READ THIS MONTH'S HEADLINE ARTICLE

"Releasing the Titan in the Black Diamond Field"

The story of how drillers fought to control Twenty Million Feet of Gas and how it finally broke all bonds.
Releasing the Titan in the Black Diamond Field

How drillers fought to control twenty million feet of gas and how it finally broke all bounds

WHEN work was commenced, on the 7th of September, 1922, on No. 4 Royalty well, the hope and intentions was to make a deep test which would answer once for all the question of what lay in the lower measures of the Dingman anticline in the Turner Valley Field, 48 miles to the south and east of Calgary, and to tap, if possible, at its source the oil body, if such there be, from which originates the high gravity oil found in the numerous “kneecap” that have been opened up in more than a dozen wells on the Dingman structure within the past ten years.

When on Thursday morning, October 16th of this year the well, at a depth of 3,740 feet, came in with a screeching gusher estimated at twenty million feet flow per twenty-four hours the drillers believed that they were upon the eve of a discovery which would mark the inauguration of a new oil field on the Canadian side of the line.

But it was only for a short four days—Thursday to Monday—that the well was under control; then it broke loose, shattered all bands and, with titanic force unleashed, possibly destroyed itself.

The question of what lies below is still unsolved and the incident adds one more to the long list of proofs that drilling for oil is a hazardous and costly game.

Making a deep test is no small undertaking in a territory with as many adverse physical conditions as the Turner Valley Field.

Here it was in 1911 that the first oil discovery in Alberta was made in the old Dingman No. 1 well, following which came the ill-timed and now historic Calgary oil boom, wherein hundreds of thousands of dollars went into without companies, of which only a small percentage went into development.

Not a great deal was known to Calgarians at that time of either the theory or practice of the fields. Charlatans masquerading as geologists—men of magic they were thought then—harvested fabulous fees for their incantations and fortunes were hazarded upon their unverifiable say so. Structures bloomed upon maps that had hitherto been guileless of anything more ornate than reality subdivisions, and curbstone brokers became suddenly fluent in the patter of domes, anticlines and cretaceous formations.

But notwithstanding all the bunkum of the day there was much drilling undertaken. In the late summer of '14 there were no less than a dozen rigs pounding away, most of them under the direction of men of business capacity and in the hands of competent drillers.

It was soon found, however, that it was a very difficult field to drill. Alternating hard and soft strata and steeply-dipped structure brought grief to many an experienced driller. Crooked holes and fishing jobs were not only the rule; they appeared to be inevitable. In fact it is claimed to-day by men intimately acquainted with the records that there is not one well in the field that has not some missing hardware in it at some point and many of them have from two to half a dozen strings of tools in places where they will never
again see the light of day. Many a driller with a furished and shiny reputation came jauntily to the Turner Valley field to show the natives style, only to find himself humbled by a geologic condition which had more cunningness in it than anything in his previous experience.

But out of the wisdom bought with adversity a handful of drillers learned that field and by dint of perseverance and genius got their holes down to the Dakota sand, which was their objective.

In one respect the Turner Valley field has been a remarkable one; that is in the respect that every well which reached the depth got some oil. There were no dry holes. But on the other hand there were no bonanzas, and the oil was of a freakish nature. Very light oil, in many almost pure gasoline, which many oil men maintained was not oil at all but the natural condensation in a subterranean laboratory of the gasoline out of a wet gas given off by some oil body lying at a greater but unknown depth.

So that the wells sunk did not solve the problem; they merely intensified it. The question still remained whether this hypothetical oil body could be found or whether, if it existed at all, it did not lie at too great a depth to be reached by the drill.

The reason why the wells did not solve the problem was that they were running low and that the company wanted no more of their shares. To add to their perplexities United States government placed an embargo on casing and drilling equipment. Operations slowed down and by one company ceased drilling in 1918 and '19 only three or four rigs altogether were working in the field.

Then in 1921 the Deginman Company, which had pioneered the field and had made an heroic attempt at development but without profit to themselves, consummated an arrangement by which the Imperial took over their enterprise, furnishing all the capital, the Deginman holders retaining a participating interest.

The Deginman Company, headed by W. A. Deginman and composed very largely of business men in Calgary, had made the most consistent attempt of any of the Calgary companies toward the development of the field. They had two wells on production and a third drilled to a depth of 1200 feet. The incorporation name of the company, which, in behalf of the Imperial, took over the enterprise, was the Royalite Oil Company and these wells subsequently became known as Royalite Nos. 1, 2 and 3.

The production from the wells was wet gas with a small amount of very light oil. The Deginman Company had had an absorption plant, constructed with the assistance of Imperial Oil by the Hope Natural Gas people of Calgary, with which it had been separating the gasoline from the gas. In the late fall of 1920 fire had completely destroyed this plant, leaving the company without equipment for production.

The outfit was about the same as that used when Imperial Oil took it over.

The Royalite took over in March, 1921. One of the first requisites was a new absorption plant to put the enterprise on a revenue-producing basis, and steps were at once taken toward the construction of the plant now in operation there, which is admittedly one of the most efficient and modern plants in existence anywhere and the only one of its class in Canada.

Meantime the drilling of No. 3 was resumed and a contract entered into to supply gas to the Calgary Gas Company, delivery to be into the company's mains at Holmstead. For the carrying out of this contract a six-inch pipe line was built, on arrangement with the Gas Company, from Turner Valley to Holmstead, a distance of 18 miles. On December 31st, 1921, the absorption plant was put into commission and simultaneously the pipe line was completed.

The Royalite commenced on that date to deliver gas to Calgary and therefrom on to Holmstead, thus continuing on a production basis.

There still remained the question of what lay below. In fact no serious attempts had ever been made to solve the riddle, although it was generally recognized that there were possibilities at depth.

No new drilling was undertaken until September, 1922, when Royalite No. 4 was commenced.

The idea from the first had been to reach the greatest possible depth. The location chosen was upon the apex of the structure and the rig was heavy duty standard, commencing with a 20 inch hole.

From September 22 to November 23 drilling was carried forward continuously. Ninety feet of the 20 inch were put in, 766 feet of 15", then 1192 feet of 12 1/2", and 1957 feet of 10 inch, one of the last strings of the size ever used in Canada. A string of 8 1/2" was run in and at 2871 feet a gas sand was opened up which showed a potential of seven million cubic feet a day, the largest well thus far in the Turner Valley. From November 15th, 1923 to May 21st, 1924, drilling was suspended so that the well be allowed to deliver gas during the winter months. When drilling was resumed the 8 1/2" was landed at 3985 feet and all arrangements appeared propitious for the deepest well in Alberta. At 3450, with a 6 1/2" string, they had reached the top of the 10" line and appeared to have exhausted the possibilities of the field as the sand, corresponding to the Ellis in the Kevin field and which immediately overlies the Madison, was found to be absolutely dry.

Nevertheless, with the 6 1/2" landed at the 3450 they continued drilling open hole, as much because they had good drilling as for any other reason. Then at 3740 came the surprise.

The usual experience with gas wells is that they give two or three a day and never show a steady increase. Occasionally there may be a cut-back, but the main flow, by and large, just keeps on increasing, so the opportunity of finding a new gas field of a large nature is not all illusory.
**Interpreting the Sub-Arctic Enigma**

**Racing with the Short Season, the Drillers Find Time Alone. The Factor that Prevents the Unraveling of the Riddle of Fort Norman.**

**The Unadorned Tale of the Season's Work in the North**

THAN the crisp and business-like story of the men who do the work in the far flung search for oil, there is no more absorbing narrative. Here is Angus Sutherland's report of the season's operations in the Mackenzie River. Angus is a veteran of the pioneering staff of the Imperial. To all acquainted with the field forces of the company it will not be difficult to read into his story some of the atmosphere and romance of the search for oil.

To him a life time of experience has taken the thrill out of an invasion of the wilderness or the coming in of a new Well. A trip to the Arctic is only part of the season's work. Shipwreck, storms and the tyranny of an inexorable climate are the commonplace incidents of this episode on the rim of the circle. The terse and matter-of-fact language of the report conveys more clearly than could any flight of poetic fancy the spirit and morale of the men who sacrifice comfort, toil prodigiously and risk their lives in the search for oil. Here is the story. Read it for yourself and find out if it does not make you feel a little better to be playing in the same team.

**The Party**

**Angus Sutherland**
Superintendent

A. L. Featherstone, Second Driller

Harry Whitton
Tool Dresser

E. W. Sutherland, First Driller

W. D. C. Reid, Fireman

W. A. Wilson, Fireman

L. B. Harrison, Mechanic

P. W. McKinnon, Transport Officer

**General Report on Operations at Fort Norman Season, 1924**

The party reached Fort Smith on June 15th, and had we left on the Northern Trading Company's steamboat, the Turon Company's bevor engaged we should have been out immediately for the North, as Great Slave Lake had been clear of ice since June 10th. Unfortunately neither Company had figured on an early spring and the result was that we had to lie at Smith until June 28th, on which date we left for our journey to Fort Norman. The journey was uneventful, and the party reached the settlement on July 3rd.

**The Men on the Ground**

**TRONNDRON DRAPER**
General Manager of the Resolute Oil Operations.

**SAM** COLTUS
The man who knows how to capture gasoline from water and get it to market.

**BILL** APPLIQUE
Drilling Superintendent who has handled the drilling of more deep bore holes than all other field men combined.
run up on a submerged rock. After getting clear we had to work our way around the most dangerous part of the reef. Immediately on our arrival here and with the assistance of the compass of the "Trader" we proceeded to launch the 45 foot boat and went in and anchored immediately. By this time we had anchored the 45 foot boat near the reef and the outrigger party proceeded to bear island to inspect timbers and check our progress. The next day we proceeded to bear island to inspect timbers and check our progress. This work was completed during the morning but as it was at low tide we had to move the party over to the "C" camp until the following morning. The water was low at the time but after the 200 gallon water lines to the storage tank and the kitchen and in setting up the pump and gasoline engine.

The following day, July 1st, the party on reaching "C" camp proceeded to tidy up the cabin and cook house, overhaul the rig and, fill the boiler ready for running. The next morning the 6" string of rigging was started without anything to break it down and it was not to be in operation to the top of the 250 ton jack. By July 4th, all the 6" string had been pulled and shackled. The following morning we started on the pulling of the 10" string, but were able to move this string only about 250 feet at which it stuck fast. By July 6th the 10" jack was broken free and it was decided to drop the rigging. It was made 65 lengths from the surface and the timbers were moved without difficulty. By July 11th this string had been pulled and the rigging was completed and work was commenced on the 10" string which was pulled rapidly and three times before it was possible to break the last of the timbers which made the big jack. The final cut in this string was made on July 12th, which cut the large and surfacing and that amount of rigging pulled and shackled.

On July 9th, the party returned to the "D" camp from the large and surfacing and that amount of rigging pulled and shackled.

On July 25th we were ready to proceed with the breaking of the foundation. The size of the crew was from 12 to 18 men and the foundations were set by the "Radarium" and lasted until the boat was pulled and the 8" string was pulled from the 10" string. The boat was handled economically and it was necessary to cut the entire length of the 10" jack. The boat was handled economically and it was necessary to cut the entire length of the 10" jack. The boat was handled economically and it was necessary to cut the entire length of the 10" jack. The boat was handled economically and it was necessary to cut the entire length of the 10" jack. The boat was handled economically and it was necessary to cut the entire length of the 10" jack. The boat was handled economically and it was necessary to cut the entire length of the 10" jack. The boat was handled economically and it was necessary to cut the entire length of the 10" jack. 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Gullible's Travels
BOOK FIVE–ADVENT IN A REFINERY

It is now a mere matter of history that my seaman career in a tucker was abruptly terminated in a terrific storm during which my life was threatened and at the termination of which I was cast ignominiously upon the beach. The storm had broken about my head with startling intensity when the Chief Engineer, late of Liverpool, made the disconcerting discovery that while absent in the engine room his very own private pail of lemonade had been supplanted by salt water, although the lemon peels still dangled in the pail lid. It seems that someone had seen the culprit steal away from the Chief's Cabin with a cup in hand, although I can recall no more than an unexpected encounter with Tom and Mary, the ship's cats, and a slim-high piece of piping while proceeding forward under full head of steam toward my own quarters.

The humiliating details what they may, I was told off, paid off and kicked off when the tank ship "Alberfor" docked at Montreal East Refinery the following day. The dock is of cement, as I remember.

After limping away to a safe and secluded spot, I adopted a semi-recumbent posture to contemplate an uncertain future and to essay an anchoring frame. As Senior Sixth Engineer I had been awarded the magnificent gratuity of 25 cents a month, and with six weeks of service to credit or otherwise, I boasted possession of 37 of the god's king's coppers with which the Captain, in a perverted moment, had endowed me.

Thirty-seven cents and Toronto four hundred miles away! Plainly work was to be sought without delay. The tin of preserved peaches and few biscuits harboured from the forward storeroom could not forestall the anxious clamor of a hungry stomach for long, and my working capital exasperated immediate activity.

Well, I thought, you who have gone down to the sea in a ship with other brave men, observe a shore respite and it might just as fittingly be here in a petroleum refinery as a mile away, say at Dominion Park. It occurred for a moment to apply for position as "efficiency expert" on a pressure still, whatever that was, for I had sometime gained an impression that the less one of the experts knew about the problem in hand the easier it was to chip off minutes of time, degrees of heat, and years of concealed usage. But second thought discouraged the plan upon the condition of the several gentlemen present on the engine room platform at the time. Anyway, I got work, work embracing the use of two well-known implements—a pick and shovel—and instructions to dig down six feet toward the bowels of the earth in a certain spot of the refinery yard.

By noon the hole had assumed the dimensions of a sepulchral pit. Having no more to do and nothing contributory to lunch beyond an appetite, I walked across to a nearby structure and introduced myself according to the "Mariner's Unwritten Handbook of Shore Etiquette."

"I am Gulliboo," I volunteered.

"You look it," stated one of their number, at which they all laughed in what seemed friendly recognition and open conversation. To tell the truth, it was warmly pleasing to find that the fame of my travels had spread even here. Now the nature of this structure under which we stood had puzzled me all morning and I determined at whatever sacrifice to prestige already acquired, to learn something about it. Imagine my surprise, if you can, upon hearing that it was a battery of pressure stills. This huge affair hardly materialized former nebulous conception of a contraption combining the features of an old-fashioned plunger churn and about 180's, was too vague. A process to extract more gasoline from crude was therefore an urgent necessity to the petroleum industry. Hence the evolution of the pressure still and its ability to "crack" the heavier stocks into a lighter oil, which has been the principal factor in to-day's possibility of securing 30% of gasoline from the crude. The process of "cracking" an oil has been ably compared with the sifting of gravel into fine and coarse grades. When all the fine gravel is screened, and more is yet desired, it is quite apparent that by crushing the large stones remaining, the required fine gravel can be obtained.

So with all. The molecules of a heavy stock which has been already produced from crude oil in the crude still and is known as gas oil, are split into smaller hydrocarbons of lighter gravity and lower boiling point by subjecting the heavier oil to abnormal heat. This high temperature can only be attained by isolating the oil in a closed container, such as a pressure still, so that no vapors can escape until the proper temperature has been reached.

The still which holds the charge of gas oil is a shell about ten feet in diameter and thirty feet long. Fire is not applied directly to the
bottom but through a series of inclined tubes, this arrangement providing a more efficient heat distribution and securing a minimum coke deposit. The still is charged with about 15,000 wine gallons of gas oil, leaving a vapor space in the shell equivalent to 4,000 gallons. Steam is injected at the top of the shell to prevent the oil from flashing while charging and allowed to escape through vents. When charging is thus completed the steam is shut off, all vents are closed, any water which may have collected in the oil is drained off, and the vapor line and the condenser coil, or worm as it is known, are set to allow a free passage of vapor to the small drum in the receiving house, where the condensed product may be observed in the "night boxes" when it passes through toward storage tank.

The still is then heated. Vapors gradually form within the still and oil only to condense and flow back for redistillation until finally sufficient heat is imparted to send the lighter vapors through to the water condenser.

As the small drum in the receiving house becomes filled with distillate it is drained through the meter into a receiving tank. This product, called pressure distillate, is the raw material from which gasoline is made.

When a certain amount of this distillate has been removed, the quantity of oil in the still is maintained at a constant amount by pumping in fresh gas oil at the same rate at which the distillate is bled off.

The residue remaining in the shell and tubes at the end of the run is still called pressure tar and after "topping" or reducing to a safe flash point can be used as an ideal fuel because of the low viscosity, or ease with which it flows. The tar is removed to storage and the still cooled by injecting steam and removing the manholes, after which the still-cleaners enter the shell and scrape out all carbon deposits. Then the entire equipment is inspected and repaired, re-assembled and another charge of gas oil put into the still and the entire process of distillation is repeated. The gas given off in the distilling process is used as fuel and also for manufacture of certain alcohols and chemicals. Thoroughly engrossed in absorbing the foregoing revelations, and padding after the stillman here and there, I had neglected to heed the hour and it must have passed three when the bosses located me. It seemed as if I had walked at the little plot and found me missing. It further appears that what he wanted was some sort of flower bed, six feet long and not too deep as I had made it.

Of course I apologized, but he didn’t get the hang of it all. how walking around learning etc., etc., would make me more valuable to the organization, and also resented very much when I quoted Byron’s "thinkst thou existence doth depend on time?" in substantiation, which was disinterestedly idle.

Walking toward the city and away from this brief refining influence, a cursory audit now revealed $2.17 on hand and $8.75 still required to get a ticket for Toronto. Moved as a last resort to the exercise of political influence upon a relative, the money was procured eventually and midnight found me on a homeward checking train, convinced contra the section, not knowledge, is the greater end of life.

Prince of Wales Visits Calgary Refinery

On October 9th the streets of Calgary were crowded by hundreds of men, women and children who cheered heartily as the Prince left the railway station for a visit to our refinery at Calgary, which he had expressed a desire to see.

Accompanied by a party composed of General Trotter, his aide, Sir Alexander MacEwan, Capt. Lascelles, Major Metcalfe, Inspector Sharp, Professor W. L. Carlyle, the Manager of E. P. Ranch, and several Websters, the Prince remained about an hour walking around the plant.

It was understood at the refinery that the Prince of Wales would be treated as a private citizen, and therefore no attempt was made to embarrass him by taking photographs or interfering with what pleasure he might secure from a quiet inspection.

Releasing The Titan

(Concluded from page 10)

But whether there is oil there or not still remains a question. The gas is large volume and the gas is wet. That much is manifest. But no indication was found of a sand to hold an oil body and if such oil body exists it would have to be in a porous limestone. Such is not geologically impossible; but it would be a departure from the earlier geologic hypothesis regarding Alberta.

In other words, the riddle is still there and unsolved. The answer can be had at the expense of another hole—say a hundred thousand to a quarter of a million dollars. That is, of course, providing there is no bad luck to add to the cost, or lose the well.

Canada’s Killarney

Kenora, the site of our first tank station in the West

By Frank Sellier, Agent at Kenora, Ont.

When Thomas Montgomery travelled out from Sarnia a number of years ago to inspect the first western storage tanks of Imperial Oil, Limited, the town site of Kenora still carried the name of Rait Postage.

Goodwill was created right back in those early days and it has been sustained ever since. Some of our oldest customers who have dealt with the Imperial organization since its establishment at Kenora take occasion to remind us now and again of the days way back when cargoes were shipped of Royalite Coal Oil in wooden barrels which upon receipt were buried in the snow. Subsequently, when the thermometer registered 30 below and a customer came round for a gallon of Royalite, it was necessary for the agent to go outside with a shovel and the office boy to exhume a barrel. Those people can appreciate the progressive policy which has brought about this transition to present motor tank delivery and a good many of our improvements.

Kenora always has been a stronghold for Imperial products and I doubt if there exist anywhere better relations between a company and its customers.

Kenora is located on the north shore of Lake of the Woods and it is a natural mecca for all kinds of outdoor sports. The fifteen thousand islands dotting Lake of the Woods combine with a nation’s paradise for anglers and a site of conquest for hunters.

Our business is a little different here than in most places. The usual demand on gasoline and lubricants for automobile traffic is supplemented to a large extent by motor boat requirements. Local travel by launch predominates. The dust of country roads, the vexation for speed limits, and the impending worry of blow-outs do not build such a prominent place in the mind of the Kenora launch operator as he twists among the islands.

To some extent the stoic Indian still may be seen perched in his birch bark canoe and taking the wash of a high-pressure launch; but more generally the modern native sits behind a little one-cylinder engine and strives for more miles per gallon.

Kenora’s industries provide a liberal market for our products. At Keewatin the finest and most up-to-date flour mill of the Lake of the Woods Milling Company operates at a capacity of 12,000 barrels of Five Roses Flour per day. Another mill belonging to this concern is located within the town and it lies on a long, wide river.
A Hard Water Problem

Soft water hard to get at Regina

BY E. A. Duschak, MECHANICAL SUPERINTENDENT, REGINA REFINERY.

One of the important points considered in the selection of a refinery site is a suitable water supply. The water supply should be abundant and a certain percentage pure and soft for the steam boilers. The remainder must not be of such good quality, but should be easily obtainable if possible. At times other factors outweigh the question of water supply and the location chosen may not furnish a supply as suitable or accessible as desired. Such is the case in regard to the Saskatchewwan Refinery, located at Regina in the center of the prairies. Southern Saskatchewan has few lakes or streams situated so as to furnish a supply for a Refinery, and the water for the above Refinery is all obtained from wells. This means that to obtain a sufficient supply presents quite a problem and the water when obtained has a degree of hardness which makes it unsuitable for boiler use.

During the first year of operation the refinery at Regina water from the wells was used for boiler feed water. Due to calcium and magnesium salts in the water a heavy hard scale is formed in the boiler. The forming of scale results in a loss of heat and decreased efficiency.

The purpose of this article was to give some ideas of the difficulties in the way of procuring suitable water for the boiler plant at Regina, but a few words might not be amiss to show that all is not well when a water supply is obtained from wells. In the first place, the location of a well is based on the information which can be secured as to where water was found previously and the indication of the depth of the supply of water underground. But with all the above information on hand, wells will be drilled and fail to bring forth water. This means Regina drilling approximately 100 ft. After the well is drilled it develops contrary strata and gets the well in shape to operate the well pump successfully often is very discouraging and success is achieved only after considerable time and labor.

This hard water when it becomes hot deposits scale, as stated previously, and when used for cooling the condenser coils at the Stills it covers the coils with a hard scale. This decreases the cooling effect of the coal and periodical cleaning of the coils must be attended to. A sufficient supply for condensing purposes is procured at the least expense by returning the hot water from the condenser boxes at the Stills to a cooling pond, where the hot water is pumped through sprays and mixed in the pond with cool water from the wells. Also all overflow pipes and hot water sewers gradually become filled with scale and the life of this equipment is very short compared with the same equipment where soft water is used. A six inch pipe used as overflow from condenser box has filled in one year and the opening is only two inches. The additional cost of operation due to the cooling of hot water for such purposes can readily be surmised, and considerable money could be profitably expended to obtain a soft water supply. The engineering details have been worked out to bring such a supply from the Saskatchewan River to Regina and vicinity, but the proposition was not approved by the electorate when put to a vote. It is to be hoped that in the not too distant future this scheme will be approved and soft water assured for the towns and cities of Southern Saskatchewan.
Pertaining to Picnics

Halifax

THE Halifax Marketing Division went out to the east end on July 10th for its second annual picnic. At ten o’clock on that day the crowd gathered at Dartmouth dock and from thence proceeded to the picnic ground, ten miles distant, by bus and it may be imagined that few found their journey difficult. Upon arrival, the ground immediately became the scene of great activity. A refreshment booth was set up, speeches were made, the races, and many of the picnicers took a dip in the ocean. The races were a rollicking success, the blindfold race being particularly amusing as it was held on the beach and some of the participants were quite determined to head for the open sea.

The spot boasted a new dining hall where a tired and hungry multitude eventually gathered around one long table for an invigorating supper.

Further sports and an hour of dancing followed the refreshments at the conclusion of which the participants returned homeward to the tune of many a lively song.

Montreal East Refinery

A BOUT the hundred employees of Montreal East Refinery ringed their families for the annual picnic on July first at Bont de l’Isle. There were good things to eat in abundance and the program was keenly contested. During the afternoon the type tiles, lanterns, look-ins and other novelties kept the children, while thirty gallons of free ice cream cooled many a little stomach and did real work towards counteracting the summer heat. The afternoon was a success.

Toronto

CURWAYS of expectancy as scores of the five-day-old baby showed in the big baby show. The green, white and blue of the flags, on every page. The initials for the national game were strung for supremacy in a closely fought tournament, races, racing contests, a hard-pulled tug-of-war, flogging off by a delightful evening of vaudeville entertainment and dancing in the Decoration Building were the outstanding features of the big picnic of Imperial Oil, Limited, held July 24th at Exhibition Park.

Regina

REGINA BEACH was advertised on July 19th by the employees of Imperial Oil, Limited, and families. Good (but weather prevailed and bathing was not possible. A lengthy list of athletic events was contested with the enthusiasm only a Westerner knows how to inject. In the tug-of-war department the single ladies from London the single ladies from the Outfit. Heavy rain and an electric storm failed to interfere with the holiday programme.

Suggestions for the Typist

BY THE TYPEWRITER INSPECTOR

This provides a rapid and easy method of tabulating amounts up to $100. If most of the amounts are over $100 and under $1,000, set the dollars stop at 56 instead of $7; i.e., leave one space between the stops. A little experimenting with this plan will enable the typist to list figures as rapidly with this simple one-key tabulator as with the more elaborate ten-key decimal tabulator.

The ribbon switch lever (often referred to as the string cutter), though used primarily in the cutting of stencils, may be used when desiring an unusually large number of carbon copies.

By moving the lever to the neutral position the ribbon is prevented from rising, and while there will be to copy on the first sheet, it is possible to make a large number of better carbon copies since the ribbon does not intervene between the type and the carbon.

See that the shift-key tension is not too heavy. As the shift key is the weakest part of the machine, there should be high tension to bring the inner carriage back to position. The pressure should be such that the operator’s elbow is slightly lower than the bottom of the machine frame. The correct position makes the work easier.

What is Coincidence?

A RECORD of coincidence is reported from Devonshire, England, concerning two brothers aged 18. When they were 12 years old the twins were apprenticed to a miller. They are still millers and still working side by side. The letters married on the same day and lived in adjoining houses. Each had ten children; one, three boys and seven girls; the other, one girl and seven boys. For fifty-seven years both twines have attended the same Sunday School and neither has missed a Sunday.

The Exodus of Fruit

The most of the choicest fruits of the continent were brought from other lands. The cherries originated in China, so, too, did the apricots; while the sweet orange came from the South Sea Islands. Northern Europe and the temperate portions of Europe and Western Asia. The first came from lands bordering the Mediterranean, particularly Syria, while the cherry’s birthplace was near the Caspian Sea. India was the home of the citrus. The grapefruit, a member of the citrus family, is a native of South-Eastern Asia.
Sights at Sea

Sandwiched between verbose Hydrographic reports on weather forecasts and navigational notices, the reader often encounters an interesting record of phenomena observed at sea. Barnum, with all his ingenuity, could not have brought one of those meteorological tidbits up from his watertown into his museum, and an account of one of these rarities never fails to serve the hair follicles.

Couched in the unpretentious language of seafaring men, one occasionally happens across items such as these:

**PHOSPHORESCENT SEAS**

Capt. A. D. Tibbetts of the motorship "Boodyball" reports that on Oct. 7th, 1925, in lat. 45° 00' N., long. 124° 22' W., the ship entered an area of phosphorescent water of unusual brilliancy, making a glow on the horizon from 800 to 1000 feet high, and of such brilliancy that it was possible to see the lights of a city. The sky appeared to be filled with phosphorescent flocks of birds, with the luminous clouds forming a luminous umbrella over the ship. The sky was a brilliant white, and the clouds were a deep blue. The ship was at a distance of 100 miles from the shore, and the sea was calm.

**WATERSPOUT**

On Sept. 21st, 1925, in lat. 30° 20' N., long. 79° 20' W., the captain of the steamer "Narcissus" observed a heavy rain squall bearing south with an extensive cloud stretching across the sky from SE to WSW. A fingerlike projection appeared near the center of the cloud, extending downward. About one-eighth of the distance to the water it grew larger and was swinging like a pendulum. When it reached downward halfway to the water a large area of spray was formed on the surface of the sea, very strongly resembling the great whirling dust clouds often seen on the land. Suddenly the funnel-shaped cloud and the whirling spray connected and formed a waterspout which traveled toward the ship in a zigzag course. The base of the spout was surrounded by a great cloud of spray, and through it a slender streak could plainly be seen from base to top. When observed in profile it was a remarkable whirling motion. When about a half mile astern of the ship it quickly grew smaller, and shortly after it disappeared in a cloud of spray. The whole phenomenon lasted about twenty minutes and was followed by a heavy rainfall for a half hour.
FACTS

About IMPERIAL OIL, LIMITED

IMPERIAL Oil has 7,000 employees in its organization. Every other one is a part owner of the business.

There are 4,000 shareholders of Imperial Oil stock in Canada.

Imperial Oil, Limited, operates six refineries in Canada—from coast to coast—Halifax, Montreal, Sarnia, Regina, Calgary, and Ioco. These six plants combine to make the largest refinery capacity in the British Empire.

Imperial Oil owns and operates on Canadian railroads, 2,000 tank cars. Placed end on end they would make a train fourteen miles long.

Imperial Oil, Limited, owns and operates 1,000 motor trucks and tank wagons.

Imperial Oil, Limited, has 1,400 distributing stations throughout the Dominion and its products are found in every city, town and village; along the highways and byways; in mine, fishery, farm, lumber camp and up inside the Arctic Circle.

Imperial Oil is the largest single freight account of the Canadian railways.

Imperial Oil is the largest industrial taxpayer in Canada.

The Imperial Oil fleet of tankers is the largest all-freight fleet under Canadian registry. The SS. “G. Harrison Smith” is the largest combination oil and ore vessel afloat, and one of the largest cargo vessels to transit the Panama Canal.

Employees of Imperial Oil, through their Industrial Council, have a voice in the management of affairs.