

Patented Dec. 28. 1869.



Wittgenstein

UNITED STATES PATENT OFFICE.

N. AUBIN, OF MONTREAL, CANADA.

IMPROVEMENT IN PEAT-MACHINES.

Specification forming part of Letters Patent No. 98,333, dated December 28, 1869.

To all whom it may concern:

Be it known that I, AIME NICHOLAS NAPOLEON AUBIN, formerly of Albany, county of Albany, State of New York, temporarily residing in Montreal, Dominion of Canada, have invented certain Improvements in Peat-Machines, of which the following is a specification:

The nature of my invention is confined to a modification in the form of the knives and to the addition of a pocket in a machine for which I obtained a patent on the 27th October, 1868, in order to enable said machine to throw off stones or other hard bodies, which in some localities are found mixed with the peat and interfere with the working of that otherwise successful and efficient device. I shall therefore confine myself to the description of the altered construction of the knives and of the side pocket for the purpose stated.

Figure 1 is a side view of the machine. Fig. 2 is an interior end view of it with the front removed. Fig. 3 is a side view of the revolving knives with a cross-section of the cutting and grinding knives. Fig. 4 is a side view, showing the relative position of the fixed and revolving knives.

A A, outside shell; B B, panels which open to examine, clean, or repair the machine; b, handle to the same; C, shaft bearing the revolving drum *c* and driving-pulley *c'*; D, box or hopper through which the crude peat is introduced by means of shovels, rakes, or an elevator; *d*, spout through which the ground peat is expelled; E, side pocket opened in the lower portion of the shell in the relative position to the motion of the revolving drum, as indicated by the arrow *e*. *e*¹ is the hinged cover of the pocket; *e*², handle to open it; F, side view of the revolving knives; *f*¹, cutting-knife; *f*², grinding-knife; G, fixed knife; *g*¹, flange by which it is bolted to the lower part of the shell; *h h*, stone being thrown off by

the combined action and shape of the fixed and revolving knives; *h'*, stone which has been pushed by the revolving knives from the interior of the machine into the soft peat contained in the pocket.

The fixed knives, it will be observed, have a curved edge at *g*², where the revolving knives meet them acting relatively as the blade of scissors, but at such an angle as to cut soft substances only and to merely press forward any hard body. The forward edge of the fixed knives being straight and nearly perpendicular to the circumference of the drum, the substances which are not thrown off by the curved fixed knives are pushed between the latter and exposed to the grinding action of the corrugated sides of the revolving knives.

The new construction of the fixed knives, which cover nearly one-half of the interior circumference of the machine, affords a larger grinding-surface between their sides and the corrugated revolving knives. This adds much to the efficiency of the machine, as it is found that peat compresses itself in drying, and acquires a density nearly proportioned to the degree of grinding and puddling to which it has been submitted. By placing the spout or opening for the escape of the ground peat at the upper part of the machine, instead of below, as it was before, the peat is also longer exposed to the action of the knives, and its more perfect grinding is thus secured.

What I claim as my invention is—

The side pocket E at a tangent of the curve, described by the end of the fixed knives G, and the fixed knives G, in combination with the revolving knives F, the whole constructed and operating substantially and for the purpose hereinafter set forth.

N. AUBIN.

Witnesses:

GEO. A. MATILE,
CHAS. H. KELLES.