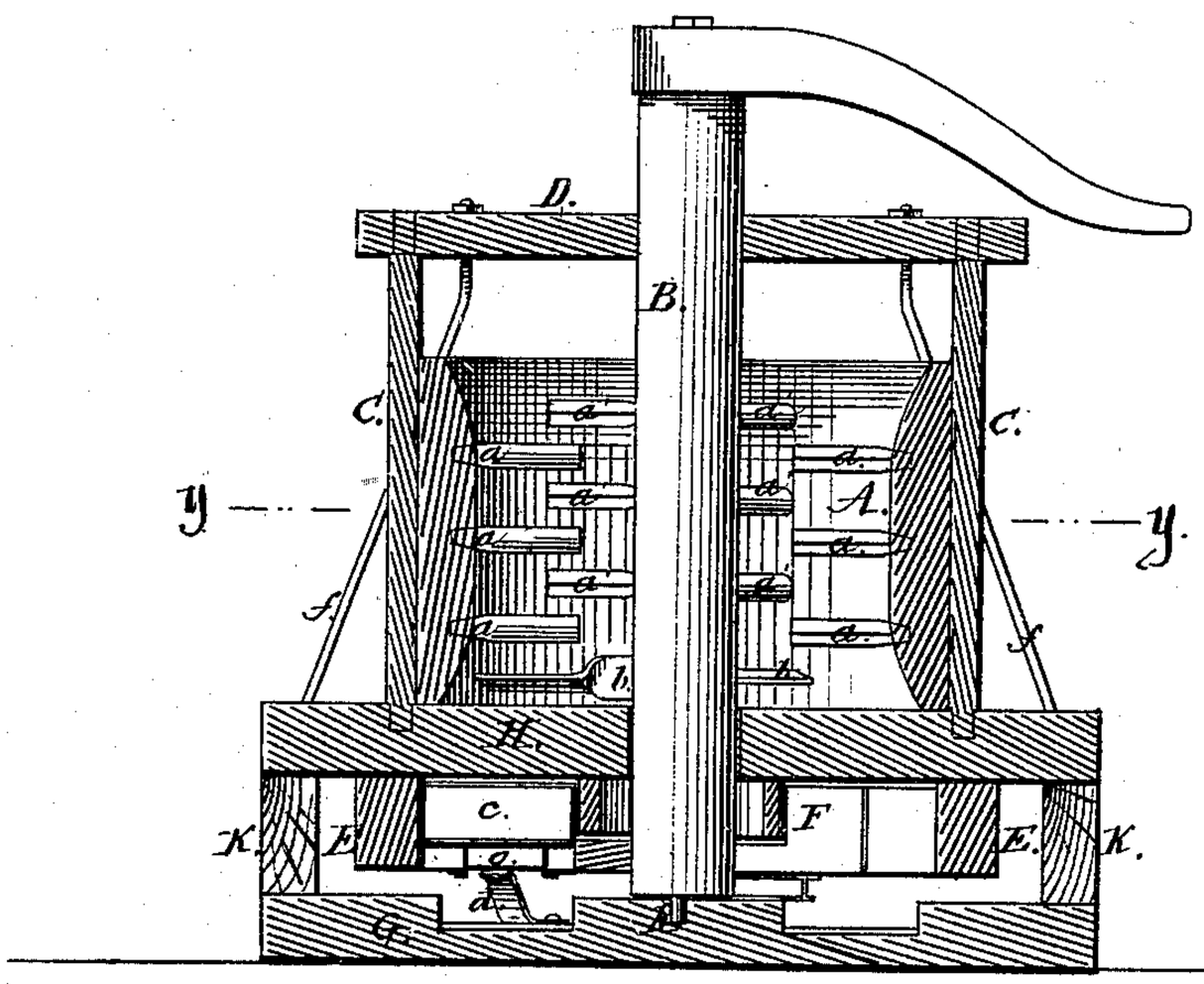
2. Sheets. Sheet. 1.

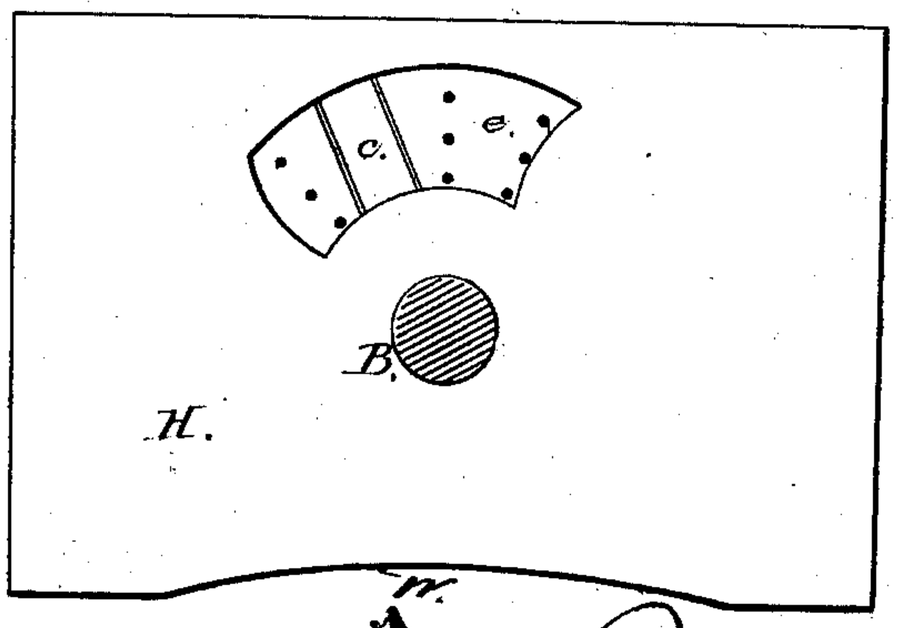
Z. Ludington,

Peat Machine.

No. 113,180. Patented Mar. 28. 1871.

Fig. 1.





Witnesses;

Edw. W. Donn

J. B. Siddall

Fig. 2.

Inventor;

Zalmon Ludington

Z. Ludington,

2. Sheets. Sheet. 2.

Peat Machine.

No. 113,180. Patented Mar. 28. 1871.

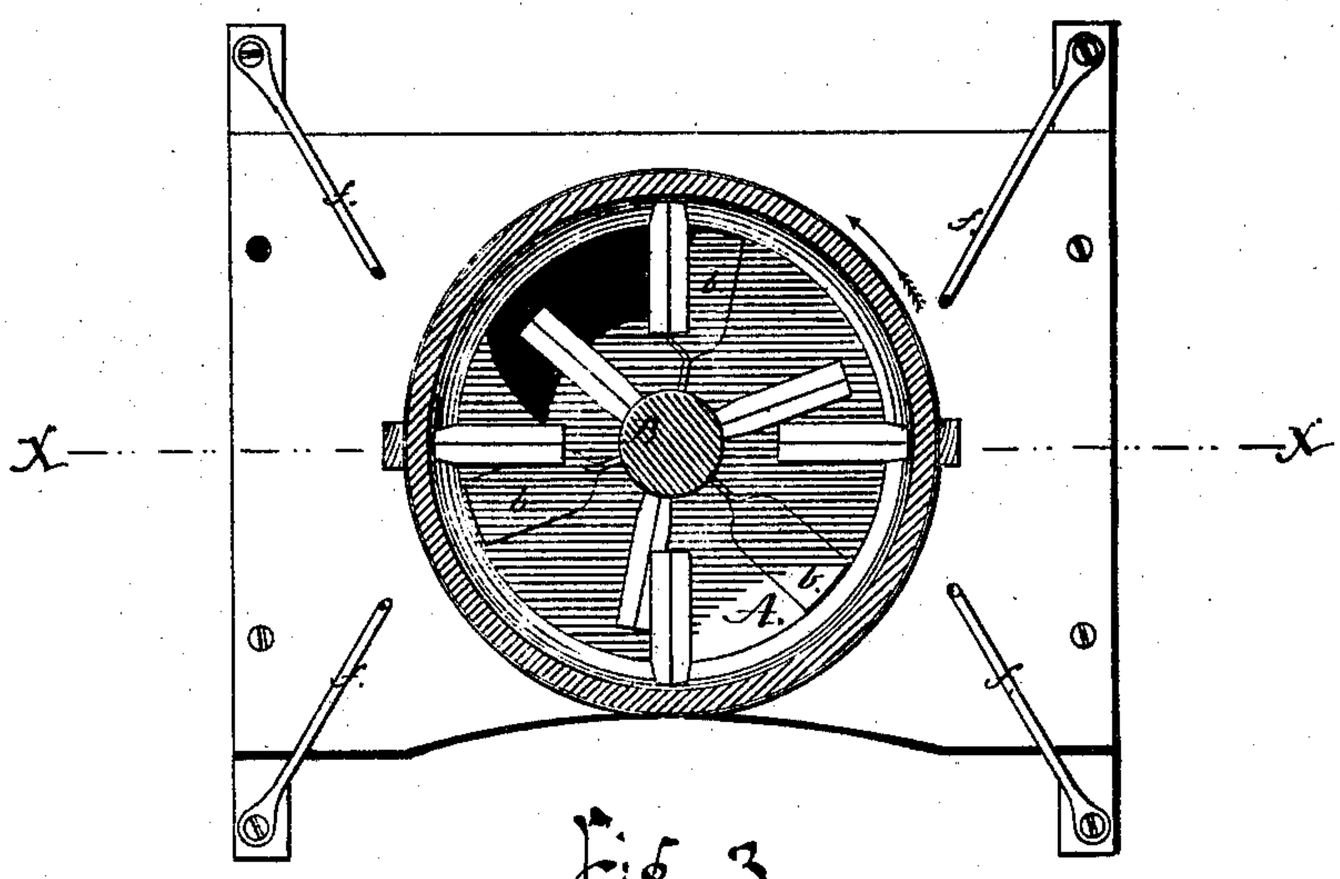


Fig. 3.

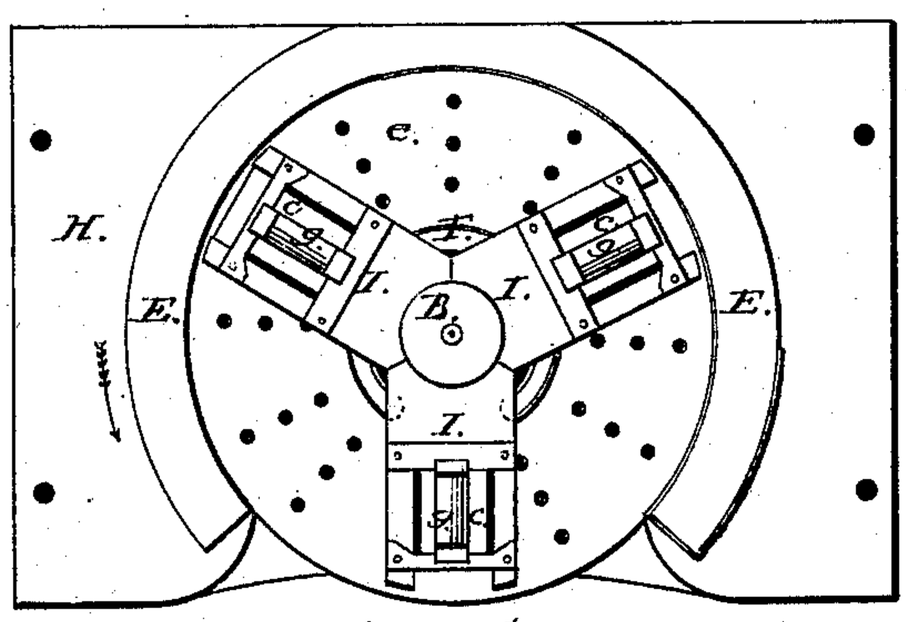


Fig. 4.

Witnesses;

Edw. W. Donn

J. B. Siddall

Inventor;

C. Kalmon Ludington

United States Patent Office.

ZALMON LUDINGTON, OF FAYETTE COUNTY, PENNSYLVANIA.

Letters Patent No. 113,180, dated March 28, 1871.

IMPROVEMENT IN PEAT-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

I, ZALMON LUDINGTON, of Fayette county, in the State of Pennsylvania, have invented certain Improvements in Peat-Machines, of which the following is a specification.

Nature and Objects of the Invention.

My invention consists of an improvement in peat-machines, in which the peat or turf may be ground and pressed into molds ready for drying, without the necessity for second handling; and

It consists of several molds formed and rotating about the axis of a shaft, and having inner and outer broken mold-rings to assist in molding the blocks preparatory to drying, after the peat has been thoroughly ground by the rotary-mill.

Description of Accompanying Drawing.

Figure 1 is a vertical section on line *x x*.

Figure 2 is a plan showing section of shaft and top of upper floor.

Figure 3 is a horizontal section on line *y y*.

Figure 4 is a plan of bottom of the machine inverted.

Similar letters of reference refer to corresponding parts in all the figures.

General Description.

A is a cylinder or drum having its inner surface at the top and bottom beveled, and containing arms *a*, converging toward the axis of the shaft B, which also has fixed firmly into it arms *a'*, diverging at right angles from its axis, and alternating with those in the cylinder or drum.

The cylinder or drum A has its bottom formed by the platform or upper floor H.

The frame, formed of the uprights C and horizontal timber D, is tongued into the platform H, and serves to steady the cylinder or drum A, while the guide-rods *f*, bolted to the horizontal timber D and platform H, clamp and hold firmly together the upper structure of the machine.

The shaft B has at its bottom the pin or axle *h*, let into a socket in the timber G, which is its bearing and support.

The timber D, through which the shaft passes, forms for it a guide to prevent it from moving laterally while the mill is in operation.

The molds *c c c*, which are formed of metal, set loosely in the slots formed in the radial frames I, which frames are firmly attached to the shaft B. The molds are of the size required to form the peat-blocks, and are open at the ends and top.

Under the bottoms of these molds are projections *g*, which come in contact with the spring *d* at stated intervals, which spring forces the filled mold upward against the under side of the platform H, and thereby gives to the block the pressure required to cause its particles to adhere together preparatory to drying.

The outer and inner broken rings E and F, serve as ends to the molds, and assist in the operation of forming the blocks. These broken mold-rings E and F are secured to the under side of the platform H, and have their surfaces next to the molds coated with metal, which forms smooth surfaces for the blocks to bear against while they are being formed.

The platform H has an opening, as seen in figs. 2 and 3, to allow the peat or turf just ground to pass through into the molds.

On top of the radial frames I is a perforated disk, through which is allowed to pass the water freed from the peat when it is under pressure.

Into the shaft B are secured flat pieces of metal *b*, directly over the molds, and as they are twisted they form a shear to press the ground peat into the molds as they are borne with the shaft in its rotary course.

The timbers K K serve to separate the platform H from the floor G to give free space for the movement of the machinery for molding and pressing the peat.

The spring *d*, which forces the mold upward, is secured to the floor or timber G, and is made sufficiently stiff to bear up the mold containing the peat against the under surface of the platform H and give the required pressure to the block.

The lever L is attached to the top of the shaft, to the end of which is applied the power which carries the rotary structure in the direction of the arrows.

Having thus described my invention, I proceed to give its operation.

The peat or turf after being dug from the pit is thrown into the drum or cylinder A; while the power is being applied to the lever L, the arms *a* being stationary, and the arms *a'* movable with the shaft, they are caused to work between each other and grind the peat. It passes downward as it is ground until it reaches the bottom of the cylinder, when it is pressed by the shear-plates *b*, through the opening previously described, into the molds, as they in their turn reach this opening.

When the molds in their turn reach the spring *d*, they are forced up by contact with the projection *g* at the bottom of the mold, and the spring *d*.

The broken mold-rings E and F perform their part in molding the peat-blocks while the rotary device is in motion as described above.

When the peat-block is complete, it arrives in its movement to the point W, which is cut, for convenience, from the platform H, and, as before arriving at this point it has been relieved from the spring, the mold drops by its own weight, and the boy in attendance may pass one hand over the mold and draw the

complete block forward onto the hand-block, on which he may carry it to its drying place.

The molds are to be made perfectly smooth inside as well as outside, so that the peat-block may have a good form, and the mold may work up and down unobstructed.

What I claim as my invention, and desire to secure by Letters Patent, is—

The radial frames I, attached to the shaft and forming a molding-wheel, in combination with the adjustable molds C, outer and inner broken mold-rings E and F, and the spring *d*, as and for the purpose set forth.

ZALMON LUDINGTON.

Witnesses:

EDW. W. DONN,

J. B. SIDDALL.