

a peat fuel with increased fuel value per volume could be economically manufactured, either by briquetting, carbonizing and briquetting, coking, or as a powder, a fuel would be obtained which in many instances could favourably compete with coal.

Another way of utilizing the peat bogs on a larger scale is for the development of electric energy. The power plants should then be located at the bogs, when the bulkiness of the air dried peat fuel is of less consequence.

The methods at present employed on a large scale for the manufacture of air dried peat fuel are:

1. Cut peat, when the peat is cut out of the bog by hand or machinery and afterwards air dried, without undergoing any mechanical treatment.
2. Machine peat, when the raw peat after being dug out of the bog generally by hand is first subjected to mechanical treatment and afterwards air dried. The methods used for manufacturing machine peat are, as a rule, divided into two classes:
 - (a) when additional water is added to the peat mass in such quantities that the resulting peat porridge can be run out into moulds.
 - (b) when the peat mass is treated without additional water and has such consistence that it can be formed into desired shape without moulds. This latter class is properly termed machine formed peat, but is often called pressed peat.

GENERAL REQUIREMENTS FOR A SUCCESSFUL PEAT FUEL MANUFACTURE.

The first condition for a successful undertaking is a suitable peat bog, as free as possible from roots, trunks and stumps of trees, which interfere with continuous working. The peat should be well humified and have a low content of ash. A depth of 6 to 12 feet or more is desirable, especially when a large output is desired and machinery employed, otherwise a considerable area requires to be worked, which necessitates frequent movings of the machinery and transportation arrangements, entailing loss of time and increased cost.

A wet bog free from roots and trees can sometimes be cheaply worked by the employment of suitable machinery for digging the peat out of the bog, but as a rule a drained bog is more easily worked. Whenever roots and trees are plentiful the mechanical excavator is not suitable and such bogs require sufficient drainage. Good drainage facilities are, therefore, favourable.

In many cases it is not necessary to drain a bog to the bottom, but the surface must be well drained, in order that as solid ground as possible may be obtained for the workmen and animals to walk on, and the laying of tracks facilitated. Occasionally the water in a bog is dammed up during the winter in order to protect the peat from frost. Peat which has been frozen hard generally loses its cohesive properties and easily crumbles to pieces, making it less suitable for the manufacture of peat fuel. The bog should be carefully