fields. Whether or not ballooning and aerial navigation in Canada will be stimulated or whether a venture remains to be seen, but at any rate the effort has been un- filled to play a prominent part in the transportation of the future is predicted by all far-sighted men of affairs.

Uses of By-Products

Pentane, hexane, heptane and octane can be readily separated from the crude gas in many cases by fractional distillation. All can be converted into substances of high commercial value by synthetic chemical reactions.

The so-called pentane thermostats require pentane. Propane and Butane is used for lighting purposes, for automobiles and various other uses. It is also used as a substitute for bushe.

As a gas for purifying purposes, the utilization of natural gas is now very important. Many by-products are taken from natural gas as a raw material. It is also a valuable fuel for cooking, and for various industrial purposes.

One of the greatest uses so far developed for lighted butane as a steel cutting. During a nine-month's campaign, recently held, "one ordinary" oxygen cylinder filled with liquid butane was sufficient to supply all the steel required. The remaining butane was used for doing exactly the same amount of work two cylinders and cylinders of acetylene were required. When one considers the fact that the charging pressure of liquid butane is below 100 lbs. and that one cylinder weighs one-third of an acetylene tank of equal gas capacity, it is easy to see that liquid butane will be much easier to handle in shipment. In other words, in order to procure enough acetylene to do a specified piece of work, twice as many cylinders would have to be handled and six times as much weight carried, than would be required if liquid butane is used for the job.

As a refrigerant, butane has been used in many cases and the tests indicate its refrigerating qualities to be as good as, if not surpassing, those of ammonia. But for this reason the tests are being made with the test equipment for future use in the industry.

For heating purposes, tests have been made showing that butane used in a reactor heating apparatus is more economical than coke, while the loss of energy through "burning" is materially reduced. It does not need a heavy load of unburned mixture to raise the temperature and dispenses with the use of compressed air.

Future Possibilities

With the advance of science, new uses for natural gas and its by-products will be undoubtedly discovered. They can be reasonably certain that new processes will be developed by which formic acid, formic acid and oxalic acid will be produced from natural gas as a raw material. It is also believed that pentane and butane, properly chlorinated would produce carbon.

From which butane and pentane are derived. They can also be used in a number of ways for the automobile and various other purposes.

It is also believed that carbon added to rubber increases its tensile strength by from 4 to 10 per cent, and also gives a greater resilience to the tire.

The natural gas industry has developed so far as to an extent that the old trodden paths must be forsaken. The old wasteful methods must be abandoned for new, in which more conservation and further utilization of by-products will be practiced.

Canada has every advantage of pre- eminence to guide her in the future development of natural gas resources. The loss of valuable by-products to nature or unimportant means of production and installation is utilized.

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Petroleum Sources and History.

By Mr. R. E. D. O'Shaughnessy, Chief Chemist, Imperial Refinery.

FOREWORD: These articles are presented for the purpose of giving the members of the Imperial Oil Limited, in non-technical language, a general knowledge of petroleum, where it comes from and how it is refined. It is hoped that this information will not only be of interest but will help each one to know how his work is connected with the work of hundreds of other employees, thus making his own work more interesting.

The business of producing, refining and marketing oil has expanded so rapidly that it will be impossible to go into the details of any of the subjects discussed. Anyone who has followed the oil business will say that any man can study it all his life and will hardly scratch the surface of the subject. This is the reason that it never loses its interest with the people who study it.

Petroleum

The word petroleum comes from two Latin words, "petra" meaning rock, and "oleum" — oil. It is found all over the globe in strata beneath the earth's crust, in porous rocks which hold a great volume of oil, and in "sands." These are overlaid with a close impenetrable rock which acts as a seal and keeps the oil from escaping.

Oil is obtained by drilling wells down through the various strata until the oil sandstone is reached. Then due to the pressure caused by the weight of the oil (which is usually accompanied with natural gas) being confined, the oil rises to the surface.

As it comes from the ground it is quite variable in appearance, some kinds being a light lemon color and quite limpid, others green or brown, down to the heavy oils which may be black and viscid at normal temperatures.

Historical

Petroleum, or oil, as we shall call it, has been known since at least 430 B.C., for it was mentioned in the writings of the ancient Greeks. It was only during the past sixty years that refining such as is done to-day has been known. The earliest mention of the existence of petroleum in North America is given in a letter dated 1627, which tells of a visit of a Franciscan Missionary to the Inland Tribes, in what is now the State of New York. Oil was found on the surface of streams in various parts of Pennsylvania and New York. It was collected by skimming the oil and putting it in barrels. As early as 1770 it was used instead of whale or sperm oil, to burn in lamps, and for many years was bottled and sold as a liniment for sprains, rheumatism, etc. It was used to some extent in the early part of the nineteenth century as a lubricant, as it did not gum the machinery used in dairies and vegetable oils.

The first drilling for oil in the United States was done by the Seneca Oil Company in 1856, in New York, which purchased a ninety-acre tract in 1857, which produced about 25 barrels a day and a well 97 feet deep. In contrast to this well there have been found wells which produced as much as 100,000 barrels a day, and a famous well which was recently closed down in Mexico is estimated to have produced more than $3,000,000,000 worth of oil during its life of ten years. The deepest well in the world is the "Lake Well" to Harrison County, West Virginia, and is 2,573 feet deep.

Petroleum in Canada

Canada has been pretty thoroughly prospected for petroleum, and though many indications of the presence of oil have been found, these have not been generally tested by drilling until recently.

The presence of oil in Western Ontario has been known for many years, and its development followed closely the discovery of oil in Pennsylvania. In fact, it is claimed that a Mr. Wil- liams drilled a successful well in 1852, more than a year before the first well drilled in the United States. By 1860 hundreds of wells had been drilled, though the total production was less than 130,000 barrels for the year.

The first refinery in Canada was built in Petrolia, Ontario, in 1861; by 1866 there were twenty-two refineries in operation in Ontario, and by 1870—forty. By 1889 the number of refineries was only thirteen, of which the Imperial Oil Company at Petrolia was one. In 1898 the Imperial Oil Company bought out the four other refining companies and consolidated them to form one that in whose only two refineries remained in Ontario, the Canadian Oil Company at Petrolia.

Up to 1917 Canada had produced only 200,000 barrels of oil and in spite of the gradual decline of the older wells in the country, production has increased slightly for each of the last three years, so that about 300,000 barrels were produced in 1918.

Crude Oil Supply

The United States produces about sixty per cent of the world's supply of oil at present, Russia, Mexico and the Dutch East Indies being next in order named. The amount of petroleum still in the ground is not accurately estimated, but from all indications (Continued on Page 14.)
The Imperial Fleet
An Important Link in the Chain of Imperial Service
By Captain J. Wilkie, Marine Superintendent.

When one considers the size and scope of our organization and the tremendous volume of oil that is annually refined and distributed to every part of the Dominion, it would seem to the uninformed that the source from which all this activity springs must be limitless. The questions "Where?" and "How?" flash into our minds seeking an answer.

Petroleum (crude) and its source is a much discussed question to-day, and the "where?" of its source is generally known. It is the "how?" of transportation that this article will deal with.

Aside from the pipe line and railway facilities, which do their part in the transportation of crude, the refineries, a large part of the responsibility of furnishing the refineries from which all Imperial products are made, rests upon the Imperial fleet. Likewise, in the transportation of refined oils to their various markets, the tank ships operating on the Great Lakes play a leading role.

Now that navigation on the St. Lawrence River and the Great Lakes has resumed full operations, it would seem an opportune time to discuss the "fleet" upon which so much responsibility rests. For when all is said and done, without our fleet that "reliability of supply and prompt delivery" of which we are all so justly proud, would cease to exist.

The Imperial Fleet is the third largest fleet under the Canadian flag. It extends across the Atlantic to European countries, down to the Carribean Sea and up to the St. Lawrence to the Great Lakes. During the year of 1919, the total quantity of crude oil delivered by the steamers at Halifax and Montreal was 3,434,419 barrels, and to the various ports on the lakes, 1,753,277 barrels of refined products, while to the Maritime Provinces, 406,447 barrels refined products were delivered.

Growth and Development
Like every other department of our organization, the fleet starting from a modest beginning has grown and developed into proportions exceeding all expectations, and like every other department, it continues to grow.

But large as it already is, the volume of crude oil demanded by our refineries necessitates the chartering of outside tonnage to help us.

On account of the shortage of tank steamer tonnage, the Company has been forced to provide at present under construction, two 15,000 ton tankers ("Victolite" and "Canada"), which we expect to have in service by May, 1921. These steamers will be fitted with all the latest improvements for the rapid loading and discharging of oil cargoes, and it is our intention out to keep them in port more than 24 hours.

On the Pacific Coast, arrangements have been made through The International Petroleum Company, Limited, whereby crudes are supplied to our Esso Refinery. Extensive pipe-line systems furnish our Sarnia Refinery, while the railroad tank cars are being employed for our Regina plant. For the supply of crude oils for the Halifax and Montreal Refineries the Imperial Fleet is responsible.

We have engaged in the Mexican to Halifax and Montreal trade, the "Trentolite," "Montolite" and "Manitolite," all of which are carrying Mexican crude to our refineries there. In fact, the first steamer of our fleet to arrive at the Montreal Refineries was the "Trentolite" on April 4th. It arrived just in time to save the situation for that refinery, as the reserve stock of Mexican crude oil which last summer amounted to something like 600,000 barrels, had been reduced to 5,000 barrels—just sufficient to keep that refinery running for one day. This illustrates what extensive efforts must be made to build up a sufficient reserve to keep those refineries running throughout the year.

Interesting Careers
The "Isma" has had a romantic career. During the war she joined the British Navy and served there with distinction as an oiler for the British Fleet. In May, 1919, she was returned to us and placed into the Lake service here, but at the close of navigation on the lakes, she was taken to New York and loaded for Aarhus, Denmark. Her voyage across was very successful, but on the return trip very bad weather was encountered, which caused her to spring a leak. The fires were put out, which left her helpless in the middle of the Atlantic Ocean. She was, however, fortunate enough to get in touch with the American steamer "Western Hope," which took her in tow to Havana, Azores. Here the leaks were repaired and in due time she proceeded on her return voyage to New York.

The "Luc Blanc," famous for her thrilling fight with the German submarine, which eventually sunk her, no longer on our roll. Her name is entered upon the honor roll of those (Continued on page 17.)

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<th>Tanker</th>
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<td>&quot;Mammoth&quot;</td>
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| "Trentolite" | 4,000 | H. Heald

The Imperial Fleet consists of the following ships:

- Barge No. 4 - 5,200 tons
- Mammoth - 500 tons
- Trentolite - 4,000 tons
- Montreal - 3,000 tons
EDITORIAL

The Co-Operative Investment Trust

Every employee of Imperial Oil Limited who has completed one year's service is entitled to become a shareholder in the Company. A plan to enable employees to purchase stock is now operating and is known as the "Co-Operative Investment Trust of Imperial Oil Limited." More than 70 per cent of those employees who are eligible to take advantage of the stock offer have subscribed.

Employees who are nearing completion of their first year's service and who are desirous of participating under the plan offered by the Co-Operative Investment Trust, may make application, through their manager or representative, for stock, on the completion of eleven months' service. Applications should not be forwarded to Sarnia, however, until completion of employee's year of service. When a year's service has been completed, participation in the Trust may automatically be started through having made the preliminary preparations.

Accident Prevention

Figuring averages, each one of us will have, during the next twelve months three opportunities of accidents which might result in the serious injury of one or more of them or a considerable destruction of property. In other words, three accidents occur yearly for each adult or child on the North American Continent.

Emerson, who compiled these figures, undoubtedly took all reported accidents into account, but consider his figures any way you like and it is still easy to see the importance of avoiding accidents. "Safety First!"

According to Emerson's figures, one out of every twenty people has an opportunity at some time during his life to prevent an accident that may prove fatal to one or more others. In nearly half of these cases, accidents result from a failure on the part of the responsible party to be ordinarily careful.

None of us wish to suffer accidents, nor do we wish the loss to be responsible for an accident to one some other. Each of us, according to the above figures, can save at least ten accident victims during the next year if we use ordinary care. Some of us may have the golden opportunity of saving the lives of others by preventing an accident that would otherwise be fatal.

Let us strive to prevent accidents. Let us all practice, "Safety First!" first, last and all the time.

The Cost of High Living

Is the high cost of living due to the cost of high living? Have we so raised our standards of living that we consider as necessities many things that are really luxuries?

Sixty-dollar suits, twenty-five-dollar pajamas and fifteen-dollar shoes would have amazed the folk of grandfather's time. Such things as eggs on toast were regarded as delicacies for invalids. What added to the appeal of these eggs were the fresh strawberries and melons, and the snow-covered raisins, which were unheard of.

Clothing and expensive foods are all right. So are theatres, excursions and twenty-five-cent cigars, but we should remember that we can buy more real pleasure with the money we save than we can in any other way. Twenty per cent. of our earnings saved now will practically double the amount of that percentage a few years really.

What Color Are Your Glasses?

Life assumes the color of our mental spectacles. Our thoughts, moods and temperaments, varied as the hues of the rainbow, are as glasses through which we view the world.

Ignorance is the smoked glass that plunges the world into a fog of obscurity. It is the false and the trivial that are its cut-off. The spectacles of the birds, the rustle of leaves, the sighing of the breezes, the chatter of the birds, and all things—all made in a pause of praise.

The echoes of happy laughter and the laughter of the birds are warmed to our souls. We are able to see the joy of life in a joy of living, and quote "God is in his heaven, all's well with the world.

Proceed in the color of the era in which we live. You will find that the color of the era is well worth your attention.

The Co-Operative Investment Trust of Imperial Oil Limited.

Imperial Oil Trust deals of Imperial Service

Imperial Service does not end in the management of the Company, but the distribution of Imperial products alone, it reaches farther than that. It reaches even further when it is not an accident, but it makes itself felt in innumerable ways in the work of the welfare of Canada and its people.

It is encouraging to us all to know how members of Imperial Oil Limited are everywhere doing their duty both as Imperial Oil men and as citizens of Canada.

To illustrate this we might cite the splendid service of Mr. L. Westcombe, Imperial Agent at Lachine, Alta. Mr. Westcombe, who is a member of the Canadian Legion and the T.D.I. Association, has always been interested in the red cross movement and ambulance work. Even in early youth he was a member of the St. John's Ambulance Brigade, where his training in first aid work and nursing proved of inestimable value to him in later life.

Two years ago, when Lachine was stricken with the "Flu" epidemic, he willingly volunteered his services to help. Here his training proved a boon and a blessing to the stricken community.

Every day after completing his duties at the Imperial, Mr. Westcombe has charge of the provisioning of from 18 to 20 quarantined homes. With a team of horses, and the assistance of six boys from his Sunday school, Mr. Westcombe delivered fresh water, food, groceries and other necessities to these stricken families for many weeks. His services have been regularly served at the Municipal Hospital from 8 o'clock until 2 in the morning, in addition to his regular work at the Imperial Oil Station. To continue working like this, practically night and day, requires resolution and determination, and unbreakable stamina, and it was the self-sacrifice and unflagging spirit of Mr. Westcombe that made it possible for Canada to cope successfully, with the ravages of the "Flu" epidemic. When the "Flu" epidemic and scarlet fever were raging in the city last winter, Mr. Westcombe came forward to aid the suffering.

It is necessary that the service to Lachine should be continued. He has endeared himself to his associates, and his memory remains as an inspiration to all who knew him.

Mr. James Thompson

We deeply regret to announce the death of Mr. J. Thompson at Sarnia on May the fourteenth at his home known as "Jimmy" Thompson to his host of friends, both at the Sarnia plant and in the city, was a Sarnia boy, and up to the time of his death he had spent twenty-two years in the employ of Imperial Oil Limited.

Mr. James Thompson, a tall, quiet man, was in the prime of life, and the news of his death was a shock to his friends.

A Real Snow Storm

(Continued from page 3)

A board train on the branch lines had to suffer accordingly.

A peculiar and special feature of the mother of invention, and nourishment for the major events of the winter, was that it was not long before the inventive powers of our snow-bound passengers were set to work on a cloud of snow, and achieved through the use of provisions discovered among the local freight shipments. To further alleviate matters, two dry goods storekeepers unpacked their sample trunks and provided wraps for the ladies, while it is darkly hinted at that a little "medicine" was brought out under the guise of "medicines" (not necessarily in the mail-coach).

Relief At Last

It was not until the third day that a relief train could bring through a crew to release the imprisoned passengers. The herculean efforts of the relief crews resulted in a cleared track and snow, which, driven through the drifts by two powerful locomotives, finally landed some 15 to 20 feet of snow and consequently was "burned out of sight." The accompanying pictures give an idea of the unusually high snow drifts. The snowdrift and romance of the Old West is gradually passing away. The days of the Indian, the buffalo and the prairie schooner are no more, but the biting cold of "forty below" and the driving snow will continue. In the meantime the prairie blizzard still comes back to us at times to emphasize the fact that the West is still the West and always will be.

I Am the Enemy of Mankind

I have destroyed more lives than all the wars of the world.

I tear homes asunder; I snatch babes from their mothers; I tear families asunder; I have hurled mankind since the dawn of history.

I spread misery and desolation.

I bring pain, sickness, yet seek to escape me.

I destroy and maim; I give nothing but take all.

I am relentless, the rich and the poor alike I seek.

I am preventable disease.
A Great Loss
Two Valuable Men Pass Away

Mr. T. H. Clement

The news of the death of Mr. Theodore Clement, assistant manager at Saskatchewan, comes as a shock to every member of our organization, as well as to many friends he had won during his career in the west. His loss leaves a vacancy that will always make itself felt, for he possessed that magnetic personality which inspires others to greater achievements. He inspired not by words, but by action; he led by example, rather than precept. During his ten years service as salesman for Imperial Oil Limited, he was always to the fore in all selling contests. His slogan was thoroughness — mastery of every detail. "Thoroughness," he said, "is an undoubted asset. Business success demands it. Thoroughness is a practical slogan for all ambitious people." His success in the field amply justified this faith in thoroughness.

In October, 1919, he was appointed assistant manager at Saskatchewan, in which capacity he served up to his illness in December.

Mr. Clement, who was only forty-three years of age, stood on the threshold of success. The future held out splendid promises of further achievement. He was a member of the Odd-fellow and Masonic orders and a highly respected citizen in the community. He had a genius for making friends and retaining them, while his ability and industry as a salesman had won for him a position in the business world which offered every promise of a great future.

It is with profound regret that we bid farewell to our trusted friend and co-worker. His memory will always be a power for good in his organization; his example always an inspiration and a help to his former associates.

Mr. Charles MacMillan

We sincerely regret to announce the death of Mr. Charles MacMillan at Vancouver. He was taken seriously ill about one month before his death, and, as his illness progressed, it grew so serious that hopes for his recovery were at no time very promising. He became reconciled to the inevitable, and even when the shadow began to fall he remained bright and cheerful to the end.

Mr. MacMillan entered our organization at Winnipeg on January, 1905, was transferred to Vancouver in 1911 where he was appointed assistant chief clerk. In January, 1919, he became chief clerk, in which capacity he served until his illness. His efficiency and industry had early been recognized by the firm, while his likeable qualities had endeared him to all his associates.

Mr. MacMillan had a future full of great promise; far, even though only thirty years of age, at the time of his death, he had shown more than ordinary executive ability. The company has lost a faithful and efficient worker whose loss will always be felt.

At a special meeting of the Imperial Club, a resolution of condolence was proposed by Mr. G. M. Rolston, seconded by Mr. L. H. Griffiths of New Westminster and unanimously passed. The resolution, which was signed by every member of the staff and representatives of the warehouse department, was accompanied by a letter to Mrs. MacMillan, expressing heartfelt sympathy in her bereavement. Reluctantly we say farewell to our old friend, feeling assured that young lives so broken and incomplete, must somewhere fulfill the purpose of the Master of all things.

The funeral service, beautiful in its simplicity, was conducted by the Oddfellows Society, of which Mr. MacMillan was a member.

Imperial Service Honor Roll

(Continued from page 8.)

Petroleum

The search for petroleum in the Canadian Northwest has been going on for sometime and though no "strike" has as yet been made, the indications are promising. That vast area which lies along the Mackenzie River has every geological formation which points to petroleum deposits and only the further exploration work in this area can ascertain whether or not a "pool of oil" lies there. Oil sands and small quantities of oil have been struck at various places in the Peace River country as well as in Central Alberta, while as far east and north as Fort McMurray indications and traces of oil point to the existence of a vast petroleum field in the north.

This prospecting is being carried out in a great many countries with the same end in view.
THE IMPERIAL OIL REVIEW

IoCo Refinery Pump House
An Important Unit in Manufacturing
By Mr. E. E. Nisbet, Superintendent, IoCo Refinery

I oc o Refinery Pump House

THE REFINERY PUMPHOUSE AT IOC0

The refinery pump house, though a modest looking building in size, plays a leading role in the manufacture of Imperial's products. Few people are aware of the importance of this unit or know how the work there is being carried out.

A good pumping plant is as essential to an oil refinery as the distilling plant itself. It is responsible for the advancement of the various distillates in a refinery where both careful and efficient operation is the main concern.

Mr. F. W. Townsend

While the friends of F. W. Townsend stand ready to congratulate him on his recent promotion, there is no small sense of regret in the fact that he is leaving the Refinery that has been known to him ever since his graduation. Mr. Townsend was employed by Regina Refinery in January of 1916 as Drifting Engineer. In 1917 he was made Mechanical Superintendent, a position he has held ever since.

The pump plant at Regina Refinery was thoroughly enjoyable, perhaps a special feature was the Scotch music and dancing by Piper Douglas and Miss Ray.

At the finish of the program a dainty buffet lunch was served in the spacious dining room, by members of the Ladies' Club. From tables prettily decorated with red carnations, the flower emblem of the club. Later in the evening there was dancing, bowling, pool, and other amusements.

Timing

Townsend leaves at this time for Tahara, Peru, where he will hold the position of mechanic at the International Petroleum Company's plant. Mrs. Townsend and little son will accompany him to their new home.

Qualifications Required

The refinery pumpers are responsible for the transferring of the oil and must be careful to see that no oil is expelled by allowing air to get into the pumps. Any air that is allowed to get in will spill oil and lubricating oils turned out at the refinery; the location of the pump and the pipes leading thereto. He must know the different valves on the lines and be sure these valves are properly set. He must have knowledge of machinery and electricity, as the pumps contain both pumps and motors. Most of our pumps are driven by direct connected electric motors. We have a number of steam pumps, so you can see from the above the kind of qualities required to make a good refinery pumper. He must be a combination of an electric and steam engineer and understand the process of work of the refinery as well.

JUDGING FROM THE NUMBER OF SOCIAL AFFAIRS WHICH HAVE BEEN HELD SINCE THE OFFICIAL OPENING, COMMUNITY HALL IS GOING TO BECOME A GREAT CENTRE OF AMUSEMENT TO IMPERIAL OIL employees and their friends.

The Imperial Fleet

(Continued from page 10.)

Tell Us a Story

The Review is a publication for Imperial Oil employees and written by them. Everyone who has had an idea of how the Mexico may be improved should forward it to the editor.

The object of our little magazine is to instruct, interest and amuse the members of our organization. It is a medium through which members may exchange ideas or offer information, which will be interesting and profitable to all.

In response to our appeals for stories and articles, correspondents and others have been in the generous in their contributions. We ask them to continue with those contributions. The success of the Imperial Oil Review rests entirely with its readers—the members of Imperial Oil Limited.

The scope of our organization embraces every walk of life, hence stories and poems may be for the benefit of the whole. The goodbyes were said in the "wee small hours."

In addition to the locality dealt with, scientific articles of interest to the oil industry.

The Fleet.

The fleet was purchased this year, will be engaged in carrying general freight between Halifax and Newfoundland.

The foregoing description gives but a slight idea of the size and work of our fleet. It is important to our company cannot be overestimated, while its service is invaluable. It is as necessary to our organization as all these form material for good feature articles, Sports, hunting, fishing, social events, comsic service, promotion and other news items are interceded while the story with the smile is always appreciated.
New Offices, Ottawa, Ontario
A Decided Improvement Welcomed by the Staff

By Miss Reynolds, Ottawa, Ontario.

November first, 1919, was a Red Letter Day in the lives of the office staff of Imperial Oil Limited Ottawa Branch, for on that day they moved into their new general office building located at 310 Percy Street.

The office of the Company for a number of years was located upstairs at 361 Sussex Street, about two miles from the warehouse, but in 1915 it was decided to transfer the office staff to the plant.

After being cooped up in a corner of the warehouse for about four years, each and every one of the office employees took on a new lease of life when they were transferred to their respective places in the new office building.

Noisy Quarters
The old office in the warehouse was, of course, arranged to the best advantage at the time, but it was inadequate for the staff, with the result that it was unhealthy. There was not sufficient desk room in the first place, while many other inconveniences were experienced. On account of it being located in a portion of the warehouse there was more or less noise and confusion from the warehouse, thus distracting the attention of the office staff from their work and causing delay in the transaction of business.

The office was also very close to the C. T. K. right of way and the continual “shunting” and railroad traffic made working conditions very unpleasant and unsatisfactory in the office. In the summertime the “heat” would cause some of the staff to neglect their work and ponder upon the eternal mysteries to cure, while in the winter time the variations of temperature depended altogether upon the pressure of steam that was required for the glue kettle.

The New Office
The new office building is a wonderful addition to all the above unpleasing conditions. It is well located and has a separate heating arrangement. It is beautifully finished on oak, with walls and ceilings becomingly tinted. It is spacious, airy and light, and lastly there is ample desk room. We have been supplied with an almost complete new outfit of furniture, the desks and chairs being of excellent quality and convenience. We now have a vault wherein we can store papers and documents of value and in the basement there are spacious cloak rooms, as well as other conveniences for the staff. There is also a large room for filing away records.

Improvements
The agent, Mr. Gerington, has a very cozy private office in which customers can be assured of pleasant and private interviews. Under the old conditions the best we had to offer a customer who paid a visit was a chair in the general office, where the conversation was audible to the office staff or the general public. At other times interviews had to be held outside of the office on the public street.

When it was necessary to send an urgent message to the warehouse, one of the staff would have to leave the office to locate the party for whom the message was directed. With the private branch exchange that has been installed in the new offices we can communicate with the warehouse office without delay and obtained the required information without any loss of time.

Sad Stories
The man speeded up to see if he could catch the train over the crossing. He couldn’t.

The man struck a match to see if the gasoline tank was empty.

It wasn’t.

The man patted a strange bulldog on the head to see if the “critter” was affectionate.

It wasn’t.

The man looked down the barrel of his gun to see if it was loaded.

It was.

The man touched an electric wire to see if it was alive.

It was.

Organization Changes
Mr. Robert Kingsmill, since February, 1919, in charge of ledgers and credits at Toronto and previous to the Company at Sarnia and Calgary, has been promoted to the position of chief clerk at Vancouver to fill the vacancy caused by the death of Mr. Charles Macmillan.

Mr. R. S. Pemberton, formerly District Manager at St. Johns, Newfoundland, has been appointed District Manager at Halifax, N.S.

Mr. A. W. Oldfield, formerly Assistant Manager at Halifax, N.S., has been appointed District Manager at St. John’s, Newfoundland.

COME! WHERE?
Second Annual Picnic
TORONTO EMPLOYEES
Centre Island, Toronto
JULY 4th
Competition and Fun For All
Ability Always Recognized

"If you can write a better book, preach a better sermon or make a better mouse trap than anyone else, the world will make a beaten path to your door." Ability and efficiency can no more be concealed than the light of the sun or the blue of the sky.

Capability makes itself felt wherever it exists. No matter how commonplace the task or how remote the location, the opportunity to show your ability is always there.

Recognition may sometimes be slow, but success was never won through half-hearted effort, and recognition of ability is, in the end, certain. If we stifle our best efforts through fear of not being recognized, we are robbing ourselves of success.

If we can honestly say to ourselves after the completion of each task that we are pleased with our work, we are increasing our ability and making its recognition and our success sure.