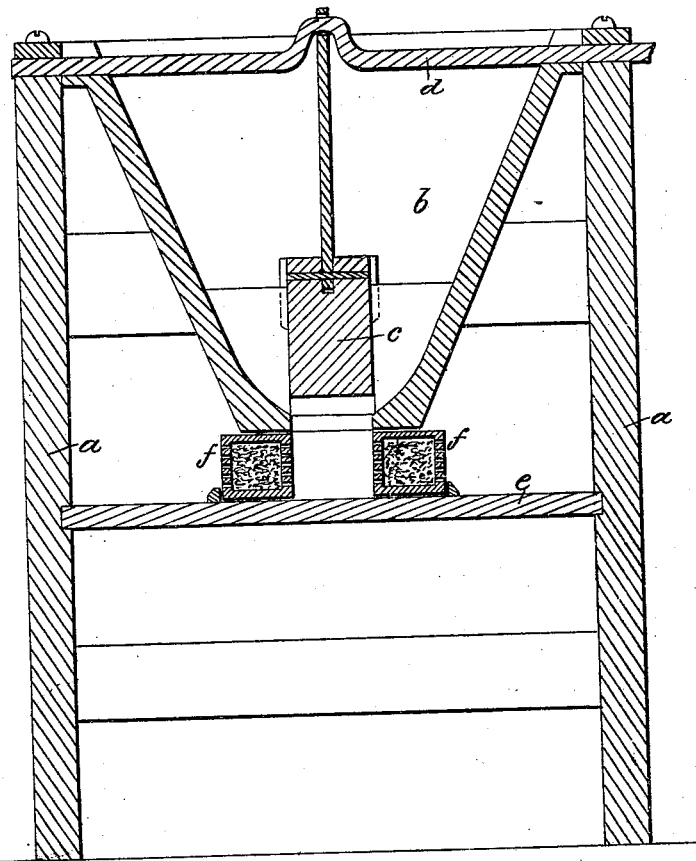


S. MARDEN.

Peat Machine.

No. 54,186.

Patented April 24, 1866.



Witnesses:

*F. Gould*  
*J. B. Hilder.*

Inventor:

*Sam'l Marden*  
*by his atty*  
*W. J. Crosby*

# UNITED STATES PATENT OFFICE.

SAMUEL MARDEN, OF NEWTON, MASSACHUSETTS.

## IMPROVEMENT IN PEAT-MACHINES.

Specification forming part of Letters Patent No. 54,186, dated April 24, 1866.

### *To all whom it may concern:*

Be it known that I, SAMUEL MARDEN, of Newton, in the county of Middlesex and State of Massachusetts, have invented an Improved Machine for Preparing Peat for Fuel; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

The invention relates to the construction of mechanism for preparing peat for fuel, and particularly to the construction of a mold or mold-box which is used in connection with a hopper or peat-containing reservoir and a reciprocating plunger by which the peat is driven from the hopper into and compressed within the mold.

In bringing peat into a merchantable condition for fuel, the principal obstacles to overcome are the separation of the water from it and its compression into compact form, the difficulty being that in treating the semi-fluid substance taken from the bog to pressure by mechanism the intimate combination of the water and the finer particles of peat causes them to flow from the press together, leaving only the coarse, fibrous, and least valuable portion of the peat in the press.

My invention is designed to obviate this difficulty by the employment of a mold-box having a hollow casing forming the sides of the mold, the sides of this casing being perforated with holes and the interior packed with sponge or other fibrous material, so that in pressing the peat into the mold the water may escape through the casing, while the fine particles of peat will be held back by the closeness of the fibers of the packing.

It is in this construction of the mold-box that my present invention consists.

The drawing shows a cross-section of a machine having a mold-box embodying the invention.

*a* denotes a frame having a hopper or reservoir, *b*, into which the crude or semi-fluid peat from the box is thrown. *c* is a reciprocating

plunger worked vertically by a crank-shaft, *d*, or in any other suitable manner. Beneath the hopper is a shelf or bed, *e*, on which the mold-box *f* is placed in such manner that the plunger in its downward movement shall enter the mold and compress within it the peat which enters the mold when the plunger is raised. This mold-box has a hollow casing on one or more of its sides, the space in which is filled with a fibrous packing of sponge or other similar material; the sides of the casing being perforated with numerous holes, as seen in the drawing, to permit the escape of the water, while the packing serves to retain the peat.

By this means I have found that I can compress the peat and separate it from a large percentage of the water contained in it, so as to practically prepare it or aid in its preparation as an article of fuel made into compact and convenient form for sale and for consumption.

The mold-box may be constructed with a series of compartments or molds, and may be used in connection with a triturating mechanism and a mechanism for filling and discharging the molds, as seen in my application for a patent filed October 5, 1865, or it may be constructed and used with any other mechanism for preparing peat in which molds are used for compression of the peat, my invention not being limited to the form of the molds, but consisting in the construction and use of a mold-box with a hollow casing packed with fibrous material, through which the water is pressed through perforations leading into and from said casing.

I claim—

In combination with a reciprocating follower, a mold-box having a construction substantially as described.

In witness whereof I have hereunto set my hand this 17th day of January, A. D. 1866.

SAML. MARDEN.

Witnesses:

F. GOULD,  
J. B. CROSBY.