

N. Aubin's Peat Wringer.

PATENTED AUG 1 1871

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Fig. 1.

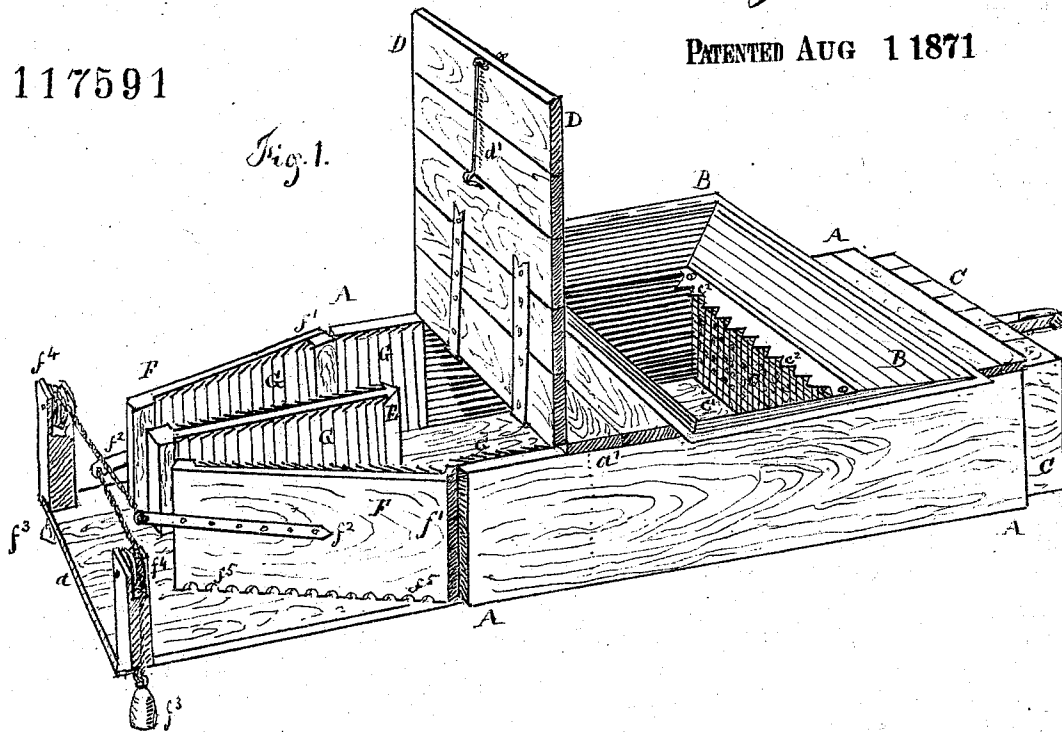


Fig. 2

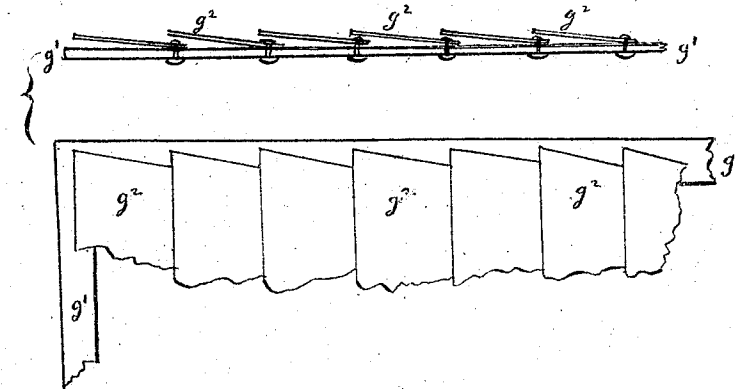


Fig. 3.



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Witnesses.

Inventor

N. Aubin

UNITED STATES PATENT OFFICE.

AIMÉ NICHOLAS NAPOLEON AUBIN, OF PORTLAND, CONNECTICUT, ASSIGNOR TO
AUBIN PEAT-FUEL AND MACHINE COMPANY OF CONNECTICUT, ASSIGNOR TO
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IMPROVEMENT IN PEAT-WRINGERS.

Specification forming part of Letters Patent No. 117,591, dated August 1, 1871.

To all whom it may concern:

Be it known that I, AIMÉ NICHOLAS NAPOLEON AUBIN, of Portland, in the county of Middlesex, in the State of Connecticut, have invented an apparatus for extracting a certain portion of the water retained in peat when recently drawn from the bog, and which I call a "Peat-Wringer," of which the following is a specification.

The nature of my invention consists in forcing the wet peat to traverse a box provided with strainers of a particular construction, against which the peat is submitted to a gradually-increasing pressure, and so arranged that the peat, travelling in one direction, cannot escape through the apertures, while the water can run out in a contrary direction.

Figure 1 is a perspective view of the wringer. Fig. 2 is a side and top view of the strainers on a larger scale. Fig. 3 shows how the strainers are placed on the boards so as to be easily withdrawn and replaced.

A A A A is an oblong cylindrical box made of wood or iron. The bottom of it is continued to *a*. On the top, near one end, is a hopper, B B, through which the peat is introduced. C C is a piston moving backward and forward. It is long enough to close the lower aperture of the hopper while the front end of the piston moves to *a'*. The front end of the latter has holes covered with a wire-gauze, *c'*, to allow air to enter the box when the piston is moving backward. Above the forward face of the piston at *c''* is fixed a knife with angular teeth. On the opposite side of the lower aperture of the hopper is a plate of iron or steel, under and close to which the piston passes. This knife and plate are placed thus in order to cut any root which otherwise might interfere with the motion of the piston. Any fine roots adhering to the knife are thrown off when the piston recedes and passes the lower edge of the hopper. D D is a door, which, when lowered to its place, forms a continuation of the upper side of the box to which it is hinged. *d'* is a hook by which the door is fastened when the apparatus is in operation. This door enables the attendants to clean the strainers and the inside of the box. E, upright partition, furnished on each side with strainers, and placed there to divide the peat which is forced through the box, and thus to multiply the water-separating surface. F F, compressors. They are composed of two boards, hinged to each

of the upright sides of the box at *f¹ f¹*. Their inside surface is furnished with strainers. On the outside are fixed two iron straps, *f² f²*, with an eye at their outward end to receive a rope or chain. Each rope passes over a pulley placed on an upright fixed to the edge of the bottom opposite each compressor. A weight, *f³ f³*, is suspended to each of the ends passing over the pulleys *f⁴ f⁴*. These uprights are proportioned to the pressure to which the wet peat is to be submitted, and tend to draw the compressors together and toward the center partition E. G G, strainers. They are composed of a frame, *g¹*, made of flat iron, to which strips of sheet-tin or galvanized iron *g² g²* are riveted, so as to overlap each other like blinds, leaving a narrow space between the strips. Each of these strainers is placed in a recess left in the boards, as seen at Fig. 3, and kept in its place by a thin strip of wood or metal. These strainers can thus be easily withdrawn and replaced. The strainers, which do not move, are placed over holes bored in the bottom of the box for the escape of the water. The water absorbed by the strainers on the compressors passes under the scalloped apertures *f⁵ f⁵* left at their lower edge. The water from all the strainers is conducted to a receiver placed under the box.

The wringer being constructed as just described, its operation is as follows: The peat, as dug from the bog, is thrown into the hopper B, and when the piston has moved back to the position shown in the drawing it falls into the box; then a forward stroke of the piston pushes it toward the compressors to *a'*. Another stroke brings a new charge, which, when moved forward, pushes the former one between the compressors, where the space becoming gradually contracted, the wet peat is slowly pressed against the strainers. As the peat travels in the direction of the overlap of the strips its fibrous form prevents it from escaping backward through the spaces between the strips while the mass is moving forward. In the mean time, the water expressed from the mass by the pressure to which it is exposed runs out freely through the strainers. As may be seen, the compression is constantly proportionate to the weights, and regulates itself according to the quantity of material brought by each stroke of the piston. The operation of the wringer is, therefore, regular, continuous, and self-adjusting, as each motion of the piston expels a quantity of

peat, partially deprived of its water, equal to the amount received through the hopper, and which has to be exposed in its turn to the same pressure due to the weights.

What I claim as my invention is—

An apparatus to separate from freshly-dug peat a portion of its water, and which I call a peat-wringer, consisting in a box or cylinder, A, with

a hopper, B, piston C, compressors F, and strainers G, the whole constructed and operating substantially as set forth.

N. AUBIN.

Witnesses:

N. SLINGLAND,
J. SCOUGHAM QUIN.