

Three materials are employed in the manufacture of our Illuminating Gas. These are, Crude Petroleum, Water, and Charcoal or Coke, all of them accessible and cheap, and from the extraordinary abundance of Petroleum in Canada and the United States, this body is likely to remain so.

The qualities which we confidently expect will secure for Petroleum Gas your favour, are:—

1st.—Its extraordinary illuminating power.

2nd.—The mildness and softness of its light.

3rd.—Its cheapness.

4th.—The ease with which a supply can always be controlled for illuminating, heating, or cooking purposes.

A one-foot burner gives a flame as large as a four-foot burner of the common Coal Gas supplied to cities and towns. The comparative smallness of the flame greatly diminishes the heat, which is often found so oppressive in large rooms lighted with coal gas. The absence of the flickering which is often disadvantageous and disagreeable in common coal gas, is another quality which it can be made to possess. Until the recent adoption by the public of Coal and Petroleum Oil Lamps, Coal Gas was considered to be by far the cheapest illuminator known. Since the discovery of a process for manufacturing gas from Petroleum, to burn without smoke or smell from ordinary gas burners when properly made, Coal Gas has been far surpassed in cheapness by Petroleum Gas, and a milder, steadier, yet stronger light secured.

Its cheapness may be inferred from the following brief statement:—

Five gallons of Crude Petroleum distilled and converted into gas according to our process, make one thousand cubic feet of gas. But one cubic foot of Petroleum Gas is equal in illuminating power to four cubic feet of common Coal Gas, so that in effect five gallons of Petroleum are capable of producing an amount of light represented by 4,000 cubic feet of Coal Gas, or from \$12 to \$16 in money, according to the present ratio of gas charges in Canada. Where gas is required to be manufactured on a large scale, it is desirable to remember that petroleum and water are easily handled, and can by their own flow supply the retorts continuously and without waste, thus doing away with the unceasing labour of continually replenishing the retorts with coal, and the expense entailed in the maintenance of numerous hands.

With respect to public buildings, one man giving three hours' attention per day to the manufacture of Petroleum Gas, can produce by our patent process, enough gas to supply 100 burners with full pressure for 10 hours, at a cost of material not exceeding ONE DOLLAR, fuel for distillation included, or at from one-fourth to one-third the cost usually charged by the Gas Companies now existing in Canada.

The substitution of Petroleum for Coal in Gas Works now in operation, can be effected with very little additional expense.

In public and private buildings where it is desirable to introduce Petroleum Gas, a small detached room would be required, according to the capacity of the works. The pipes and burners now used by Gas Companies are in all respects adapted to the Petroleum Gas, with this difference, that where a FOUR foot burner (the one in common use) for Coal Gas is employed, a ONE-foot burner for Petroleum Gas would have to be substituted. Petroleum Gas burning through a FOUR foot gas burner is a magnificent illuminator, and one which would not often be used for ordinary purposes.

Any communications relative to the introduction of the Patented Petroleum Gas into public buildings or private houses, may now be addressed to JAMES E. THOMSON, 109, King-street, West, Toronto; and if the applicant state the number of burners required to be supplied, an estimate of the size and cost of the apparatus will be returned without delay.

We are, Sir, your obedient Servants,

JAS. E. THOMSON,
Hydraulic and Gas Engineer.

HENRY YOULE HIND, M. A.
Professor of Chemistry and Geology, Trinity College, Toronto.

This is speaking to facts certainly. Where coal is abundant and cheap, it is not probable that in towns or cities, gas manufactured from CANADIAN NATIVE OIL will be a successful competitor for public favour, notwithstanding its superior illuminating power, and the agreeable softness of the light which it produces. The manufacture of gas from coal has attained such excellence, that where the material can be procured at a moderate rate, the value of the coke and other by-products is sufficient to pay the