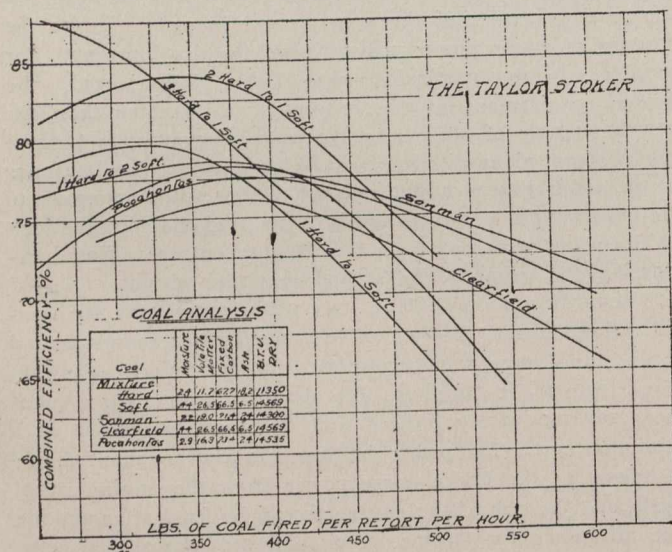


FIRING MIXED FUEL.

In a recent address before the International Association for the Prevention of Smoke, Mr. R. S. Riley, President of the American Ship Windlass Company took occasion to point out the economy to be derived from efficient burning of mixtures of anthracite slack and bituminous coal. "The burning," said Mr. Riley, "of mixed fuels, is becoming an important factor in steam boiler economy in the East.

"The price and freight rates of anthracite screenings usually allow it to be bought at a much lower cost per B.T.U. than bituminous. Hence, the desirability of utilizing it in as large a proportion as possible. It has been proven by several large concerns, that steam can be produced most economically by burning these mixtures in Taylor Stokers." Mr. Riley illustrated his remarks with a slide which is reproduced below.



The curves of efficiency and load for three kinds of straight bituminous coals are shown, and the remarkable results obtained with mixed fuels of the compositions indicated are graphically demonstrated. The quantities of coal are for a seven retort Stoker, and represent a range of from 100 to 200 per cent. of the boiler rating. The automatic control of coal and air peculiar to the Taylor stoker and the underfeed feature account for the high efficiencies obtained.

CONSUMERS GAS CO., TORONTO, ONT.

That there had been during the past year an unprecedented increase in the gas sales in Toronto was the announcement made at the annual meeting of the Consumers Gas Company.

The output amounted to 2,621,247,000 cubic feet, or 395,084,000 cubic feet more than the output of 1909, the rate of increase being 17.74 per cent.

New services to the number of 6,268 have been put in during the year—an increase of nearly 500 over the largest number of services introduced in any previous year.

The erection of the new gas-holder of 5,000,000 cubic feet capacity, referred to in the last annual report, is proceeding satisfactorily, and it is expected that the holder will be ready for service about June 1st next.

Mr. John L. Blaikie, the president, pointed out that the balance carried forward, after meeting all demands on the company, was \$77,411.79.

"The remarkable increase in the number of consumers," explained Mr. Blaikie, "is accounted for very largely by the appreciation by the public of the advantages of cheap gas when supplied through proper burners. There are still some belated consumers who use flat-flame burners. We are striving to secure the general introduction of the modern burners, the results from which are so much more satisfactory than from the flat-flame ones."

The company's mains, he continued, covered an area nine by seven miles, and their total length was over 423 miles.

"With increases at the rate of thirty miles or more per annum, a great deal of skill and careful thought is required in laying out the plans for the ultimate conditions when the city will have upwards of a million population.

"With reference to the output of gas, it is an astonishing fact that the volume of gas put out by this company during the past year is very nearly equal to the total quantity of manufactured gas sold during 1909 by all of the other gas companies in the Dominion of Canada combined."

Further on in his address Mr. Blaikie added:—

"I am glad to be able to say that, if nothing unforeseen arises, the directors hope to be able to make a further reduction in the price of gas at an early date. When we are able to take off another five cents per thousand, making the net price of gas 70 cents per thousand feet, it cannot fail to afford great satisfaction to the consumers of gas, whether for illuminating, manufacturing, cooking or other purposes. This will be the cheapest price for gas of any company on the continent, notwithstanding that coal and oil have to be brought hundreds of miles to the works, and that the company must pay customs duty of 53 cents upon every ton of gas coal used.

Undersell Electricity.

"The prospect of Hydro-Electric or Toronto Electric Light pushing their method of lighting the city does not cause your directors the smallest concern or anxiety, feeling perfectly confident that this company can, under any and all circumstances, undersell electric lighting."

General Manager Hewitt said that two years ago the company had no commercial department. Prior to that, miles of territory had been lost to other systems of lighting. In the last two years much of that lost ground had been regained.

(Continued on page 612).

Table Showing Growth of Company's Business for Six Decades, from 1855.

Year.	Pop.	Increase per cent.	Output of Gas M. ft.	Increase per cent.	No. of Meters.	Inc. %	Consumption per meter.	Per capita of pop.	Miles of main.	Inc. %
1855	42,500	22,000	1,119	11,500	302	23
1865	47,500	11.7	30,014	36.4	1,188	6.1	16,000	402	41¼	79.8
1875	68,678	44.6	100,122	233.9	2,508	111.1	26,500	969	66	60.0
1885	105,211	53.2	273,484	173.1	6,778	170.2	29,000	1,873	126	90.9
1895	190,000	80.6	614,553	124.7	20,626	204.3	25,000	2,883	227½	80.4
1905	250,000	31.5	1,374,114	123.6	39,711	92.5	31,334	5,496	302.06	32.9
1910*	375,000	10.7	2,621,247	17.7	64,781	10.7	40,463	6,990	423	13.3

* The increases shown are as compared with 1909.