CA MAN'S WATER POWER

Present Developments and future Possibilities

TURBINE AND GENERATOR

As the water passes through the casing it forces the vanes to revolve. Some turbines take the power from the water as it enters the casing. These are called impulse turbines. Others take the power from the water as it leaves the casing and these are called reaction turbines. There are many types and models of each kind.

It is interesting to note that while the turbine engine is a modern device, the principle on which it works was used in Heron’s Fountain which was designed in 1790 B.C. and later in Barker’s Mill of the Seventeenth Century.

Canada’s Supremacy

There is no country more active in the development of its water power resources than Canada. With the exception of Norway, we lead the world in per capita development. In a country as new as ours and where investigation has as yet been incomplete, it is impossible to obtain an accurate estimate of the total water power available. From investigation so far made, Canada has at least 19,554,000 available horse power, 2,365,110 of which has been developed.

The water power resources are fairly distributed throughout the provinces and fortunately situated where most required. Within economic transmission range of practically every important city from the Atlantic to the Pacific are clustered water power sites which will meet the probable demands for hydro-power for generation.

The Modern Turbine

The modern turbine, unlike the water wheel, puts a big portion of the energy in the water that passes through it to useful work. The old style water wheel obtained its power chiefly through the weight of the water that flowed over it. The modern turbine utilizes practically all of the force of running water.

The water turbine consists of a number of vanes or buckets which rotate on a spindle. This spindle is held in a casing with suitable openings to let the water in and let it out again.
Western Water Power

The available water power in the West—British Columbia and the three Prairie Provinces—can only be roughly estimated. The northern regions, which have been only partially explored, may hold enormous resources as yet undiscovered, and only the settled and further development of this country can ascertain to what extent water power will be developed there.

In British Columbia, the chief water power sites are at Lake Banff in Barriere Inlet, Slate Lake, Jordon River, Powell River, Kootenay River, Kettle and Puntledge Rivers, Oyster Falls, Fall Creek and immemorially smaller sites as well as minor developments in connection with mining operations.

In Alberta and Saskatchewan the northern parts hold enormous resources as yet undeveloped, the chief power rivers being the Athabasca, Churchill, Peace, Saskatchewan and Slave Rivers. The sites at present described in Alberta are on the Peace River, the Horseshoe Falls and Kanata Falls, being the most prominent.

Manitoba has great resources on the Churchill, Nelson and Saskatchewan Rivers, while the Winnipeg River is one of the best power rivers on the continent.

Eastern Water Power

In the East we have water power in its lowest state of development. Its resources are estimated at 12,293,000 horse power. Quebec and Ontario being the greatest in area and number of water ways represent more than half of Canada’s entire resources. Canada’s greatest water power project, the Lower Power Commission, is owned and controlled by Ontario. The Ontario Power Commission was reconstructed and is now operating ten separate and distinct transmission stations, each of which supplies power to 934 municipalities.

The Niagara System

The Niagara System being the first one organized and one of the greatest developments in Canada, comes first in interest. From the Hydro Electric Power Commission’s power house at Niagara Falls, power is supplied at cost to 114 Ontario municipalities, 17 townships, 21 companies and 3 institutions.

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It is estimated that there is 9,000,000 horse power of energy in Niagara Falls and in the rapids above and below the Falls. It is possible to get this much energy out of the Niagara River because no turbine will take all of the power out of water and besides, a sufficient amount of water must be left in the river to prevent ice jams in winter.

The Boundary Waters Treaty limits the amount of water to be diverted to 20,000 cubic feet per second for the United States and 9,000 cubic feet per second for Canada.

When the new Hydro Electric project is finished at Niagara, practical all of Canada’s 1,000,000 horse power will be available to light Ontario’s cities, furnish power for Ontario’s factories and do other useful work in Ontario homes.

New Niagara Developments

The new developments at Niagara has received world-wide publicity as the greatest engineering project in North America. This development should be well on the way toward completion by the end of next year. When completed, this plant is estimated to produce 30 horse power per cubic foot per second, an ultimate capacity of 300,000 horse power.

Another project which has been proposed is a dam on the Niagara River at Foster Falls, 4/3 miles south of Lewiston. An effective head of 90 feet can be provided which would furnish two million horse power to be divided equally between the United States and Canada. The estimated cost of dam and Hydro Electric plants is 200,000,000 dollars.

The Prong trees in Quebec are found throughout the province. Twenty-nine rivers hold water power possibilities, ranging from 1,000 to 5,000,000 horse power each. The Hanlon, Missisini, Manouagon, Notawa, Ottawa, Pembroke, Sagaway (Grande) all are over 1,000,000 horse power each.

Other Provinces

Prince Edward Island, New Brunswick and Nova Scotia are well on the way toward water power development. New Brunswick has considerable development on the St. Croix, Madawaska and Aroostock Rivers, while the available water power at Grand Falls on the St. John River as well as Pemister, Grand Falls as the Township of the Nepisiguit River await only developments to make them important water power sites. In Nova Scotia the developments are more extensive. Powerful water power sites being situated at Grand Falls, Rapid and Cowie Falls, Weymouth Falls and on the Clyde, Medway and St. Croix Rivers.

Uses of Water Power

In general, the use of water power in Canada may be divided into three classes, (a) municipal purposes, (b) pulp and paper, and (c) electric, chemical and similar processes.

Municipal purposes cover all domestic and ordinary industrial demands—electric railways, light, heating and power for electrically driven manufacturing plants. About 78 per cent of the total or 1,361,400 horse power has been developed for this purpose. As further requirements demand increased power for municipal purposes, additional installations and storage for existing plants will probably be made. In certain centres, however, for instance the Niagara zone, growing requirements can only be met by new water power developments.

About 14 per cent or 246,925 horse power has been devoted to the demands of pulp and paper mills. Increased activity in the pulp industry demanding further electric power will be met for some time by adding installations to present plants, although the growth of this industry will need new water power developments in certain centres. New paper mills and pulp mills being located in the heart of the pulp wood forests, are more likely isolated from other industrial or municipal centres, hence (Continued on page 14.)
Aeroplane Spruce

The Romance of the Aeroplane Spruce and Fir Industry in British Columbia

By Mr. C. M. Rolston, District Manager, Vancouver, B.C.

SOMETHING little time had elapsed after the outbreak of the Great World War in 1914 before Great Britain began to look actively to the Colonies for supplies of woods to be used in the construction of aeroplanes. In the year 1917 this was brought forcibly home to them through the supremacy, at that time, of the German air force and they immediately began to send feelers out to see what assistance the Colonies could render in the supplying of timber for aeroplane manufacture.

In the meantime the Canadian Aeroplanes, Limited, of Toronto, was started with Sir Frank Bailey as President, this factory being constructed for the purpose of manufacturing practice planes.

As spruce was the only wood at that time acceptable to the War Office, owing to its lightness in weight and good resiliency, it was necessary to conduct exhaustive research to discover where suitable stands of spruce existed. With this end in view, Sir Frank Bailey came to Vancouver. He spent some time going over the spruce situation with the various mills in the province and after having made a careful study of the situation, returned east leaving as his representative, Mr. H. R. MacMillan, who acted in the capacity of purchasing agent, buying aeroplane spruce timber and shipping it to the Canadian Aeroplanes, Limited, at Toronto.

In the fall of 1917 the British War Office, noting the gravity of the situation, realized that something radical had to be done if they wished to cope successfully with the German air force. They communicated with Sir Joseph Flavelle at Toronto, who was chairman of the Imperial Munitions Board, instructing him to do all in his power to stimulate the immediate production of aeroplane spruce hands. As this project was an entirely new one in this country, required some 15,000,000,000 feet, and was not carried on by the Government, it required some 200,000,000 feet of which came from coast which had practically proven suitable for airplane manufacture. The British Columbia loggers were working in other timber, most of their equipment being located 100 miles from the spruce areas.

Government Investigations

To clear this great problem confronting the department was the assignment of a suitable spruce producing areas. The board conducted extensive cruising, with the result that when the work was completed, the department had records on hand of a total mileage cruised amounting to 6,466 square miles. These cruises showed that the best spruce for aeroplane purposes was

SPRUCE LOG, 10 FT. IN DIAMETER

be raised above the rim to prevent impact of glancing foreign bodies against the glass. 4. The goggles should be light in weight, with non-corroding frames which may be sterilized. 5. They should prevent good ventilation to prevent the collection of moisture. This is accomplished by perforation in the side shields of the goggles, where such are used. 6. The goggles should be adjusted to fit comfortably in each case. 7. Special lenses should be provided for those who have defective vision, and the nose clip which attaches to the head should never be allowed to irritate the skin behind the ears. Many prefer to use elastic bands to hold the goggles on the head, as they do not irritate, are easily adjusted and comfortable to wear.

Side Shields

The use of side shields in the majority of occupations is not really necessary, and it has been found in most cases, glasses of wide diameter, which fit as closely as an ordinary pair of spectacles offer adequate protection, excepting where an excessive amount of dust is present. It is rare that any single floating particle, such as a bit of iron rust or fragment of steel filing would enter the eye at an angle which would not be protected by this type of goggles. These goggles have the advantage of lightness, simplicity of construction and less formal attachment than the heavier types with side shields.

Rules Adopted

At a recent conference, 24 of the largest American industrial corporations, formulated rules for the use of protective goggles which included the following recommendations:

1. There should be one person using all goggles.
2. All defects or misfits of goggles should be promptly reported by employees or foremen.
3. Periodical inspection should be made to see that they are kept in order and properly worn.

Corrections

4. Cases for the goggles and covers for the glass should be supplied. 5. The Parsley should be sterilized when necessary.
6. Assembled sizes should be furnished.
7. All eye injuries, however slight, should promptly be reported to the company’s doctor or first aid station, and no one else should be allowed to touch the eyes.
8. Those having defective vision should be given corrective lenses.

The foregoing measures are now being followed by the majority of large industrial plants, as the results obtained, more than repay the effort.

Perfect Protection

Injuries to the eye no matter how slight can become very serious through infection, hence immediate care should be always given to prevent complication. If an employee objects to wearing goggles effort should be made to find out the reasons for his objections. These can easily be overcome by demonstrating that the glasses cannot possibly injure the eye, however much it may be splintered, that the glass is easy to see through and does not collect moisture. The fasteners can be made light and comfortable and not prove irritating to the skin.

Safety First

In one of the largest factories in the country there were 500 cases in which protective goggles had been damaged, but there was not a single injury among them. Although in some instances the glass had been injured by flying molten metal, which without the protective goggles, would have rendered the wearer blind for life. The employee owes it to himself, his family and his company never to run needless risk of even partial blindness.

The more fact that he has thus far escaped injury does not assure him of the safety of the present and the employee, who is to operate with his firm in eliminating risks, thereby benefitting himself and his firm.
Canada's "Motorropolis"

The Border Cities—The Automotive Centres of Canada

By Mr. J. H. McGhee, Agent, Windsor, Ontario.

The Border Cities of Ford, Walkerville, Windsor, Sandwich and Ojibway—an unbroken six-mile front of stores, factories, dwellings and other buildings—fringe the river on the Canadian side, and gaze as though for inspiration across 800 yards of clear, beautiful water separating them from the splendid City of Detroit—America's great "Motorropolis." It is probable that no community in Canada offers a better market for the discriminating manufacturer than the Ford Cities. From the small city class, as Windsor was known for years, the Border Cities have become, almost overnight, the most talked of community in Eastern Canada. Their industrial expansion is paralleled only by some of America's greatest manufacturing centres and workers in all lines are in demand, at wages greatly in excess of those prevailing in other Canadian cities.

Manufacturing Centres

The Border Cities now stand third in Ontario in value of manufactured products, and the prospects for future development are truly wonderful. With the completion of the Canadian Steel Corporation's $75,000,000 plant at Ojibway, the Border Cities will rank among the greatest steel producing centres on the continent.

There are a large number of factories, among which are such large concerns as the Ford Motor Company of Canada, Limited, General Motors of Canada, Canadian Salt Company, Canadian Steel Corporation, Berry Bros., Adding Machine Company, Canadian Bridge Company, Caledon Paint and Varnish Co., Limited, Chalmers Motor Company, Champion Spark Plug Co., Dominion Paint Works, Dominion Forge and Stamping Company, Fisher Body Company, Ideal Fence and Spring Company, Kelsey Wheel Company, Maxwell Motor Company, Parke-Davis and Company, Frederick Stearns and Company, and Hiram Walker and Sons, distillers. The Walker distillery is said to be the largest in the world.

Needless to say, all these industries are heavy consumers of Imperial Products. The wide variety of the Imperial lubricants for motors and manufacturing and rolling enables them to obtain an oil specially suited for every requirement, while Imperial service assures them of a reliable supply and prompt delivery at all times. Being the centre of Canada's automotive and in close connection with the automotive centre of America, Imperial Polarine oils are adequately represented here. Automobile manufacturers, recognizing the importance of correct lubrication, invariably recommend our Imperial Polarine brands to their customers.

Thirty-two factories are employed in the manufacture of autos and accessories. The Border Cities are also the Canadian centre of the salt, brine, and iron drum containing the gasoline he placed the five-gallon can. Starting to fill it, he had just poured one half gallon into the can when the flames from the gasoline reached the lantern and caused it to ignite, setting the liquid, as it was poured into the can, on fire.

Is Badly Burned

In trying to save the building and contents, he grabbed the flaming can and funnel and threw them out of doors. In doing so the gasoline splashed over his sleeves and clothes, which caught fire. His customer grabbed a blanket and smothered the fire after he had become well scorched. The attention of the customer was then drawn to the fire which was on the floor, and while putting this out the owner was afraid he did not throw the can far enough from the building. He grabbed the burning can to throw it out on the road, whereby he caught fire again and was nearly burned to death. He spent two months in the hospital, and was left with the use of one hand. This is an example of the danger there is in handling gasoline in this way.

In this case the building and contents were destroyed. We dare say not all of us have seen or read of accidents of this kind. We therefore cannot be too careful in handling these products.

It is the duty of every Imperial Oil employee to exercise the greatest care in regard to fire. The inflammable nature of our products makes this precaution all the more necessary. Study the rules given in the Manual to Service Station employees, and see that these rules are being carried out. Be sure to remove all rubbish which may accumulate, and keep your station clean. Keep your fire-fighting apparatus in good condition and instant readiness at all times, and see that "No Smoking" signs are obeyed as well as displayed. "An ounce of prevention is worth a pound of cure."
SECOND ANNUAL PICNIC—TORONTO EMPLOYEES

Some MOVING PICTURES of the Days' Sports

ITTLE LEGS NITTER THAN TWO

THE MERRY ERN

DEVOURING THE EATS

OFFICIAL GARDEN SCOUT

THE SOLDIER WITH CHINA PAGES!

THE YOUNGEST IMPERIAL OIL ON THE GROUNDS

BOOT AND SHOE RACE

SACK AND SHOVEL RACE

THE TOS-OFF A MARC

PANORAMIC PICTURES OF THE PICNIC PARTY

Some of the highlights included:

- **Three Legs Mutter Than Two**
- **The Merry Old Man**
- **Devoiling the Eats**
- **Offical Garden Scout**
- **The Soldier with China Pages**
- **The Youngest Imperial Oil on the Grounds**
- **Boot and Shoe Race**
- **Sack and Shovel Race**
- **The Tos-off a Marc**
- **Panoramic Pictures of the Picnic Party**

**CLAN! CLAN!** "All along gone island!"

It was a Scotch battle, fought in the grounds of the Toronto Museum. The scene of the conflict was the field where the picnic was held. The forces were the employees of Imperial Oil and their families. The leaders were Mr. Martin and Mr. Scott. The battle was fought with enthusiasm and bravery. The outcome was a victory for the employees, who were cheered by the crowd who had gathered to witness the spectacle.

**Some Moving Pictures**

On the program were some moving pictures of the day's sports. They included shots of the three legs mutter than two, the merry old man, devouring the eats, the official garden scout, the soldier with China pages, the youngest Imperial Oil on the grounds, the boot and shoe race, the sack and shovel race, and the toss-off a marl. The pictures were taken by a local photographer and showed the fun and excitement of the day.

**The Picnic Party**

The afternoon was spent in enjoying a picnic. The grounds were decorated with streamers and balloons. The food was excellent, with a wide variety of dishes to choose from. The atmosphere was one of fun and camaraderie, with employees and their families mingling and enjoying each other's company.

**The End**

It was a day to remember, with the Imperial Oil employees and their families coming together in a spirit of fellowship and celebration. The picnic will be remembered for the moving pictures, the games, and the camaraderie that filled the air. The next annual picnic is already being planned, and everyone is looking forward to it.
EDITORIAL

Our Front Cover

The divine rod man was a familiar figure in the early oil fields of California and Texas. These men claimed to be able to turn oil deposits by billeting with a forked stick or hazel rod. Occasionally these old "oil-smellers" really believed in themselves and their methods. Often they were the tods of unscrupulous promoters, but whether they worked alone or with the promoters, practical operators soon learned to pay very little attention to them.

The picture on our front cover, newly issued for the Review, will be of interest to our readers, as even now the divine rod man is found in territopies where oil development work is going on.

Sure Tips to Failure

There is nothing at all difficult about failing. Anyone can do it without requiring no special effort or energy, but if you would make an easy thing sure, just observe a few of the suggestions given below:

Never get to work on time, and always leave a little bit early. Make it appear that you are trying to slip into the office without being observed. The Boss will notice your practice sooner or later, and this will help to make him feel that his authority is something.

Hang back. Never push, but always drag a little. Of course, this may be a little harder and more disagreeable to yourself, but it always makes things more difficult for your co-workers, and it is strongly recommended to those seeking a quiet, sure death.

Do a little bit less than anyone else who works with you, and be sure that your co-workers have as much of your work as you can pass on to them. This practice will soon secure a reputation that will let you take a round or two lower down.

Never admit a mistake. If you can argue long and present a sufficient number of hodius excuses, you don't need to do another single thing to insure an excellent failure.

Recent every request to observe rules and routines. Take a firm stand that you are a free person, and show the pleasure you take in disobeying instructions. The more you can worry other people by observing this practice, the more rapid and complete your failure will be.

Thieves, dwarves, and jacks, tell tales, and always knock the other fellow. This helps a lot in carrying the stuff off, and it does not increase the boss's opinion of you, so this method is safe everywhere employed by all.

Above all, never be cheerful or agreeable. Whenever you see a smile in the office, do your best to change it to a frown. This applies especially to the Boss. He has no business smiling, or laughing, and if you can keep the Boss mad, you can insure not only your own personal popularity, but the failure of everything around and "the whole bloomin' works."

Imperial Service Sells

With Apologies to Omar Khayyam—
And Suffering Readers.

Here with a staff of bread, saracines and wine.
A flask of wine that law will not allow.

Is there not much that August Out Review.

And wonder why some agents live—

and how?

in this callous business world to-day?

And where opposition fiercely stalks its prey,

Think.

How agent after agent without pep

Has sold a drum or two—and gone his way!

Might i fill the cup! What boots it to re

pair How jobs are slipping under some

men's feet;

When just a little action might have meant

The other guy wouldn't have had them bea!

Myself when green and new did frequent

Some dealers' stores, and entered argument

Against the opposition's oils, but still

Came out clean page and pen as i went.

Then to the Main Branch Office quick

I bind, to do what stunt they had for agents' guide,

Vainly posing Imperial products' sale

Service and Quality," the hoo re

piled.

Then if the oil sell, or shipment make

Ioco's reputation has at stake,

What should I worry? Partners, deal

ers. All

Will buy, and rest assured of mis

Take in and out, beyond, about, below;

William talk of Imperial Service goes.

And Quality is always guaranteed.

There are the things your public ought to know.

ONE WHO WAS THERE.

Imperial Service

"Novalite" Dashes to the Rescue

By Mr. T. O. O'Neil, Halifax, N.S.

A BLYNDING new snowstorm sweeps over the coast and out over the rag

ing Atlantic. A oar is tossed lither and tither, lost in a

world of whirling snow, then crash! she dashes against the

rocks. It was the Leyland liner "Beechwood," bound for Liver

pool, and calling at Halifax for coal, that crashed on the broad

breaker ledge of the "Blind Sisters," near Sandbro, a distance of 16 miles south of Halifax. The catastrophe

occurred at 3 a.m. on March 1st, and inside of 24 hours the liner broke in

two, after the part Booting away, leav

ing the bow of the vessel fast on the

ledge. The liner carried 64 passengers

and a crew of 100 men, with a load of general cargo from Boston to Liverpool.

To the Rescue

About noon on the next day, word of her breaking reached our Halifax

office, whereupon Mr. S. S. Stafford, Halifax manager, immediately sug

gested that the "Novalite"—our new fighter—go down and partake in the

salvage.

She was away on her mission in an

hour, reaching the scene of the wreck at 3 p.m. The "Novalite"—in charge of

Captain R. Blasley, with Laurence W-full, late of R.M.C.S. Rainbow, un

nerving the engines—ran down and

back in great style. Her Fairbanks

Morse 60 k.p.h., 4-cyl, semi-Diesel

gine (using, of course, Imperial Extra Light Fuel Oil and Imperial Engine Oil)

Imaged like a watch, never

missing a stroke.

Picks Up Cargo

With Ed. De Young and T. Samp

son, both old salts on deck, and our

reliable servicer, Tom O'Neil, making

her debut as a salt-water slinger, things

would surely move around in the sal

vaging line.

After crusing around an hour and a half, we returned to Halifax, having

picked up 15 cases of pork, weighing, approximately, three tons, four

hundreds of cotton, weighing about 400

pounds.

A Good Day's Work

It was rough work down there around the rocks, and the lighter "rolled around" a bit at

times, but she stepped up fine both ways, doing her work with the

sagt and pep of a "salty" chaser.

The "Novalite" is "some" boat, and her work on March the 2nd was well

done, "all hands," as some say.

Two tons of pork and 400 pounds of cotton means something these
days when "pig" and cotton is made into wooden "combinations" and five-dollar
t-shirts.

Correction

Owing to an error, the authorship of the story, "A Real Snow Storm," which appeared in the July issue of the IMPERIAL OIL REVIEW, was given to C. Halsey, District Manager, Regina.

This story was written by Mr. W. P. Hardmell, of our Regina office.

We take pleasure in giving credit where credit is due, especially in the case of the fact that the story, which was at first nothing more than a dip in the lake on a hot day, send us some more cool stories, Mr. Hard-

J. Rewal...
Aeroplane Spruce
(Continued from page 6.)

Aeroplane Spruce, it became necessary to make arrangements with the mills, for the manufacture of all spruce logs produced. In this, the board met with a great deal of success, in that practically all the mills of the north devoted all their time and energy to the production of aeroplane spruce lumber. The mills on Queen Charlotte Islands were supplied for the board with logs from operations near them, while the mills on the mainland were supplied with logs from Queen Charlotte Islands in the form of Davis rafts.

The logs, secured from the west coast of Vancouver Island were towed to Quadra Island, or to Vancouver. There were some 2½ mill contracts let, and as to the time of the arreasted these mills had produced 21,012,480 feet of aeroplane spruce lumber.

Extensive Operations
In the early part of 1918 the War Office decided to accept for certain specifications in the manufacture of certain parts of the machines then made in England. The Department of Aeronautical Supplies, interested in the receipt of their requirements, took the question of the production up with the mills here, and through the cooperation of the British Columbia Lumber Manufacturers’ Association, placed orders for the entire output of aeroplane fir from 22 mills. This was started in April, 1918, and from that date until the date of the arreasted, the total amount of aeroplane fir lumber shipped was 9,222,480 feet.

To show the magnitude of the operations in easy readable form, the following table will suffice:

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total quantity of logs produced, including those delivered to water</td>
<td>250,000,000 feet</td>
</tr>
<tr>
<td>Felled and backed in</td>
<td>21,012,480 feet</td>
</tr>
<tr>
<td>Woods at end of operations</td>
<td>30,000,000 feet</td>
</tr>
<tr>
<td>Total aeroplane space produced</td>
<td>46,412,480 feet</td>
</tr>
<tr>
<td>Shipped</td>
<td>20,999,480 feet</td>
</tr>
<tr>
<td>Held awaiting shipment</td>
<td>20,999,480 feet</td>
</tr>
<tr>
<td>Total aeroplane fir lumber shipped</td>
<td>9,222,480 feet</td>
</tr>
<tr>
<td>Total mileage cruised, 6,280 sq. miles</td>
<td></td>
</tr>
</tbody>
</table>

Closing the Industry
The foregoing will give some idea of the magnitude of this industry. (Continued on page 18.)
A Thing of Beauty

The Imperial Oil Tank Truck is Admired Wherever Seen

By Mr. W. M. Gilchrist, Sarnia, Ontario.

WHEN they see an efficient, well-lubricated and honest Imperial Oil tank truck gliding on its way through city traffic, or "speeding along" along some country highway, the "great ununiformed" stop, look and listen, saying in self-communion, as it were, "Some truck, some truck."

To the average Canadian of to-day these two words convey the meaning of pleasure, of unqualified approval of the neatness and efficiency of the products—in other words, our truck is popular. It is easy to look at, "gets there," and mightily seldom is found lying wounded on the road or looking abjectly lorry home.

To a man who knows and "thinks" motor trucks, whose business is building or selling them, the sight of one of our trucks causes several sensations, not the least of which is entirely surprise. For, if you must know it, an International or White salesman will often look twice to recognize the truck he has sold only a short time before, such is the transformation.

The transformation consists first in adding the Imperial Oil Limited's own style of tank to the long, powerful chassis soon after they are unloaded in Sarnia (these tanks being made right at the Sarnia plant).

The final transformation consists of paint, enamel and lettering, which gives that distinctiveness so noticeable in the Imperial truck. In the meantime the motor is being tuned and adjusted and the pipe fittings added, so that within a short time it is standing parked with others in front of the motor truck garage in the Sarnia plant ready to be sent out and put to work, maybe in Nova Scotia, perhaps in British Columbia, but in any case sure in the knowledge that it will "deliver the goods."

Japanese Courtesy

The following are taken from Japanese "Rules of the Road."

1. At the side of the road you pass someone. Do not pass him or otherwise disrespect him.
2. When a passenger of the foot is in sight, hold the horn to introduce him melodiously at first. If he still obstacles your passage, bow him with vigour and express by word of mouth the warning "Haa, Haa!"
3. Beware of the humping horse that he shall not take fright as you pass him. Do not applaud the exhaust box at him. Go soothingly by.
4. Give big space to the festive dog that makes sport in the roadway. Avoid entanglements of dog with your wheel spokes.
5. Soothingly lie on the grease 

"some trucks." We admit it; we know it, and are proud of it.

When we consider the quality of the trucks chosen, the truck as manufactured here, and finally the class of men we have to rebuild and assemble and decorate the finished products, we do not wonder at the multitudes standing spellbound in admiration. It's "some truck." and we know a truck when we see one.

Japanese Courtesy

The following are taken from Japanese "Rules of the Road."

1. At the side of the road you pass someone. Do not pass him or otherwise disrespect him.
2. When a passenger of the foot is in sight, hold the horn to introduce him melodiously at first. If he still obstacles your passage, bow him with vigour and express by word of mouth the warning "Haa, Haa!"
3. Beware of the humping horse that he shall not take fright as you pass him. Do not applaud the exhaust box at him. Go soothingly by.
4. Give big space to the festive dog that makes sport in the roadway. Avoid entanglements of dog with your wheel spokes.
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drug and chemical industry, as well as pharmaceutical products.

Active Development

Owing to the location of the Border Cities at the extreme end of the Essex County peninsula, the trading area is confined to that section, south 20 miles to Lake Erie and east 50 miles to Chatham. This territory has a population of about 112,500, including many beautiful towns on the shores of Lake Erie, such as Kingsville, Leamington and Amherstburg. The population of these towns is greatly increased during the summer months, as all through that section are hundreds of beautiful summer homes. The climate is the most genial in all Canada.

In 1919 building permits totalled $6,852,900.00, more than 4,000 homes being erected, and even this did not relieve the housing situation, owing to the phenomenal development. Approximately 1,000 houses were under construction on May 1st, 1920, and it is believed that more than 3,000 houses will be erected in 1920. This activity naturally creates a wonderful demand for building material of all kinds.

A Beautiful District

The Border Cities, and Walkerville in particular, are justly noted for the beauty of their residential streets. The houses are built for homes, there being very few apartment houses. There are no slums and no mill settlements. Rapid street car service enables industrial worker to live under the most pleasant conditions, while large numbers of Detroiters are building their homes in Windsor and the adjoining Border Cities, as it actually requires less time to reach Detroit from the downtown section of Windsor than from the greater portion of the residential sections of Detroit.

Beautiful Belle Isle lies directly opposite Walkerville and Ford, while the White Star Line and Detroit and Windsor Ferry Company steamer provide means of reaching scores of beautiful parks and resorts a few miles up or down the Detroit River.

Every advantage of transportation is enjoyed. Five great trunk lines, two electric subway lines and a reliable network of paved gravel roads spread out over this district, while during the navigation season on the Great Lakes, Windsor is the port of call for many of the large steamers. These are now under way to materially develop the harbor facilities in anticipation of the opening of the St. Lawrence to the sea.

Having such beautiful roads and being the automotive centre of America, it is obvious that automobiles are here very much in evidence. In Essex county there are 6,039 passenger automobiles, or one car for every twelve persons, while 950 trucks are registered.

Future Developments

Any description of the Border Cities would be incomplete without special reference to Oilway, the model town of the Canadian Steel Corporation (Canadian Branch of U.S. Steel). The company has a 2,000-acre site on the banks of the Detroit River, having already expended over $6,000,000 on preliminary work. This plant, when in operation, will make the Border Cities the centre of the iron and steel industry of Canada, attracting scores of allied industries.

That Imperial Oil is vitally interested in the development of this great industrial centre remains obvious. Every plant now in operation and every plant constructed in the future will require our products. Every car that is manufactured now or in the future is a consumer of our motor oils. Hence the Border Cities district is a real dot on the Imperial Oil map of Canada.

Aeroplane Spruce

(Continued from page 14.)

The abandonment of the industry so fully developed, seriously affected the entire province of British Columbia. Several thousand men were thrown out of employment, highly efficient logging camps with the most modern equipment were closed down and mills which had barely reached completion were abandoned. The men were soon absorbed in the camps of the regular lumber industry, the logs were dismantled, and where possible, used in the regular lumber industry, while the logging equipment was collected and sold to the highest bidder. Thus ended the Aeroplane Spruce and Fir Industry of British Columbia.

It is interesting to know that it required no less than five thousand five hundred barrels of lubricating oil to supply the demands of this industry, and ninety per cent. of this was supplied by our company. Every department used our products. They played their part in every operation, from the felling of the tree to final delivery.

Thus did Imperial Oil Limited contribute their share to aiding an industry that helped win the war.
How Much Do You Know?

The difference between failure and success lies in what we know. Every great man in history became great because he mastered some one subject better than anyone else.

Edison in electricity, Lavoisier in chemistry, Rembrandt in art, Beethoven in music, all became great because they mastered every detail of their respective work.

Our success in our chosen work with Imperial Oil Limited rests with our capacity to learn — to master every detail. Recognition, promotion and success comes to the one who knows his work and applies that knowledge to enhance the value of his service to the Company.