

converted into gas, will be reduced to from 15 to 20 per cent. When the fire-box is sufficiently large the combustion is complete, and without smoke or soot, leaving always a clean boiler surface. A properly regulated draught insures complete and even combustion. Its comparative freedom from sulphur makes possible a long life for the boiler. A better insulation may be had against loss of heat by radiation, and the hot gases from the generator may be utilized for drying the peat which is to be converted into gas.

The most important reason, however, why peat gas can be more profitably and extensively employed than peat in large industrial works lies in the fact that by locating a large central power station at a suitable bog the cheapest kind of peat, namely cut peat, satisfies all requirements; and the gas may then be piped for distribution, or, if the place of consumption be at too great a distance, it may be converted at the bog into electrical energy.

SULPHUR IN ONTARIO PEAT.

At the Provincial Assay Office 36 samples of peat from different bogs in Ontario were analysed for their sulphur contents. The results serve to show the general character of our peat in this respect.

Each sample was analysed in duplicate by three different methods. The sulphur content was found to range from 0.112 to 1.00 per cent, with an average of about 0.5 per cent. Pennsylvania anthracite contains over .6 per cent, and bituminous coal over 1.4 per cent. sulphur.

Bogs are however to be had, as the analyses show, which carry little more than traces of sulphur, should freedom from this ingredient be particularly desired.
