JOINT COUNCILS

Imperial Oil Limited
Elected and Selected Representatives for the Year

MANUFACTURING DEPARTMENT

DELEGATES

Elected

Selected

Loco Refinery

J. R. Siemens

(President)

Richardson

Sarnia Refinery

J. A. M. Stoddart

(Treasurer)

Montreal Refinery

J. H. Deans

(Chairman)

Halifax Refinery

T. H. Longley

(Chairman)

Regina Refinery

H. S. Gilbert

(Chairman)

Georgetown

(joint)

Marketing Divisions

Calgary

G. L. Stewart

(Chairman)

Vancouver

F. J. Tupper

(Chairman)

Edmonton

D. M. Allan

(Chairman)

Toronto (Princess St.)

C. H. Macdonald

(Chairman)

Montreal

R. M. Millard

(Chairman)

Quebec

G. A. Ferguson, Calgary

Impaler

A Magazine Published in the Interests of Employees of
Imperial Oil Limited

Vol 6

NOVEMBER, 1922

No. 7

Irrigation in Alberta

M. J. MUSSEY at the desired season, enough, yet not too much, is a development in the science of farming that the majority of Canadian agriculturists have yet to learn; yet irrigation is not new. Historians assert that the same brains that built the pyramids, irrigated the Nile district. The Pueblo builders left traces of their irrigation works in New Mexico and bordering states. The astronomer is also of the opinion that the planet Mars has been irrigated for centuries.

The pioner of Southern Alberta was a rancher in the true sense of the word. Stock raising was his calling. Still, as the settlement of the West proceeded, the grain farmer gradually encroached on the areas once devoted to ranching. There is no doubt that Sunny Southern Alberta's climate, supplemented with a reasonable amount of moisture at the right time, will produce crops such as one reads about but seldom sees. It was with that object in view that irrigation was first introduced, and it has made considerable headway in the past five years. For a proper consideration of the subject, it is necessary to consider the soil conditions and general formation of the country. The Rockies form the western boundary of the Province and the foothills extend well into the centre of Alberta, where the hills roll gradually into the prairies. One would not expect to find these rolling hills and plateaus, soil of the most fertile nature, nor even heavy. It is light in the majority of areas and not deep, lying on a subsoil of clay or gravel. With the natural fall of the rivers running east through large coulees and cut banks, the general formation of the land is excellent for irrigation systems. Reaching damms on the rivers, the bulk of the water from the mountains has been utilized throughout acres now in operation. The accompanying photograph of the Canadian Pacific Railway's dam at Bassano shows how this theory is applied. It is part of the Eastern Section consisting of 1,106,224 acres, of which approximately 440,000 acres can be irrigated. It might be worth while here to quote the Canadian Pacific Railway Company's own description of its Eastern Section:

"The Eastern Section is composed of 1,106,224 acres, of which 440,000 are to be rendered in-

The famous Bassano dam situated about three miles from the town of Bassano on the Bow River. It is one of the engineering feats in the C. P. R. line. This raises the river about forty feet.
Concrete sidewalk: Eastern Section, C. P. R. Irrigation Plan. This sidewalk is two miles long.

The Imperial Oil Review
November, 1922

"The East Branch, leading from the tail pool of the main canal, has a size at the outlet of 70 feet bed width, carrying 9.4 feet of water. Its general course is south-east and it serves the balance of the country not supplied by the North Branch. Near Lethbridge the first branch takes off, crossing the railway and watering a large area between the two forks of the Milk-o-win Creek. This branch is known as the Spring Hill Canal and is 35 feet bed width, carrying seven feet of water.

"The East Branch continues south-eastly, reaching the height of land at the head of Antelope Creek. At this point it again forks, the south-eastern branch being known as the Bow Slope Canal, which is about 17 feet bed width, carrying five feet of water, and will serve all the land on the Bow River Slope. At Cessna two smaller canals are taken off, and just south of Brooks the East Branch discharges part of the water into Lake Nexall reservoir, formed by a depression in the Little Rolling Hills by the construction of a number of earth dams, the largest of which is about 2,000 feet long and 30 feet in height. The storage capacity of this reservoir is about 185,000 acre feet. The balance of the water in the East Branch goes down the east flank of the Rolling Hills in a high grade line in a canal known as the Rolling Hills Canal. This canal is about 20 feet bed width and carrying 6.25 feet of water.

"An outlet from the reservoir is a canal about five miles in length and about 40 feet bed width and carrying seven feet of water. At its eastern end it discharges into another reinforced concrete flume about 10,000 feet long, which carries about 200 feet bed width and carrying 8 feet of water. This entire line has a ditch-like mass of concrete and 250 miles of reinforcing steel. Construction on both parts was begun in the summer of 1919.

"At the north side of the spillway, and at right angles to and just inside it, are located the headgates of the main canal by which the system is served. The elevation of the sides of these headgates is 35 feet above the original low-water level of the Bow River, and above the sills are the eleven feet of water retained by the gates of the spillway, making a total height of 46 feet that the level of the water has been raised. The headgates consist of five openings, each of twenty feet, with electrically operated sluice gates, and control a discharge into the main canal of 3,800 cubic feet per second.

"From the headgates the main canal leads to a point about five miles distant, where an earth dam 1,280 feet long and 52 feet high is built across the valley to form a tail pool from which the branch canals are fed. There are two of these: the North Branch and the East Branch. The North Branch is the smaller and serves the country lying north and west of Milk-o-win Creek, the valley just mentioned. At the outlet the canal is about 30 feet bed width carrying about 13.5 feet of water. After crossing the railway, it follows the west flank of a deep valley known as the Crawling Valley to a point about eight miles north of the intake, where it crosses the valley by a flume 1,320 feet in length, and then runs northward. It has numerous branches and becomes smaller as the tributaries are thrown off, finally tailing off into the Red Deer River.

"The estimated mileage of canals and ditches to serve this portion of the Irrigation Block are:

<table>
<thead>
<tr>
<th>Section</th>
<th>Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Canal</td>
<td>5</td>
</tr>
<tr>
<td>Secondary Canal</td>
<td>475</td>
</tr>
<tr>
<td>Distributing Ditches</td>
<td>2,100</td>
</tr>
</tbody>
</table>

Over twenty million cubic yards of earth were removed in the construction of the canals and ditches.

It will be readily seen that irrigation systems are built on the same plans as Rome—not all done in a day. In the reinforced concrete flume referred to, also illustrated, it shows that expense was only a minor detail when the supply of water is considered. This particular aqueduct may not, in future years, be sufficient to supply the demand for water in the area which has recently been opened. There is little doubt, however, that adequate means of supplying this district will not be overlooked.

In traversing parts of the irrigated areas, it is interesting to study the detail of the distributing systems. All water is, of course, distributed over the surface while the irrigation systems supply the water in their main canals and keep an accurate record of all water supplied to the farmers.

It is not the intention to deal at any length with statistics, but, considering the information compiled, the moisture supplied to the land with the aid of irrigation can now be considered. With the aid of irrigation there is an average of 24 inches of moisture supplied to the land yearly. The average precipitation at Lethbridge, covering a period of 19 years, was 15 inches. The best year’s showing in this period was 1902, when there was a rainfall of 28.05 inches. In 1916 there was a bummer crop in this district, the precipitation recorded at Lethbridge being 24.57 inches.

Headgates at the main canal in the eastern suburbs of Calgary on the Bow River.
There is no doubt but that an adequate supply of water in Southern Alberta should make it one of the best agricultural districts in the Dominion. It certainly would stabilize trade. The Imperial distributing organization will assist in the development of the country in this respect. Wherever irrigation contractors are found working, one will find Imperial Oil stations furnishing their products. There are no fewer than four stations now supplying contractors on the Lethbridge Northern Irrigation work. Three of these are equipped with tank wagons. Within the area now covered by irrigation there are forty stations. In areas under survey there are twenty-four stations and yet the irrigated area of Southern Alberta and areas now under survey represent only a very small portion of the territory.

The Alberta Railway & Irrigation Company was the first to adopt any definite plan that would put farming on a firm basis and in 1892 made its original survey. This was completed in 1901 and covered an area of approximately 120,000 acres. The C. P. R. now operate this and the development of this project has led to the development of other projects.

There are other enterprises such as The Canca Irrigation Company, which irrigates approximately 200,000 acres. Water has been supplied this tract for several years.

The Lethbridge Northern Irrigation District, while it has its difficulties in organization, was successful in having the Provincial Government guarantee its bonds, and work was commenced on the main drag line in the summer of 1921. Over 100,000 acres will be irrigated, while the cost of constructing the canals and the distributing system will be approximately $25.00 per acre. It is the hope that the high cost of living affects the price of water also. One feels sure that the pioneers of irrigation—the Pueblo builders—got water at less expense. Just the odd peppering of statistics to flavor. Water is being supplied in the following systems, the average being approximate:

Western Section, C.P.R....Irrigable area 220,000 ac.
Eastern Section, C.P.R....400,000 ac.
Lethbridge Irrigation Dist. 120,000 ac.
Canada Land & Irrigation Co. 300,000 ac.

United Irrigation District 80,000 ac.
Small irrigation schemes under private control... 54,700 ac.

Total Irrigable Area... 1,018,700 ac.

Further areas under survey and considered possible are:

Sundal Irrigation Dist. Irrigable area 70,000 ac.
Lethbridge Northern Irrigation District 100,000 ac.
Tabor Irrigation District 27,000 ac.
Milk & St. Mary Rivers Project 390,000 ac.
Macleod Irrigation District 10,000 ac.
Macleod Southern Irrigation District 30,000 ac.

Total 566,000 ac.

Then do these projects deliver the goods? The following figures are conclusive:

<table>
<thead>
<tr>
<th>Months</th>
<th>Rainfall plus irrigation allowances</th>
</tr>
</thead>
<tbody>
<tr>
<td>1924</td>
<td>1905</td>
</tr>
<tr>
<td>Feb.</td>
<td>6.18</td>
</tr>
<tr>
<td>Mar.</td>
<td>6.98</td>
</tr>
<tr>
<td>Apr.</td>
<td>5.81</td>
</tr>
<tr>
<td>May</td>
<td>4.23</td>
</tr>
<tr>
<td>June</td>
<td>2.15</td>
</tr>
<tr>
<td>July</td>
<td>2.58</td>
</tr>
<tr>
<td>Sept.</td>
<td>3.12</td>
</tr>
<tr>
<td>Totals</td>
<td>25.33</td>
</tr>
</tbody>
</table>

The average rainfall over a period of fifteen years was 13.618 inches. When you come to consider that there are hundreds of thousands of acres that can yet be irrigated, it will easily be seen that the territory is yet in its infancy. Truly, the successive crop failures in dry farming areas for the past five years have stunted its growth for the present, but it is coming back on a much more stable basis. Imperial service will extend with this development.

Do not overload chain hoists, cable and rope tackles.

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Henry J. W. 29 contained approximately 16,000 gallons of Imperial Royalite Oil, which burned steadily during the night. Due to the actions of our motor truck driver, R. N. Howard, the motor tank truck was saved. When it was evident that the town was doomed, Howard sought safety for his family, and then re-
Executives and Chief Clerks in Convention

For some time past the Manufacturing Department, Toronto, has been working on a revision of the refinery cost and yield forms with the result that a complete new set of these forms was adopted the first of this year. In order to properly record the necessary details to make up the new statements, changes had to be made in the accounting work. Where a concern like Imperial Oil Ltd., has a number of plants operating along the same lines, uniformity is one of the most important essentials in the preparation of their cost and yields.

While all the refineries did exceptionally well in installing the new system, it was thought by management that the best results could be obtained by a conference of the Refinery Chief Clerks which resulted in their meeting at Sarnia during the week ending June 3rd.

During this meeting nearly every phase of the accounting work was thoroughly discussed. Subjects had previously been assigned to the various members in attendance, and the thoroughness with which they conducted their topics showed a complete mastery of their work. The discussions of these subjects brought forth some very constructive criticisms, which resulted in changes being adopted in the method of determining labor costs and storehouse deliveries, figuring prime cost of storehouse material, re-arrangement of the manufacturing records, new basis of distributing Mechanical Department expense, etc.

In addition a new Refinery Primer was reviewed and adopted. This primer briefly covers the accounting work incident to Imperial Oil Refineries and outlines in detail the different features of refinery costs. This Primer will become effective in the different refineries on July 1st, the result of which will be uniformity in alloction of the refinery expenses and will give costs that will be of more value for a basis of comparison and will also show the different features of expenses in such detail that they can be followed by the refinery on an item seem to be out of proportion.

Mr. Sinclair met with the Refinery Chief Clerks on June 2nd and gave a very instructive talk on the Annuities and Benefits work, covering not only the details incidental to handling this work but also outlining the plans recently adopted by the Board of Directors for handling tuberculosis cases and the spirit in which the Annuities and Benefits plan is administered. In dealing with a subject which touches so closely the personal affairs of Imperial employees there naturally arose numerous points for discussion and the Chief Clerks had many questions to ask which were very clearly answered by Mr. Sinclair. His address was very much appreciated by those in attendance and should result in the better application of the principles pertaining to the Annuities and Benefits plan.

The Co-Operative Investment Trust, which is increasing in favor with Imperial employees as each year passes, was also discussed with the Chief Clerks and it was very gratifying to note the satisfactory way in which this plan has been handled by the various offices. At the conclusion of the conference a complimentary dinner was tendered to the visiting Chief Clerks at the Hotel Vendome. The Manufacturing Department, Toronto, was represented at this dinner by Messrs. L. J. Isnor, Dartmouth, N. S., C. C. Copeman. The other visiting members were Messrs. S. McCann from Lethbridge, R. C., W. E. McPhail from Regina, Sask., T. W. Creelman, Montreal, Que., and L. J. Isnor, Dartmouth, N. S.

Halifax Carnival Week

The Fourth Annual Picnic of Sarnia Refinery Employees was staged at Bayview Park. Arrangements were made for a big crowd and a good time, and with entire success. The weatherman, however, did not view the preparations with serenity and made a determined effort to dampen the ardor of the picnicers, but the programme of 29 numbers was fully completed.

Promptly at noon the greatest industrial parade ever seen in Sarnia left the refinery and moved through the city to the picnic grounds. Numerous motor trucks, over a hundred autos, several teams and bicycles comprised the parade, each artistically decorated. Each track portrayed some feature incidental to the work of the refinery, and elicited much favorable comment.

The Ball Game between Toronto and Sarnia teams was most excelling and spectacular. These teams met before in Toronto but the result was a tie, so that each team entered this game for "blood." After the second inning the game settled into a pitchers' battle with exceptionally good support on both sides. The score stood 3 to 3 at the end of the 15th inning, when game was called, account rain.

Judges of the Sarnia Baby Contest

Left to right: Mr. Wilkie, Mr. McCaff, Mr. Gilchrist, Mr. Sinclair.

The Imperial Outing at Sarnia

Impression track which appeared in the parade industrial parade the painting depicting a reproduction of the Halifax Refinery on noninsured cost the painting being by local artist. The artwork was by Sam Pagan, an employee of the refinery since its inception.

The first float aptly illustrated how proudly the oil industry has progressed in the past quarter century, the second gives an idea of a modern pressure still. Both were awarded prizes.
Western Branches Attend their Annual Outings En Masse

The staff of the Winnipeg office, with their wives, daughters and sweethearts, enjoyed their picnic at Winnipeg Beach.

Pictoresque Basson Island was the scene of the second annual outing of the staffs of Vancouver and Ioco.
Calgary Division Employees at Play

The Annual Picnic of the Calgary Division, held at Bowness Park, Western Canada's finest picnic grounds, proved the most successful in its history.

The varied and educational programme of sports was keenly entered by the staffs of the Calgary Division office and warehouse, the Royalite Oil Company and the Northern Gas Company. The office sprinters won the top dog this time - the particular star of the meet being H. Hetherington, who won the long and high jump, the 140 yard dash and the sack race, besides being well placed in other events. "Narcissus" was the best event, being won by the office and the warehouse. The annual "Tag-of-war" was won by the backslers of the warehouse. The children's races were quite a feature, the future directors of the company showing excellent pace. The 'ladies' races were quite an eye-opener, great form being displayed by the lady athletes, most prominent of whom were Miss Madge Taylor and Mrs. Isaac Dawson.

The great event of the meet was the relay race, which was won by the office by a lap. "Threading the needle" was repeated with success. A Canadian record was probably made in this event.

There are two ways to do your work, one safe, the other unsafe, one is right, the other wrong. Do YOUR work the safe way.

A chain is as strong as its weakest link. Test all chains.

It is usually safe to keep your temper.

The evil that results from the untimely mail are many and are a type of accident that can be easily prevented.

The Bank of Safety pays 100% and never fails.

Vancouver and Ioco Picnic - Ioco Wins Championships

Glorious picnic weather greeted the Imperial Oil workers for the second annual picnic. A capable committee under the chairmanship of Mr. Geo. M. Miller included Messrs. Eley, Kev, Ayres, Hufner, Unigetti, Foster, Leatham, Bradin, Scott, and Miss Gifford of Vancouver, and Messrs. Elston, Welsby, McCann, Harris, McCellan, Saffon, Hopkin, Chivers, Foster and Buxton of Ioco, and all necessary arrangements for comfortable transportation and accommodation on ground had been made by Mr. McMillan, the Union Steamship Co.'s "Chぜn" sailed at 45 minutes past 7 a.m. and by the time she arrived a large and handy crowd was waiting at the Henty wharf for Ioco.

The sail down the inlet which is of course no great novelty for boaters was soon accomplished. At Vancouver another large contingent was taken aboard and between 440 and 500 young men who were all seen steaming through the famous Narrows for Bowen Island.

Before lunch, Messrs. D. McNairn and Chivers picked up sides for a baseball match and a very amusing game was witnessed. The sports took up the greater part of the afternoon.

The tags of war are always looked forward to with great interest and this year Vancouver men won both events after an exciting struggle, but the Ioco ladies proved too heavy for the Vancouver team.

An Imperial Oil picnic without a football match between the city and Ioco would be quite unthinkable and a very well contested game progressed until after half time when the score was 2 all. Collections taken up among the employees enabled those in charge to provide excellent prizes for the sports which were presented at the end of the afternoon by Mr. Macaulay of Vancouver. After supper, a move was made for the boat and on the return journey capital music for dancing and singing was provided by Miss Mary Strange, Messrs. Dudley, Foster, Donald McMillan, and Eric Fuller.

Once again, as in 1921, the representatives of Imperial Oil, Limited, in the baseball field are in the limelight, Ioco having won the Dewdney League and the Mainland Championships, and have just missed repeating last year's never-to-be-forgotten performance by a run of luck. After defeating all comers, Ioco was defeated in the finals by Victoria for the championship of British Columbia. But although defeated Ioco's colors were not dragged in the dirt by any means and their famous "sportsmanship" is still fresh in the minds of British Columbia baseball fans.

Ioco has always been well represented in the Dewdney League, and has won three pennants in four years, which goes to show the remarkable support Ioco has received, both from the town and the company. Ioco has always supported their team well, and the team has rewarded them by bringing the bacon home to Ioco on three occasions out of four, also one British Columbia Championship.

At the conclusion of the season Mr. Sirdewan followed his regular custom by entertaining the team and the executive of the club at his annual banquet.

Mr. Sirdewan presented the various prizes to the star players. One for the best hitter on the team donated by himself and won by "Bub" Sullivan, our shortstop. He also presented the prizes donated by Mr. Stick, one of the first players to knock a home run in 1922 which was won by Mr. Cross, Ioco catcher. The other was for the player making a home run in the final game of the season and was won by D. Macdonald.
The Imperoyal Boy Scouts

By Bernard C. Wood, Halflax Refinery

The question may be asked as to the benefits obtained in the home, in the school, at play, or at business, to boys who have become members of the boy scout organization. It has been my experience that the boys are far more alert and responsive in the various activities of the day; that the organization is a most efficient means of reaching the boys. A boy who has enrolled in the boy scout organization has found it more difficult to try to be a white lying, lying boy; to do one good turn to some person every day without any remuneration; and to be a friend to animals.

Mr. D. M. Allen, Honorary Scout Master, General Superintendent, Imperial Refineries; Mr. W. G. Holmes, Asst. Scout Master, Calumet Refinery, Detroit; Mr. A. V. Savage, Asst. Scout Master, Cleveland, and Mr. A. M. Savage, Asst. Scout Master, Drumheller, have been prominent in the work of organizing and promoting the various scout organizations.

Mr. R. P. McLean, Scout Master, is in charge of the Boy Scout movement in the area served by the Canadian Government. Mr. J. F. F. Maloney, Scout Master, is in charge of the Boy Scout movement in the area served by the Government of the British Empire. Mr. J. B. L. Bird, Scout Master, is in charge of the Boy Scout movement in the area served by the Government of the United States of America.

The First Imperial Boy Scout Troop, and the First Imperial Wolf Cub Pack are in Boy Scout condition. The former has an enrolment of 80 Scouts, of whom 3 are King's Scout (the highest rank available). The First Class Scout, 14 are Second Class Scouts, 8 are Tenderfoots and 3 are in the Resolute Class.

The "Cubs" have an enrolment of 25, of whom 10 have received their first star and the others are "Tenderfoots." Twelve of these boys have completed one year's service. The boy scouts, under the direction of assistant cubmaster Robert, have turned out a fine minstrel show which has been shown in the village school, in Halflax and at Eastern. The minstrel show has met with great applause and the boys have profited in more ways than one.

The Doukhobors of the West

By W. H. Skidmore and H. W. Purdy

Among the large "consumer" customers of Imperial Oil products in north-eastern Saskatchewan is the Christian Community of Universalist Church, Limited - a cooperative group of farmers in which successfully operates and farms some sixty-four thousand acres of Western Canadian land. These people are better known as Doukhobors.

Apart from our interest in them as consumers, the history of the group is one of considerable interest. They are Canadian Russians, exiled from their own country because of their religion, which is not that of the Orthodox Greek Church. In Russia they were social outcasts, paupers, and suffered greatly from religious and civil persecution. The president of the Christian Community of Universalist Brotherhood and leader of the group prior to coming to Canada, was an exile in Siberia where he had been sent by the government for being the organizer and leader of the Doukhobor group in Canada. Through the instrumentality of Count Tolstoy, who rendered them financial aid and enlisted the assistance of the British Government, some thousands of these Doukhobors migrated to this country and located in various parts of the West. In 1905 Peter Vorolig was released from his exile in Siberia and joined the formation here, where he became again their leader.

At this time there are about twelve thousand Doukhobors in the West and about six thousand of these have secured their connections with the Christian Community, and while they maintain their religious convictions they have broken away from the one party. It appears that friendly relations are maintained between the community and non-community Doukhobors, because we find that they visit together quite considerably. It would seem that the non-community Doukhobors have their children in a number of the Doukhobor religion, except that of the socialistic viewpoint.

Their religion differs from that of the Orthodox Greek Church in that they cannot marry and that there shall be no rich or poor among them. They grow all their own food and are not allowed to own any form of property from the headquarters of the body. They undertake the responsibility of the care of the aged, the infirm and the very young.

Of the sixty-seven thousand acres that they own, a part is located in Saskatchewan, a part in Alberta and a part in British Columbia. The headquarters of the community are located at Veregin, Sask., and at this point they also maintain their original grain elevators and flour mills. As the community is now organized, it is a strictly business proposition, furnishing employment for more than six thousand people, and anything that these people earn goes to the community and from the community they draw sustenance and clothing. They are good farmers, getting good crops and not only do they cultivate their crops, cultivate extensively and keep the soil dense.

In all, the community operates twenty-two tractors of eighty or more at Veregin; they have in use fourteen steam engines, which are utilized for threshing operations only. They tell us that their reason for using so many different makes of tractors is that they are experimenting with a view to finding a model most satisfactory for their purpose, and when this is known to them they intend to use that model to the exclusion of all others. It seems to us to be a tribute to our products when we find that they are not doing any experimenting with those and neither have they done any experimenting in the past with our products, but have used them exclusively for the past twenty-five years. In the steam engines they use Imperial Capital Cylinder Oil and firmly believe that it is the only oil of its kind suitable for such engines. For their tractors they are using Imperial Potolite Special Heavy for lubrication and they are purchasers of Royalite by the barrel.

The Doukhobors are not a military man and one of the first principles of their religion is that they shall not kill. In the summer of 1921 it was discovered by the leaders of the group that twenty-one members had purchased rifles and sporting guns of various descriptions. A number of meetings were held, when it was decided that these weapons should be destroyed. Quite a function was made of this act of general destruction of the arms, and the weapons were burned at Veregin, where a large fire was built and the weapons which were shown to them were publicly burned. A manusing a keg of gasoline was allowed to cut the arms from the bodies of the weapons and set them on fire. Once a fifty-dollar Remington was thrown among the flames.

Rows and Homeplay are not included in a day's work.

Badly piled material invites a smash. Be careful.

All men overhead should remember the man below.
The Passing of the Pride of the Lakes

The “yacht” is gone from the Lakes. Each season whenever the little tanker poked her nose into any of the ports or canals along the Great Lakes system, some one was sure to cry—“Here comes the yacht!”

Shining cleanliness and graceful lines gained the “Imperial” her flattering nick name and, after her long years of service, at the time of her departure, one of the best known steamships on the inland seas.

Remembering the age of the “yacht,” one hears of present plans with some surprise, for no one would have suspected the “trim little old maid” of a desire to leave her comparatively placid lakes to venture out on the broad expanses of the Atlantic and the Pacific.

At first the thought of the “Imperial” pitching and tossing on the giant combers of the greatest seas of all appalls one. As the “yacht” she seems so small and so “petit” that one does not connect her with oceans and storms.

Then we remember that the “yacht” has already crossed the Atlantic once—she was built at Newcastle-on-Tyne and long before most of the great tankers of Imperial Oil, Limited, were even thought of, this little vessel was a veteran of the ocean.

And on top of that, vital statistics show that she is not so very ancient after all. In fact it was some years after the last of the pirates had been chased away from the North Atlantic that she slid into the Tyne River. The “Imperial” is twenty-four years of age.

When one gets really close to her, she is not so terribly small either, for she measures 200 feet from “fore” to “aft.”—What was that, Captain Cross?—and has a thirty two foot beam. While this does not place her in the levitathan class, she can stow 5500 barrels of gasoline or fuel oil and “walk away” with it. She has been doing this for years.

The oldest ship in the Company’s fleet, it is estimated that the “Imperial” has carried more than three million barrels of Imperial products and in doing this she has plowed the waters of the Great Lakes for a total distance of over two hundred and fifty thousand miles.

During all these years the “Imperial” has been out of commission for an extended time only once and that was when she was forced to take “time out” after a little mix up with the Midland Prince, one of the largest ore freighters on the Lakes. This is another instance of the fact that the “yacht” is a stout hearted ship, for she certainly picked out a giant to battle when she “took on” the Midland Prince.

The voyage which the “Imperial” recently took was the most eventful of her whole lifetime, for it took her through the Lower Lakes and the St. Lawrence River out into the Atlantic. She then proceeded to Panama, passing through the canal and down to Talara, Peru. From Talara, traveled up the Pacific Coast to Juneau, British Columbia, her ultimate destination.

Before leaving Sarnia she was entirely refitted and she left there with Captain Fred Foote on the bridge.

The “yacht” will be missed from the Lakes, by the old timers, and it is certain that her fame will go before her to the Pacific Coast waters. Besides being the demure little old lady of Imperial Oil’s Fleet, she is a stout hearted little ship and quite fit to hold her own on any sea.

From Red Deer to Brazeau

P. B. Jarvie, Calgary.
RED DEER district in Alberta is noted as a haunt for sportsmen. Partridge, prairie chicken, duck, plover are everywhere and in special spots one may be fortunate enough to bag some long-necked geese (wild goose). To see a party of men start out with a car and bring back fifty to one hundred birds is a common thing. Complaints have been made by farmers of the damage done to their crops by the wild fowl and sportsmen have been invited to their fields to hunt. Wild berries of all kinds, which are very plentiful, also furnish feed for the birds. When you find a good berry ground, there also will you be sure to find the birds.

Reaching Rocky Mountain House sixty miles west of Red Deer we are on the banks of the South Saskatchewan River and at the beginning of the foot hills the C.P.R. and C.N.R. parallel each other to this place and there is also a fair automobile road. This is a thriving village where the Hudson's Bay Company established a trading post 120 years ago. The Stoney Indians brought in their catches which they traded for the white-man's wares. Trading must have been good in those days for there is still good trapping in this district.

The C.N.R. extends its way further west for another 60 miles, climbing the foothills several hundred feet above and overlooking the South Saskatchewan. The view is beautiful. Three small operating coal mines are passed before the terminal is reached at Brazeau in the Clearwater Forest Reserve. Here are the big coal mines known as the Brazeau Collieries Limited, mining steam coal for the C.N.R. It is a semi-anthracite of high quality.

Brazeau is a model town with well built cottages, water works and electric light. Everything looks sanitary and tidy. The Big Horn Trading Company supplies the town with all its needs. The town has a magnificent view down the valley which lies beneath the towering peaks of the Big Horn range. Again the sportsmen have their paradise but, when they come out here they are after a big game. It takes time and a little money, for they strike off, as a rule, fifty to seventy-five miles into the mountains and pack-horses, equipment and a guide must be secured. But the Big Horn Trading Company will look after all that. What a grand and glorious feeling to be away up the side of a mountain a couple of thousand feet or so sniffing the rarified air and beholding that place beneath you where the stage ever goes on. One feels away from the world and its cares.

Then, what's that white thing moving away over yonder on the mountain side? Yes it is; there's three of 'em. Mountain goats! We make a detour and come around within range below them, keeping out of sight behind a large rock. We both fire, and down the mountain side comes one tumbling until it hits a ledge—a handsome fellow. He is skinned and a steak taken off him. One good trophy! Before one gets back to camp, he bags a bear, a big fellow too. He was roarin' mad and it would have been "good night for us" if two well directed shots hadn't done their work. Then imagine the sensation when following your tracks back at dusk, to be all of a sudden startled by the roar of a cougar, a few yards in front of you. After coming too, you notice two shining eyes in amongst a clump of spruce. You get him because cat-like, he puts his back up and didn't know enough to get out of the way. Quite a thrill though! Then you may get a moose, a deer or a mountain sheep. For the professional trapper, there is beaver and roe for him out here in the smaller animals such as the lynx, otter, beaver, martin, mink, ermine etc. For three weeks or a month of this life is a rejuvenator and will cure all ills.

There are Indian trails leading from Brazeau to Banff or Lake Louise some hundred odd miles through the mountain heights and passes. But when you get to the National Park, cease firing.

The Late P. D. Lock

Vancouver office of Imperial Oil, Limited, suffered a distinct loss in the death of Mr. Percival D. Lock, whose death occurred recently, after a brief illness. Mr. Lock had endeared himself to his fellow workers in Vancouver by his quiet demeanor, his thoughtfulness and sincerity and to the most popular member of the staff. He leaves behind him to mourn his passing, a wife and two dear little girls to whom goes out the heart-felt sympathy of many friends.

What Comes Out of a Barrel of Crude Oil

<table>
<thead>
<tr>
<th>Component</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline</td>
<td>10.8 gal</td>
</tr>
<tr>
<td>Kerosene</td>
<td>4.1 gal</td>
</tr>
<tr>
<td>Diesel Oil</td>
<td>2.7 gal</td>
</tr>
<tr>
<td>Lubricating Oil</td>
<td>1.8 gal</td>
</tr>
<tr>
<td>Wax &amp; Asphalt</td>
<td>1.2 gal</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>25 gal</td>
</tr>
</tbody>
</table>

You drive up to a filling station, put in five gallons of gasoline. You pay for it and drive off. It is all so much a matter of course that you never stop to think of what has been done by someone to make it so easy for you. Every time you use five gallons of gas in your car somebody has to pump a half barrel of crude oil out of the ground.

Examination of recent figures showing over half a billion barrels of crude oil produced for use in America last year and only 128 million barrels of gasoline made from it develops the fact that it takes nearly four barrels of oil to make one barrel of gasoline. Yet the crude oil of the United States and Mexico is produced primarily by gasoline.

A diagram of oil figures compiled by the American Petroleum Institute for 1921 shows that 927,986,000 barrels of all were used in the form of petroleum products other than gasoline. There are forty-two gallons of oil in a barrel. Of these 25.0 per cent goes into gasoline; 37.0 per cent benzene; 42.0 per cent fuel oil and gas oil; 43.4, lubricating oil; 3.4 are, and asphalt; 6.0 per cent miscellaneous and 4.1 per cent loss.
LET me but do my work from day to day
In field or forest, at the desk or loom,
In roaring market-place or tranquil room;
Let me but find it in my heart to say
When vagrant wishes beckon me astray;
This is my work; my blessing, not my doom;
Of all who live, I am the one by whom
This work can best be done, in the right way.
Then shall I see it not too great, nor small,
To suit my spirit and to prove my powers;
Then shall I cheerful greet the laboring hours,
And cheerful turn, when the long shadows fall
At eventide, to play, and love, and rest,
Because I know for me my work is best.

—Henry Van Dyke