

# WATER POWER ALONG MOIRA

Mr. Joseph James, Actinoltic, Writes of the Cheapness of This Power

Editor Ontario.

If water power is immediately available in sufficient quantity for the use of the factory (says a writer in the Engineering Magazine) it is almost always the cheapest form of power to use. By this is meant water power directly convertible into power for operation of machinery—not water power used to drive electrical machinery from a distance, perhaps fifty or sixty miles. In plants where water wheels can be obtained to develop the power in the mill, the cost is practically limited to the investment charges, the cost of oil and repairs forming a very small fraction of the operating cost. I have figures from a number of water power plants varying in size from a few hundred horse power to several thousand, and the repairs on these plants are extremely small. On one 500 horse power plant the labor for engineers and switch-board attendants amounted to \$1,220 a year, the cost of oil being less than \$125 a year, and repairs \$500 a year. At another plant in the southern states the cost was \$1.24 a year a horse power installed; this included the maintenance of the electric equipment, and the total cost of operation in this latter case was less than \$5.00 per horse power installed per annum. In plants where logs and ice interfere with maintenance of rack and water way the cost of repairs etc. may run up to \$2.00 per horse power installed, but this is exceptional.

The white coal of Switzerland, the saving to be effected, by Dr. de Biesbach of Friburg. Construction costs—steam \$627; Gas \$475; petrol \$466; water electric power \$191. Cost per horse power hour—steam 5.46 cents; gas 3.99 cents; petrol 3.08 cents; water electric power 1.59 cents.

"Even in Spain waterfalls are now being used as a source of electric power. In one case twenty three small villages are supplied from the power station. In Italy this employment of innumerable waterfalls has enormously increased the output of manufactured silk. Here says an English writer, 'is a form of power that will last longer than Great Britain's coal fields.'"

The Norwegian Government has for several years been purchasing water falls in different parts of the country whenever such have been offered for sale. It now owns in all thirty eight such falls with a total power of 156,490 H.P. unregulated, and which are estimated to give 776,080 H.P. in a regulated state. (Note the difference in quantity between unregulated and regulated.)

"The Workshop in England," by Theo. H. Price in 'Outlook' N.Y. July 25, 1914: "The coal that is used in the Lancashire cotton mills costs about \$3.25 per ton, and yet in a Lancashire mill whose records were thrown open to me I found that the cost of coal per indicated horse power was less than seven dollars per annum for fifty two weeks of fifty six hours each."

In 1905 the Governor of the State of New York appointed a board known as the Water Storage Commission. The Hudson River Water Co., in a report issued by them speak as follows of the work of this Commission. (Chapter X page 111) "The lumberman for many years have maintained low wooden dams at points among the mountains, chiefly at the outlets of Schroon Lake, Indian Lake and the Scandag drainage area. The principle interest of the lumberman has been to secure temporary floods in the last spring to assist in driving their logs to the mills and prolonging the season of sawing at the latter. For this purpose they have secured a storage, says the Commission, of at least 4,000,000,000 cubic feet. The State Commission has proposed the building of permanent dams, for which the mountains furnish abundant materials close at hand, at the most suitable locations, to take the place of the lumbermen's dams, and at other desirable points. The object of the State would be to improve the water power of the river throughout its Adirondack basin, to furnish ample supply without waste and throughout the boating season for the canals, and to improve the navigation of the river at Troy and below. The Commission has very justly estimated that it is cheaper to raise the water in the river by such storage and outflow during the period of low water than to deepen the channel by dredging."

"The Hudson River Power Co., would profit naturally and legitimately by water thus stored by the State" (note—nothing is said about the Co. paying the State anything for this stored water.)

The public control of Water

Power Sites in Ontario seems to be after political honors or public office with the Department of Lands, Forests and Mines and the Hydro-Electric Power Commission. The only actual work being done is that of the Hydro in connection with the supplying of municipalities with electrical energy, nothing is being done by either towards making it possible, by their efforts, for any industry in Ontario to provide itself with motive power that can compete successfully with the examples mentioned, and that is the competition Ontario has to meet successfully if she is to occupy "a place in the sun."

The question arises, can Ontario successfully meet these low costs for motive power? the answer is, Yes, if the resources at our disposal are utilized.

As one instance of what can be done in this direction I will instance the river Moira.

In 1880 a report on this river was made to the Department of Public Works, Ottawa by Henry F. Perley, Engineer, in it are these words, viz. "There are 35 mills at present in operation on the Moira," now all these mills procured their motive power under identical with those mentioned by the writer in "The Engineering Magazine" referred to, and had those conditions been allowed to remain as they then were previous to 1880 those mills or others in their stead would be in operation today.

What caused the change in those conditions?

The reply is, the lumbermen, they held licenses from the Ontario Government, giving them the right to cut the timber all along the course of the river and its tributaries and all around the many Lakes that form its head-waters, the removal of the green woods destroyed the forest floor (the forest floor can hold for a while a rainfall of 5 inches, Gifford Pinchot.) the destruction of the forest floor was the destruction of the storage of water provided by nature, which natural storage says "There are 35 mills at present in operation on the Moira," these mills had a natural and a valuable interest in the forest floor and its destruction was a direct damage and loss to them for which they have received as yet no recompense, but the Province of Ontario has received in the form of timber dues and other revenue from the timber cut on the Moira many hundreds of thousands of dollars, and now it is a reasonable request on the part of the power site owners on Moira waters to ask the Government to spend a small percentage of the total amount received by it from the timber cut in their country to provide an artificial storage for the water to take the place of the storage provided by nature and destroyed to provide revenue from timber dues etc.

It can be said that today there are not five mills operating by water power on the Moira.

It is not fair to the Hydro to shift the responsibility over to them, they were called into being for another purpose, a purpose not in existence in 1880, viz. electrical energy. The case of the Moira is between the people of the district and the Ontario Government.

The report of Mr. E. J. Walsh, engineer in charge of survey of Trent Valley Canal gives "total fall (of Trent River) from level of Rice Lake to the level of Lake Ontario is 264 feet." Mr. Henry F. Perley in his report on Moira River gives total fall of the Moira River from Loo Lake to Bay of Quinte at 870 feet.

after political honors or public office of any kind. In the church as well as in the community he was content to do his duty, or more than his duty in an inconspicuous way, and to let others the honors and emoluments which were his plain, unassuming, Christian gentleman. He was held in the highest esteem by an unusually wide circle of friends and acquaintance.

## THE ROYAL CAFE IS NOW OPEN

New Chinese Dining Hall is Beautifully Decorated and Has Excellent Service

Belleville possesses in the Royal Cafe a restaurant which would do credit to a larger center. The Royal opened its doors on Thursday noon in charge of Messrs Tom and Wong with Mr. J. S. Tom, the well known Chinese restaurateur as manager. Mr. Tom is one of the leading Chinese men of the city, having been in the cafe business for five years here. Recently he returned from a trip to his native land and at once began to plan for an up-to-date restaurant. The result is the Royal, in a portion of the former Dominion House next to the Standard Bank.

The new eating house has a prepossessing appearance with its white front, and electric sign.

The harmony of the colors in the interior decoration is very artistic. The woodwork is of Georgia pine with mission finish. All the furniture in mission style and the dishes are new. The open dining-room at the front will accommodate a good many guests, the walls have mirrors. There is a tobacco counter in connection with the office which is built of oak. There are six open stalls with sliding doors. The walls and partitions are in buff and are paneled. The doors of the stalls have chipped plate glass windows in a nice design. One double stall can be converted into a large dining-room for a party of twenty-five by the swinging of a partition which opens up another stall. Here a large dinner party can be accommodated without interruption from the rest of the cafe. Each stall is furnished with mirrors. The lighting is electrical and indirect. The total accommodation of the house is about seventy-five people.

The building is heated by steam. Three large electric fans will keep the hall cool in summer. The kitchen is large and spotlessly clean and is presided over by Chinese cooks. The entire service will be in the hands of the Chinese.

Mr. P. C. Denike, architect of the city had the contract for the work and has succeeded admirably.

PRESENTED WITH WATCH

Assistant Principal of Queen Alexandra School Puts on Khaki

Mr. V. E. Bullock, assistant principal since June 1915, has joined the Heavy Artillery at Cobourg. On Wednesday afternoon at one o'clock the pupils and staff of the school met in the assembly room, when the following address was read by Messrs Ralph Smith: "Dear Mr. Bullock: 'The staff and pupils of Queen Alexandra School wish to express their regrets at your departure from us at Easter. 'You will be missed, not only by your class and at the morning assembly but by the boys on the playground as well. 'We are proud of the fact that a member of our staff is going to take part in the great struggle. 'Our best wishes for your success will go with you and we shall look forward to the time when you will return and take up your work among us again. 'We would like you to accept this watch as a slight token of remembrance.' Miss Mildred Duesberry made the presentation of the watch. Mr. Bullock replied expressing his gratitude for the gift and his regret at parting which however was in order that he might do his bit. Gunner Bullock expects to go overseas about the first of May.

ENTERTAINED THE STAFF

On Thursday afternoon the principal and staff of Queen Alexandra School were entertained from three to four o'clock by the boys and girls of the Junior and Senior fourth classes in the assembly room. The time was spent in singing familiar choruses and in eating taffy so generously provided by the girls of these grades.

The Calgary Automobile Club have ask the Government to improve the conditions of Bowness road, a popular motor driveway through the foot hills.

## LARGE PURCHASE OF EGGS TODAY

Easter marks brought out a large crowd of buyers for eggs this morning. There was a fairly large attendance of farmers and a good attendance of citizens out with baskets. The outside market was about the usual size.

Eggs were firm at 35c and butter at 45c. Poultry ranged at \$2.00 to \$3.00 per pair.

The meat market was unchanged, veal wholesaling at 14c per pound by the carcass, beef at 15c; lamb at 25c per pound.

Hogs are a little weaker at \$14.75. Porkers sell at \$12.00.

There was quite a quantity of Maple Syrup offered and bought 50c per quart. This has not been a good year for the flow and the season is almost ended, so sellers state. A little sold at 45c per quart.

Hay was entirely absent today. Table potatoes brought \$3.25 per bag on the market and \$3.00 at some of the shops.

Wheat is higher being worth about \$1.30, oats are quoted at 70c.

## A GRAND SEND OFF

Lieut. Harry H. Ponton and the Belleville boys who are in the seventh draft of the Cobourg Heavy Battery received a great send off on Friday morning at two thirty as they passed through from Cobourg on their way to the front. In spite of the storm the crowd of citizens numbering hundreds and including the Fifteenth Band played, waited for the train which was two hours late. As the boys stepped from the train for the stop they were received with cheers and song. The band played a number of selections. After farewells were said, the train again moved off carrying these soldiers on their mission.

The battery men desire to acknowledge the gift of socks from the Red Cross and Patriotic Society through Mrs. O'Flynn and also thank the Ladies of St. Andrew's who sent hampers for the Belleville boys until they reached Quebec.

## CALLED BY DEATH

Leon Nelson Ostrom a former Belleville boy, son of Mr. and Mrs. N. M. Ostrom, died at the latter's residence, Elmer St. early Good Friday morning after an illness extending over a period of 5 months from heart trouble. Mr. Ostrom was at the time of death 27 years old, born in Belleville 1890, but during the last ten years has resided in Winnipeg and Toronto, engaged in the Jewelry Business. Taken ill some months ago and thinking a change would benefit he came home on a rest to his parents, about 6 weeks ago.

Three years ago he was married to Alice N. Taylor, Winnipeg. She with two children are left to mourn the loss of a loving husband. Other remaining members of the family besides his parents are Charles A. Ostrom Druggist of this city, Florence N. Ostrom and Mrs. I. H. Smith Winnipeg. Private funeral was held this afternoon at 4 p.m. interment at Belleville Cemetery. Rev. J. N. Clarry pastor of Holloway St. Church officiating. The bearers were Messrs Charles A. Ostrom, George P. Ostrom, George Bush, E.T. Cherry O. T. Duprau and Harold Butterfield.

## STORM'S HAVOC WITH WIRES

The heavy snow storm of Thursday night and Friday morning caused great havoc to electric wires poles and trees. At 12.15 a.m. Friday the electric lights went out in the city and last evening for a period of an hour or more part of the city was in darkness and lamps and candles were resorted to. The telegraph lines were also hampered by fallen wires, which condition prevented the war news from being received at the newspapers offices.

## STILL HIGHER PRICES

Foodstuffs Will Continue to Rise Skyward, Say Economists. Washington, March 31.—That prices of foodstuffs will continue to climb until dizzy heights are reached is the opinion of economists here. The withdrawal of 40,000,000 men from agriculture and productive employment to take part in the destructive work of war is the principal reason given. In addition to this the United States alone of all countries has a surplus of foodstuffs for export and the lack of competition takes bride off the prices.

During 1916 2,500,000 pounds of butter were manufactured by the Government co-operative creameries in Saskatchewan in 1917 the total output was only 66,000 pounds.

## THE GERMAN YOKE

Belgian Women Have to Live With Soldiers Sometimes Sulky and Sometimes Drunk.

What it is like to live under the yoke of the Hun, as Belgium has lived for over thirty months may be gathered from the following report of Phillip Gibbs, the famous war correspondent.

"The ruins of houses are bad to see, but worse than that is the ruin of women and children and living flesh. When I saw them in the streets and staring at me out of the windows, I was struck with the chill of horror. The women's faces were dead faces, shallow and mask-like, and branded with memories of great agonies. The children were white and thin, so thin that the cheek bones protruded, and many of them seemed to me idiot children. Hunger and fear have been with them too long. The women with whom I spoke were passionate and hysterical and told me horrible stories not to be retold here.

"I believe them too, because they had to live with men who were killing their husbands and brothers, and that is the great horror. They had to submit to the daily moods of men who were sometimes sulky and sometimes drunk."

## BOOM IN WOODEN VESSELS

New Canadian Built Wooden Schooner Reaches New York.

New York, March 31.—The Canadian schooner, Letitia T. Mackay, just arrived with a cargo of wood pulp, is according to Capt. T. A. Butler, the first of a great fleet, of schooners which will soon reach this port. She is brand new. Butler says the shores of the United States and Canada are dotted with the newly completed hulls of such vessels as his. They are being rushed to make up the shortage in ocean tonnage caused by the war.

"The Canadians," he said yesterday, "realize the demand for such vessels will last only during the war or until the builders of steel steamships can catch up with their orders. So they are getting the schooners into the water as quickly as possible."

## FAMOUS RIVER ESTATE SOLD.

J. H. Hammond, Pittsburgh, Buys The Ledges, Near Alexandria Bay.

Alexandria Bay, N. Y. April 7.—The beautiful estate a short distance below this village on the river front known as "The Ledges," has been sold by M. J. Brettenbach, New York city to M. J. H. Hammond, Pittsburgh Mr. Hammond, who is a member of the Thousand Island Yacht Club, is a great lover of the river and has occupied Dewey Island for the past few seasons. He expects to make only necessary repairs this season but is planning extensive improvements in the fall.

## ELECTION OF CANTON OFFICERS

At the regular meeting of Canton, Belleville No. 8 held in the Odd-fellows' Temple last evening the following officers were installed into office for the current year by Col. R. H. Ketcheson assisted by Col. L. B. Cooper.

Commandant—W. E. M. Gilbert  
Lieut.—A. E. Cole  
Ensign—J. E. Parks  
Clerk—G. G. Way  
Accountant—Geo. Brown  
Sentinel—C. F. Frost  
Picket—F. B. Naylor  
Standard Bearer—S. A. Barclay  
Guard—C. C. Atkins  
The members after the routine of business retired to the banquet hall where they partook of a sumptuous repast. Col. L. B. Cooper filled the office of toastmaster in his usual masterly manner, the singing of the national anthem brought a very pleasant and profitable evening to a close.



Don't ruin Your Eyes. Come to us for Glasses now.

Your eyes are your good friends. Treat them right. Come in. Fitting glasses is a science. We know our business. Our Prices are low for the skillful service we render you and for the properly fitted glasses we furnish.

Consultation by Appointment  
**ANGUS McFEE**  
MFG. OPTICIAN  
216 FRONT ST.

## Your Spring Suit



In thinking of your New Spring Suit, don't forget to think of us. If you are out to save money we are in a position to help you. If you will have a look at our \$15.00 and \$20.00 Suits you will be convinced we are still offering you old value. By careful buying, stocking ahead and cutting profits "to the bone," we are taking good care of our customers.

OUR MOTTO FOR THIS SPRING "Suits at Old Prices"

# OAK HALL

C. H. Vermilyea

BUY NOW  
**FORMALIN**  
For Smut on Grain, 40c lb. makes 45 gall's solution  
**ROYAL PURPLE CALF MEAL**  
\$4.50--100 lbs.

## OSTROM'S DRUG STORE

"FORMERLY WATER'S"

OUR SEEDS GIVE SATISFACTION  
Your crop requires the same care whether you sow good or bad seed. But the results from good seed, a full crop—will repay you well. Our seeds are all good and reasonable in price.  
We have also a heavy stock of Tilson's Dairy Feed, Ruby chop, Ground Wheat and etc., etc. The best and cheapest on the market.

The W. D. HANLEY Co.  
Phone 512 320 Front St.

If you are in need of a new servant try a want adv. in The Ontario and get good results. Others have. Just try.

ESTAB  
R  
30  
GAL  
Foe C  
AUS  
LOND  
during the  
east of Ep  
its garriso  
Cambrai a  
BOSTO  
ny sunfire  
HUN  
AMST  
Nowevak  
Hungarian  
Dr. Urban  
ister with  
AUSTRIA,  
LOND  
and Turke  
the entent  
center in B  
WITHOUT  
AMST  
the Tages  
man mona  
the Germa  
COPE  
in is plac  
ed through  
part of the  
CO  
PETR  
other min  
port that  
especially  
TRO  
Bremen w  
Biron, we  
tank durin  
early toda