UNITED STATES PATENT OFFICE.

ANTOINE CHARON, OF MONTREAL, CANADA, ASSIGNOR TO ALEXANDRE DUCLOS, OF MONTREAL, CANADA.

PROCESS OF PREPARING BOG-PEAT FOR FUEL PURPOSES.

SPECIFICATION forming part of Letters Patent No. 709,664, dated September 23, 1902.

Application filed January 16, 1902. Serial No. 90,081. (No specimens.)

To all whom it may concern:

Be it known that I, ANTOINE CHARON, a subject of the King of Great Britain and Ireland, residing in the city of Montreal, in the Province of Quebec, Canada, have invented certain new and useful Improvements in Processes of Preparing Peat for Fuel, of which the following is a specification.

My invention relates to a process for drying peat, consisting in successive steps of drying, pulverizing, and carbonizing the same and thereafter compounding with an inflammable substance, which aids its combustion, and the same may be pressed into briquets or cakes, and thus formed into a very useful article of fuel equal or superior to coal.

In carrying out my process the peat after being dug is broken up and thrown into a revolving drier, through which it passes and finally falls into a grinder or pulverizer, consisting of interlocking disks, rolls, or cones, which are connected, respectively, to the two poles of an electric circuit. The voltage of the circuit will ordinarily be from one hundred and ten to two hundred and twenty volts, and when the dry peat passes between them it is immediately carbonized by the passage of the electricity and the high temperature to which it is immediately raised. The peat is not burned, however, but falls out from between the two grinding rolls, disks, or cones in a state of carbonized powder. From this point the carbonized peat is led to a mixer, where it is thoroughly intermixed with a proportion of petroleum in the proportion of about one part of petroleum to one hundred and twenty-five of peat, or slightly less than one per cent., and when the petroleum has been thoroughly incorporated with the peat-powder and the latter is in the form of a slightly-damp mixture it is pressed into briquets or cakes and is ready for market.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A process for the manufacture of fuel from peat consisting in passing the same between disintegrators and causing a current of electricity to pass through the peat between said disintegrators thereby simultaneously pulverizing and carbonizing the same.

2. A process of making fuel from bog-peat consisting in drying the peat, passing the same between a pair of disintegrators, moving the disintegrators relatively to one another to act upon the peat, and passing a current of electricity between said disintegrators and through the peat, thereby simultaneously pulverizing and carbonizing the same.

3. A process of making fuel from bog-peat consisting in drying the peat, passing the same between a pair of disintegrators, causing a current of electricity to pass between said disintegrators and through the peat, thereby simultaneously pulverizing and carbonizing the same, and mixing the carbonized powder with petroleum.

4. A process of making fuel from bog-peat consisting in drying the peat, passing the same between a pair of disintegrators, causing a current of electricity to flow through the peat between said disintegrators, thereby simultaneously pulverizing and carbonizing the same, mixing the carbonized peat with a small proportion of petroleum, and pressing the mixture into briquets or cakes, substantially as described.

5. A process for the manufacture of fuel from bog-peat consisting in subjecting the peat to centrifugal action to eliminate the moisture therefrom, then leading it between a pair of disintegrators, causing the disintegrators to move relatively to each other to act upon the peat, causing a current of electricity to pass between the disintegrators and through the peat, mixing the peat with a proportion of inflammable material, and thereafter pressing it into cakes or briquets substantially as described.

6. A process for the manufacture of fuel from bog-peat consisting in pulverizing the peat and simultaneously carbonizing the same by a current of electricity.

7. A process for the manufacture of fuel from bog-peat consisting in simultaneously drying, pulverizing and carbonizing the peat by passing through it a current of electricity.

8. A process of carbonizing bog-peat for fuel purposes consisting in passing through it a current of electricity.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ANTOINE CHARON.

Witnesses:

ALB. DU SAULT,

P. J. CHAMPAGNE.