

N. C. SAWYER.  
Preparing Peat for Fuel.

No. 44,342.

Patented Sept. 20, 1864.

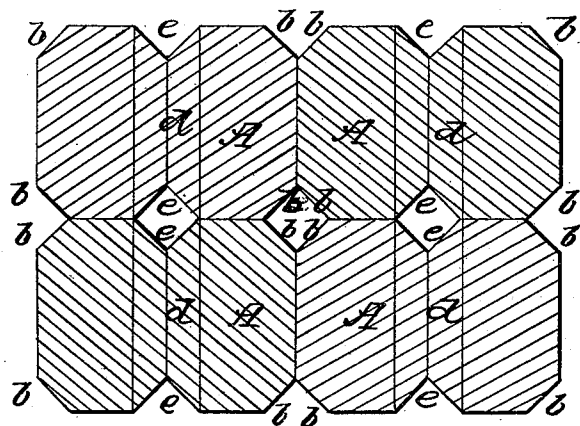
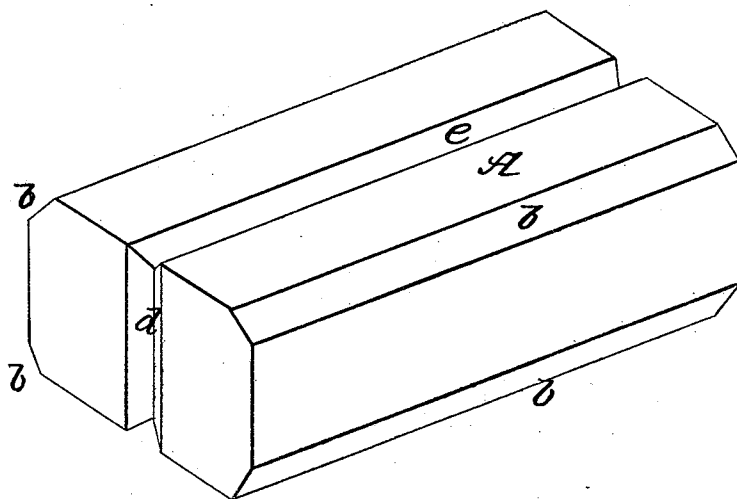


Fig 1



Witnesses  
N. Ames.  
A. A. Badger.

Inventor  
N. C. Sawyer.

# UNITED STATES PATENT OFFICE.

N. C. SAWYER, OF BOSTON, MASSACHUSETTS.

## PREPARING PEAT FOR FUEL.

Specification forming part of Letters Patent No. 44,342, dated September 20, 1864.

*To all whom it may concern:*

Be it known that I, N. C. SAWYER, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Preparing Peat Fuel; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of one of my compressed blocks or bricks of peat; and Fig. 2 is an end view of a number of the blocks piled up together, showing the passages for the circulation of air or flame.

Like parts are indicated by the same letters in both figures.

The nature of my invention consists, first, in condensing peat, either previously ground or in its natural state, by subjecting it to a powerful pressure in a suitable mold, so as to form it into blocks or bricks of convenient size, whereby the desiccation is greatly facilitated by expressing the moisture, and the peat is rendered not only more compact and consequently better adapted for transportation, but also, being thus condensed, it produces a more concentrated and hotter fire and better charcoal and coke than peat prepared in the usual way; and my improvement further consists in externally forming said blocks or bricks of peat in such a manner that when compactly piled together there shall be passages between them for the free circulation of air in drying and flame in burning, which object I accomplish either by cornering the blocks or grooving their surfaces, substantially as hereinafter described.

To enable others skilled in the art to make and use my improvement, I will now proceed more fully to describe the same.

The peat may be cut from the native bed in the usual manner, and then subjected to a powerful pressure in a mold, precisely as bricks are pressed, or by any other suitable condensing device; or the peat may be first passed through a "pug-mill" or other grinding

or cutting-machine, and thence fed directly into the condensing-mold and there compressed to any required degree.

The peat, in order to be condensed to the best advantage, should be neither too dry nor too wet, but simply moist enough to adhere together. If too dry, it will crumble after compression, and if too wet it will not be susceptible of so great a condensation. Practice alone will determine the degree of moisture. When about half dry, the blocks are perhaps in the best condition to be pressed in the mold.

Peat of different densities will require and be susceptible of different degrees of condensation—from twenty-five to two or three hundred per cent. in bulk.

The act of condensation expels the greater portion of the moisture in the peat and causes it to be so much more rapidly dried, thereby saving a great amount of time and expense in preparing it for fuel.

I do not confine myself to blocks of any particular size or shape, but prefer, as most convenient and suitable for packing and burning, a parallelopiped eight inches long, four inches wide, and three inches deep.

I also propose to cut off the corners *b*, so that when piled up together, as represented in Fig. 2, there will be spaces between the blocks for a free circulation of air in drying and flame in burning.

For a similar purpose I also propose to make grooves *ee* on the top and bottom and *dd* on the ends of the blocks, said grooves being either rectangular, semi-circular, or of any other desirable form.

Having thus described the construction and operation of my invention, what I claim as new, and desire to secure by Letters Patent, is—

Cornering or grooving blocks or bricks of peat, substantially as and for the purpose described.

N. C. SAWYER.

Witnesses:

N. AMES,

A. F. BADGER.