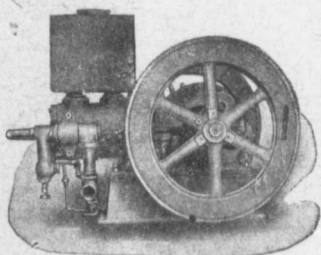


**THE BARRIE  
GASOLINE  
ENGINES**

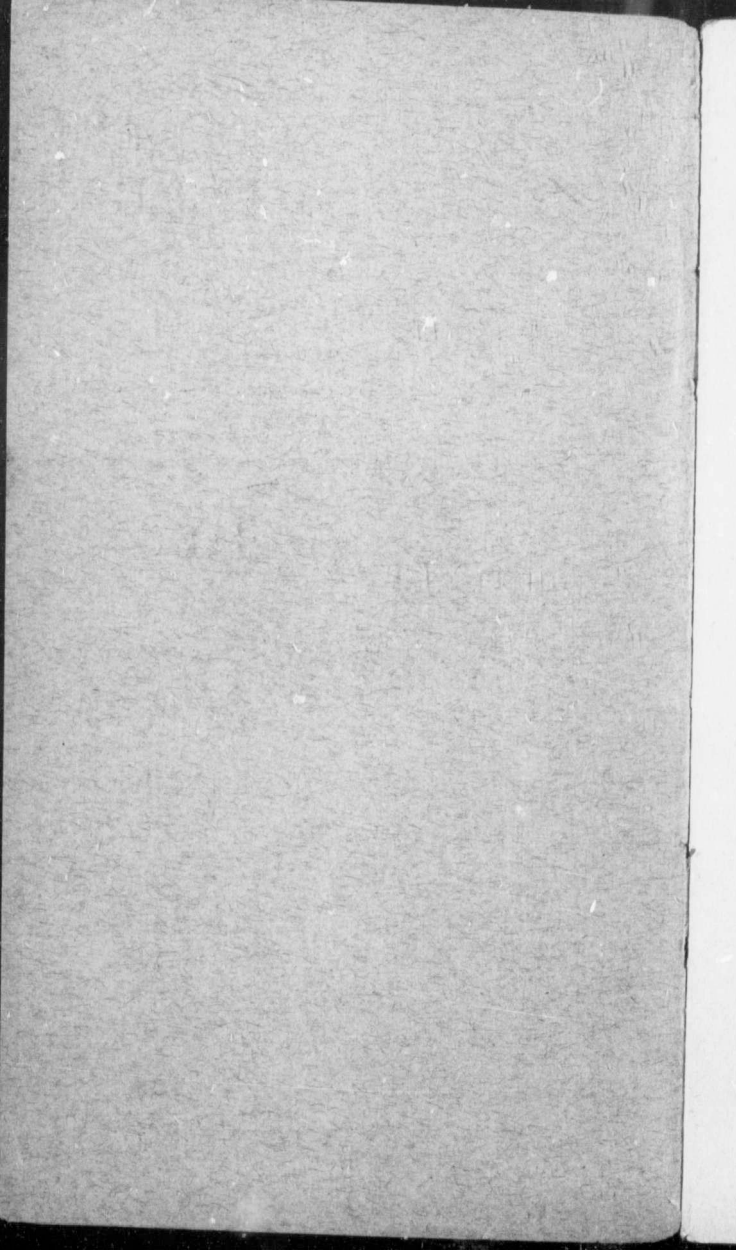
925/5



TYPE A AND B, 3 TO 8 H. P.

**The Canada Producer and Gas  
Engine Co. Ltd., Barrie, Ont.**

F5012.1910. C212B



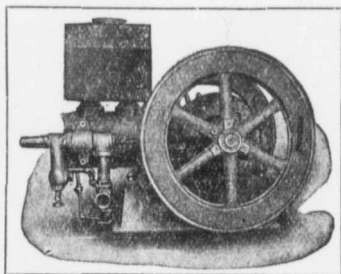
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**THE CANADA PRODUCER AND  
GAS ENGINE COMPANY, LTD.  
BARRIE, ONTARIO,  
CANADA.**

**S. DYMENT,**  
President.

**E. J. GRAVES,**  
Manager.



TYPE A AND B, 3 TO 8 H. P.

**BUILDERS OF HIGH GRADE HEAVY  
DUTY POWER PLANTS**

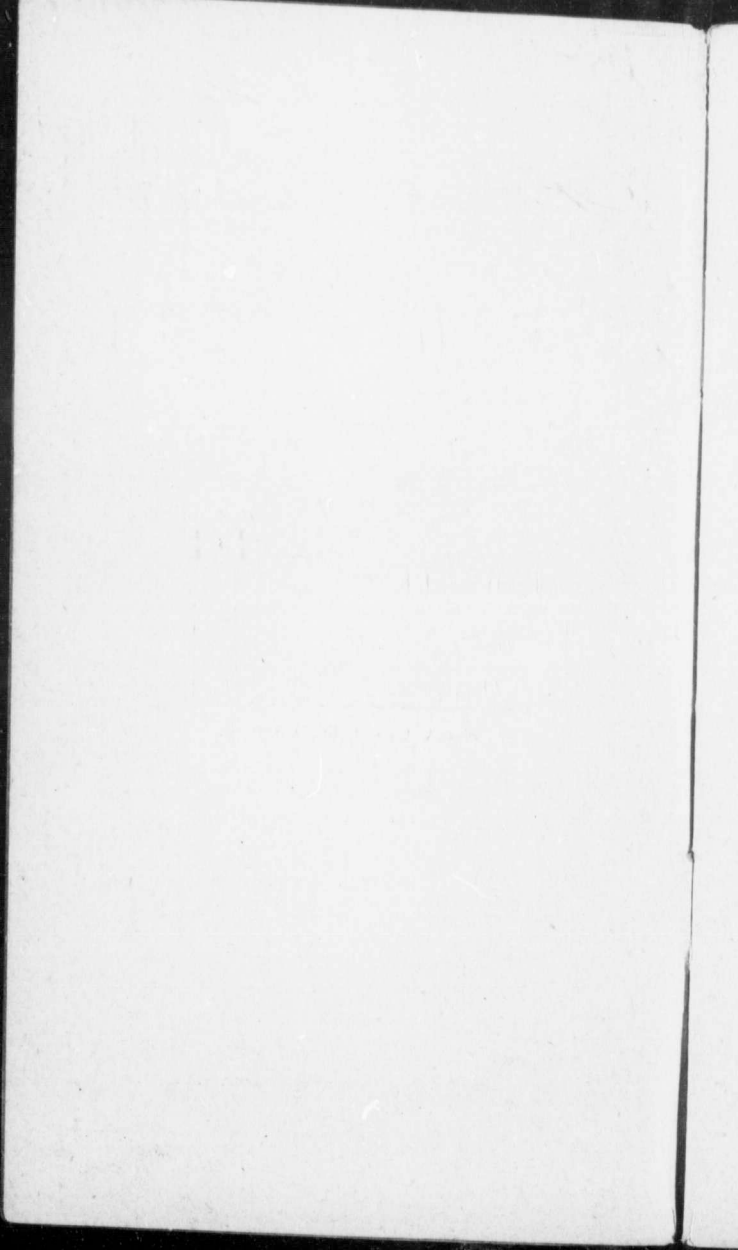
**FOR:**

**Producer Gas, Natural Gas, City Gas,  
Gasoline, Kerosene, and Distillate.**

**FOR ALL POWER PURPOSES FROM  
3 TO 1000 HORSE POWER.**

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# FOREWORD

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**Y**EARS of experience in actual building of gas and gasoline engines enables us to put before engine users, the best, simplest, and most economical gas and gasoline engine in the Canadian Market.

It embodies all the good features of the modern gas and gasoline engine construction.

It is built on broad and liberal lines to withstand hard and continuous service.

Every part of the engine is strong, and no amount of additional metal would possibly increase its strength.

SILVER MEDAL AWARDED,  
CANADIAN NATIONAL  
EXHIBITION TOR-  
ONTO, 1910.

FOR EXHIBIT  
OF GAS ENGINES.

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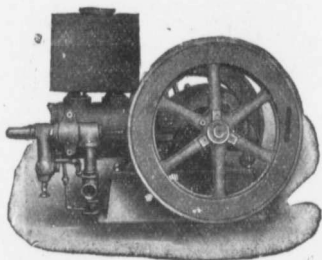
THE CANADA PRODUCER & GAS  
ENGINE COMPANY, LIMITED.

The Canada Producer and Gas Engine Co., Ltd.

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BUILT IN CANADA.



Type A, 3 H. P.

## THE "BARRIE" ENGINE

### SPECIAL FEATURES.

1. Gasoline reservoir in sub-base, on engines from 3 to 8 horse power.
2. Gasoline is drawn from reservoir by suction of engine without any moving parts to get out of order.
3. Each engine has circuit breaker prolonging life of contact points and batteries 400 %.
4. Heavy and rigid construction.
5. Solid steel billet crankshaft, counter balanced.
6. A perfect controlling governor.
7. Small number of moving parts.
8. Hopper cooled, requiring small amount of water, no danger of freezing in cold weather.
9. All parts easy of access, and **GUARANTEED INTERCHANGEABLE.**



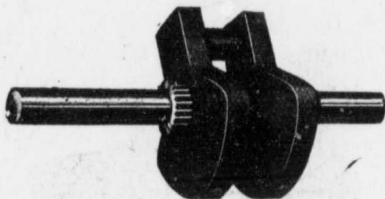
## PISTON CONNECTING ROD

The pistons are of the extra long trunk pattern, giving a very liberal wearing surface.

These pistons are fitted with four and five cylinder rings and oil grooves. The rings are of special construction, making them long-lived. Owing to this feature, the life of the engine is greatly prolonged, and the fuel consumption less than any other engine on the market.

The connecting rods are forged and cut from solid steel billets, finished all over.

Cross Head and Wrist Boxes are of phosphor bronze, and of very liberal dimensions, so built that the lost motion can be taken up at both ends.



## CRANK SHAFTS

As shown in cut, our cranks are made from steel billets, and are finished all over, also counter balanced where the balances should be, making a perfect running engine, without the least vibration.

There are no welds or bends in these crank shafts.

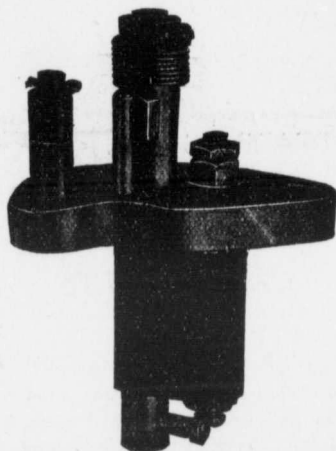
## VALVES

The valves are of "Poppet type", requiring no cleaning or oiling, and are so located as to render them easy of access for grinding in and examination.

The valve chambers and valves as well, are kept from becoming overheated by means of circulating water entirely around their seats. This feature is important and increases the life of these parts.







## IGNITOR

The ignitors on engines from 10 H. P. up, are placed in the centre of the cylinder heads, and are of the make and break type.

The stationary and moveable electrode can be readily removed for examination or repairs.

The moveable electrode is provided with a conical seat, which prevents leakage and obviates the necessity of regrinding. Both electrodes are equipped with interchangeable contact collars, and so arranged that the contact points can be cleaned without removing ignitor from the cylinder. This also can be done while the engine is running.

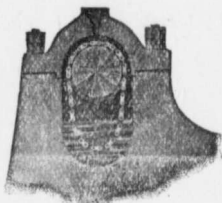
On engine from 3 to 8 H. P. we use the well known jump spark of the best make, eliminates all moving parts, and making a compact ignitor for stationary and portable purposes.

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## MAIN BEARINGS

From 10 H. P. up we use the self-oiling main bearings, which are of very liberal design. They are lined with genuine babbitt metal, and bored to fit the shaft. Oil cellars are provided in the base, under the main bearings, and by the use of an endless chain, the bearings are kept thoroughly lubricated and flooded with oil.



Main bearings on our 3 to 8 H. P., engines are equipped with a reservoir for hard oil, which makes a clean and well oil bearing. These oil wells are easy to fill, and are provided with a cover to keep out dust and all other grit that may come in contact with the engine.

All engines are provided with oil shields over crank shaft, eliminating any troubles of dropping of anything into the moving parts of the engine.

When you have an engine you want it to do its work quickly, dependably, cheaply. You want an engine you can depend on when you start it, so that you can attend to your other duties. **THE BARRIE ENGINE WILL DO THIS.**

The action of this engine is automatic, and does not require constant attention or regulation, consequently it is not necessary to have skilled labour to attend it.

## GAS & GASOLINE MIXERS

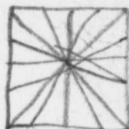
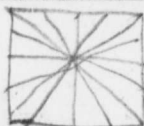
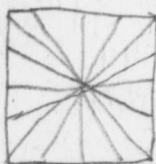
Our gasoline mixers are of the well known funnel tube, which is a very simple mixer without any moving parts to get out of order.

These mixers are supplied with a reservoir which holds a small amount of gasoline, which on engines from 10 H. P. up is supplied by a pump, and on engines from 3 to 8 H.P. the suction of the engine sucks the gasoline to reservoir as needed, making a very simple arrangement.

Owing to the peculiar design of the Barrie mixer, the gasoline is thoroughly vaporized, and incorporated with the proper proportion of air, so that the resultant mixture is a dry gas, and is taken into the combustion chamber in a direct path.

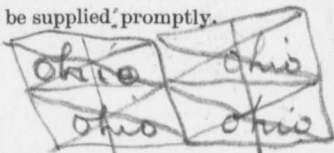
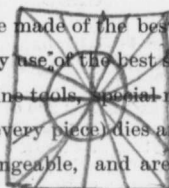
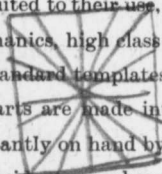
This gives the engine high thermal efficiency, and reduces the consumption of fuel to a minimum.

Only the best and most suitable materials are used in the manufacture of the engine. Each engine is carefully tested before being sent out. It is run for days under test load, well above the power it is sold for, to make sure of the perfect and permanent adjustment of all its parts. Good material and good workmanship, form the foundation of the economy of the BARRIE engines.



WEARING PARTS

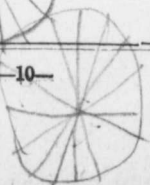
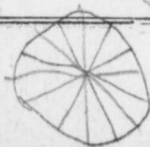
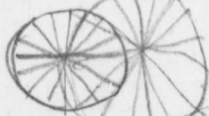
The wearing parts are made of the best materials suited to their use, and by use of the best skilled mechanics, high class machine tools, special machinery, standard templates (for every piece) dies and jigs, all parts are made interchangeable, and are kept constantly on hand by all our agents, so that in case of accident, or where a renewal of any part becomes necessary, it can be supplied promptly.

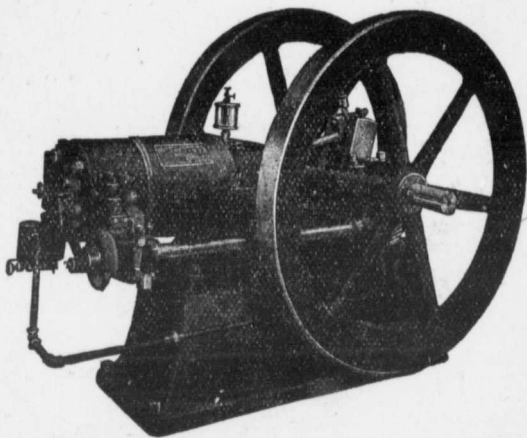


WATER CIRCULATION

675

An important feature in the construction of the Barrie engine, the same in tank cooled as in hopper cooled, the water is circulated entirely around the valve chambers and all through the cylinder and cylinder head.





Type C, 10 to 25 H. P.

## "BARRIE" STATIONARY ENGINE

These style engines are built in sizes from 10 to 25 H. P.

1. It has underground gasoline reservoir for main gasoline supply.
2. Gasoline pump, pumping supply to engine, surplus returning to reservoir.
3. Electric ignitor and sparking dynamo.
4. Circuit breaker increasing life of batteries and points.
5. Extra heavy fly wheels, guaranteeing steady power.
6. It is supplied with any size pulleys.
7. It is supplied with separate water tanks for cooling cylinder.

### GUARANTEE

All Barrie engines are guaranteed to be of the best material and very best workmanship, and we hereby agree to replace any part found to be defective, f. o. b. our works, without cost, for a period of one year.

We guarantee the speed to be steady and uniform. We guarantee that changes in temperature will not effect engines running.

We guarantee interchangeability of parts.

We guarantee that the Barrie engine can be operated without constant regulations of the throttle valve.

### NOTE OF HORSE POWER

One horse power is the power required to lift 33,000 lbs. one foot or one pound 33,000 ft. per minute.

### BRAKE HORSE POWER

Is the Effective, Actual or Belt Horse Power given off at the shaft or fly wheel.

### INDICATED HORSE POWER

Is the power given off by the piston, from which the friction of the piston and other working parts has to be deducted before the actual or Brake Horse Power is arrived at and which is generally 20%.

In ordering an engine order nothing but Brake Horse Power.

### THE BARRIE PORTABLE ENGINES

Consist of our standard stationary engines, accurately balanced, and mounted on a thoroughly well built truck.

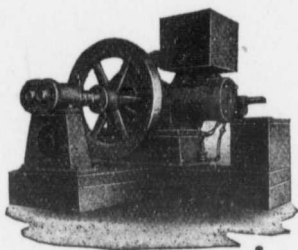
In sizes from 3 to 8 H. P., we use the hopper cooled engines.

In sizes from 10 to 25 H. P., we use a water tank made of galvanized steel with screens and air ports, allowing the thin sheet of sprayed water to come in contact with the air, and be thoroughly cooled.

This enables you to operate the engine all day, on full load, on only three or four buckets of water. When the engine stops it is automatically drained.

You cannot freeze the water jackets of cylinder or heads.

This engine, from 10 to 25 H. P. is supplied with a circulating pump to force the water through the cylinder.



### PUMPING ENGINES

The above cut shows our type A and B—3 to 8 H. P., direct connected to a rotary pump.

These engines and pumps operate under a pressure of 10 to 30 lbs., and suitable to raise water to from 30 to 75 feet.

The outfit runs without the slightest noise, and is always reliable.

We also build the geared base pumper, which is equipped with a walking beam suitable to connect to a pump, taking the place of the wind mill.

These pumps are all mounted on skids, so they can be easily moved by horses.

Prices furnished on application.



#### AIR COMPRESSORS

We build air compressors in sizes up to 50 cu. ft. capacity of free air per minute.

This is a light portable duplex air compressor, suitable for supplying compressed air for any purposes, such as pneumatic hammers, drills sprayers, sanders, painting machines, and for inflating automobile tires.

These machines are either belted or direct connected to the engine.

Prices furnished on application.

### THE BARRIE HOISTING ENGINE

The engine of the hoisters, consists of our standard engine, complete in every detail, containing all the latest improvements.

The engine is mounted on a heavy base plate, in which, between two upright standards, the drum of the Hoisting Engine is placed.

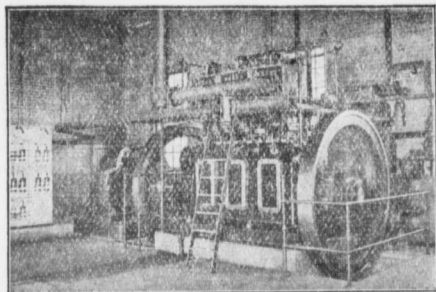
The drums are of solid cast iron, swinging on a steel drum shaft. The drum is arranged with a toggle point friction clutch mechanism, and it is impossible for the alignment of a Barrie Hoisting Engine to become disturbed.

The brake is of the standard band pattern, made of steel, and lined, of ample width and thickness to withstand any strains.

Both clutch brake and speed levers are placed in convenient positions so the operator can handle them from one position.

Write us for information, giving;

1. Purpose for which hoist is to be used.
2. If shaft is vertical or inclined.
3. Gross weight to be raised including bucket, cable, car, cage, load, etc.
4. Speed preferred per minute.



## PRODUCER GAS POWER

General knowledge is now such, that it is universally admitted to be

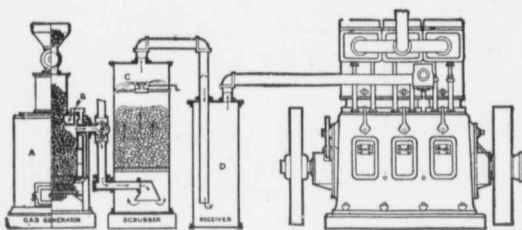
### THE COMING POWER

On plants of 100 to 1000 H.P., a saving of 30 to 50% in the cost of labor is affected over steam, and a total saving in help and fuel of 60 per cent to 70 per cent over steam power.

Built in sizes from 35 H. P. to 1000 H. P.

Write us for information, as we have a large staff of expert engineers, who are at your service

Catalogue sent on application, and full data as to power, costs, etc.



In the design of the Barrie Producers, great care has been exercised to obtain simplicity, without sacrificing the efficiency of operation.

If reference will be made to the sectional view here shown, it will at once be seen, from the standpoint of simplicity, that our Producers are in the foremost ranks.

To the close observer, it will also be seen, that any man of average intelligence can operate this producer successfully.

It can be seen also, how, with our Producers, the quality of the gas is automatically maintained uniform, at all times.

Not only is less attendance required with this producer, but less effort of the engine is required in drawing the gas through the scrubbing apparatus.

Producers furnished for any use.

Write for descriptive catalogue.

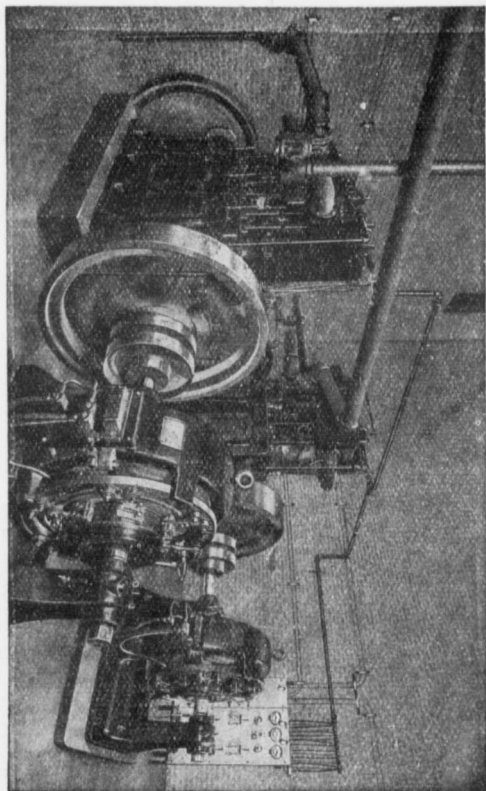
The Canada Producer and Gas Engine Co., Ltd,

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### PRODUCER GAS

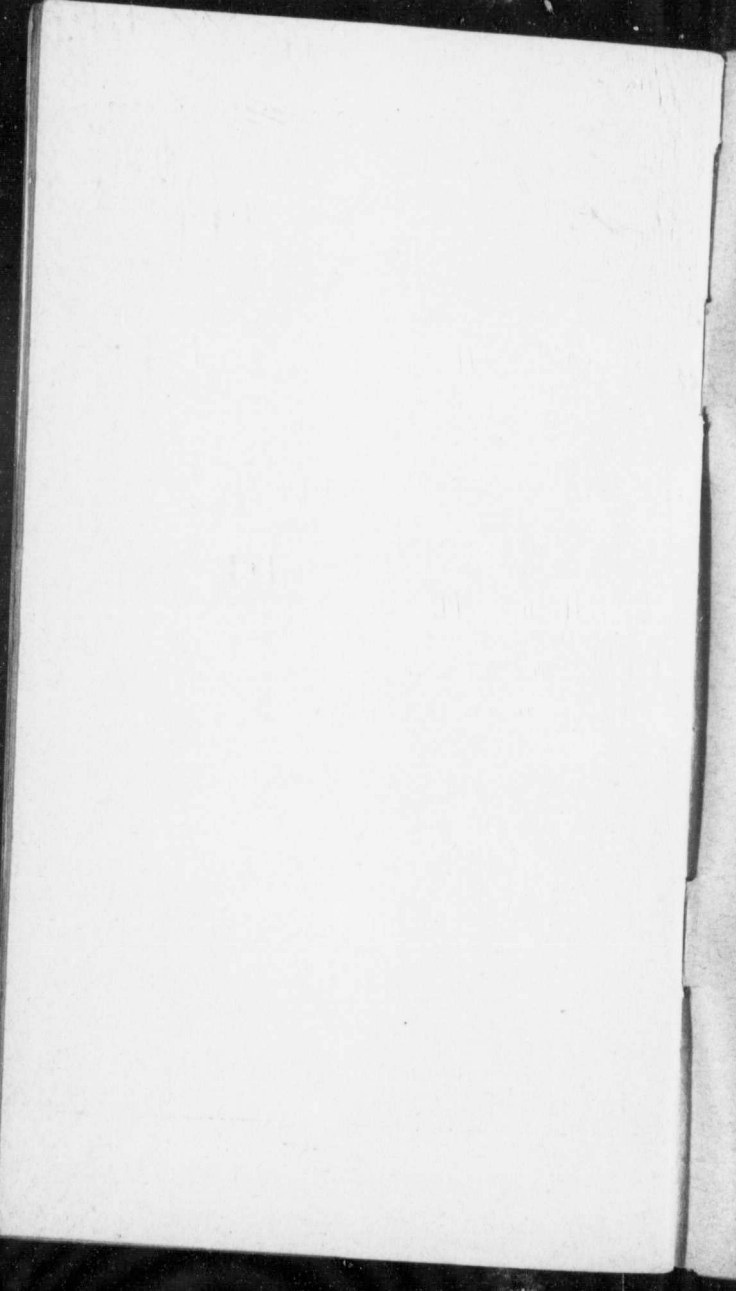
The clean, economical power of the present and of the future.



TO POWER USERS—You are cordially invited to visit our Foundry, Barrie, Ontario, Canada.

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The Gazette Print, Barrie, Ont.

