

## SOFT COAL AND A SMOKELESS CITY.

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The present day tendencies are such that in all cities or even towns of some importance and considerable size there is more or less agitation for the abatement of the smoke nuisance. In some of the larger eastern American cities the use of bituminous or soft coal is prohibited and hard coal only is used for both power and heating boilers. These cities are near enough to the hard coal district to be able to buy hard coal at a price that is low enough to compare favorably with the prices for the soft coals and as hard coal is smokeless, very stringent laws concerning smoke can be easily fulfilled.

In Canada we are not so happily situated. We are obliged to use soft coal for power and also for many heating plants. In the principal cities of Canada and more particularly those of Ontario, the situation is bearing upon the manufacturer very heavily. A municipality will pass a very stringent smoke by-law and expect the manufacturer to carry out its provisions. The city does not agree that any style or system of boiler setting, nor that any smoke preventing device will be satisfactory; they only say that six minutes per hour is all the time the plant may legally discharge black smoke. This leaves the solution of the problem entirely in the hands of the coal user. The first question the manufacturer naturally asks is, why are we subjected to such regulation and he states that he has trouble enough now that competition is so keen to make business pay a dividend upon the capital invested.

The authorities say the smoke is destroying the appearance of all our fine tall buildings. The housekeepers say the smoke and fine coal dust gets into the house making it difficult to keep houses clean. Well, it appears they are both right and something should be done to help remove the trouble. The City of Toronto consumes yearly 375,000 tons of soft coal because they can make a horse-power as cheap with it as by any other means and further because nearly all of them are equipped to use steam for power and all must use steam for heating during seven months in the year, and some of them use it in process of manufacture all the time, so it appears if any other system is used as a prime mover we must still use coal for heating, drying and many other manufacturing processes. Consequently the first thing to consider is, can we burn soft coal practically or nearly smokeless. It is demonstrated that it can be done. The next