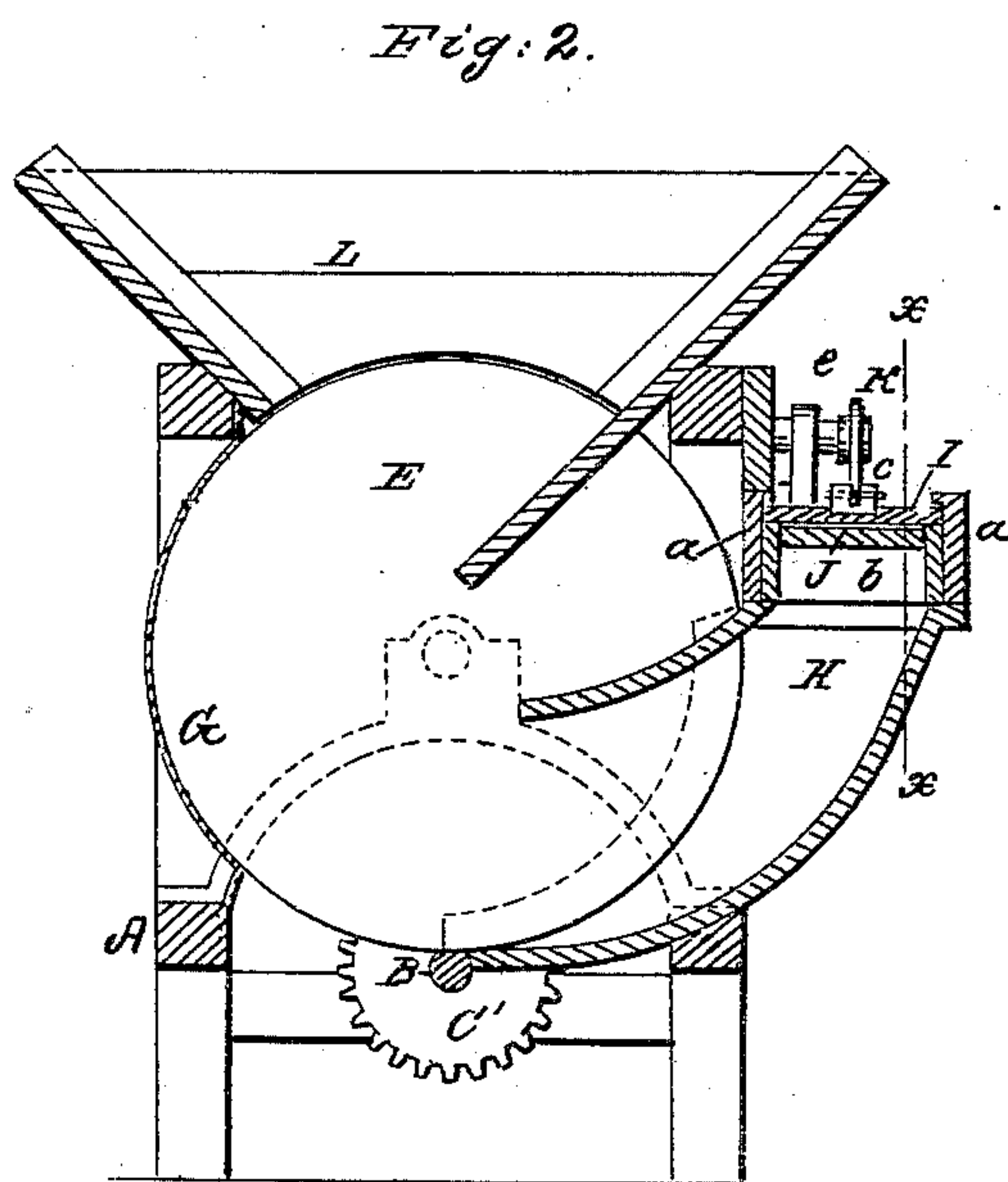
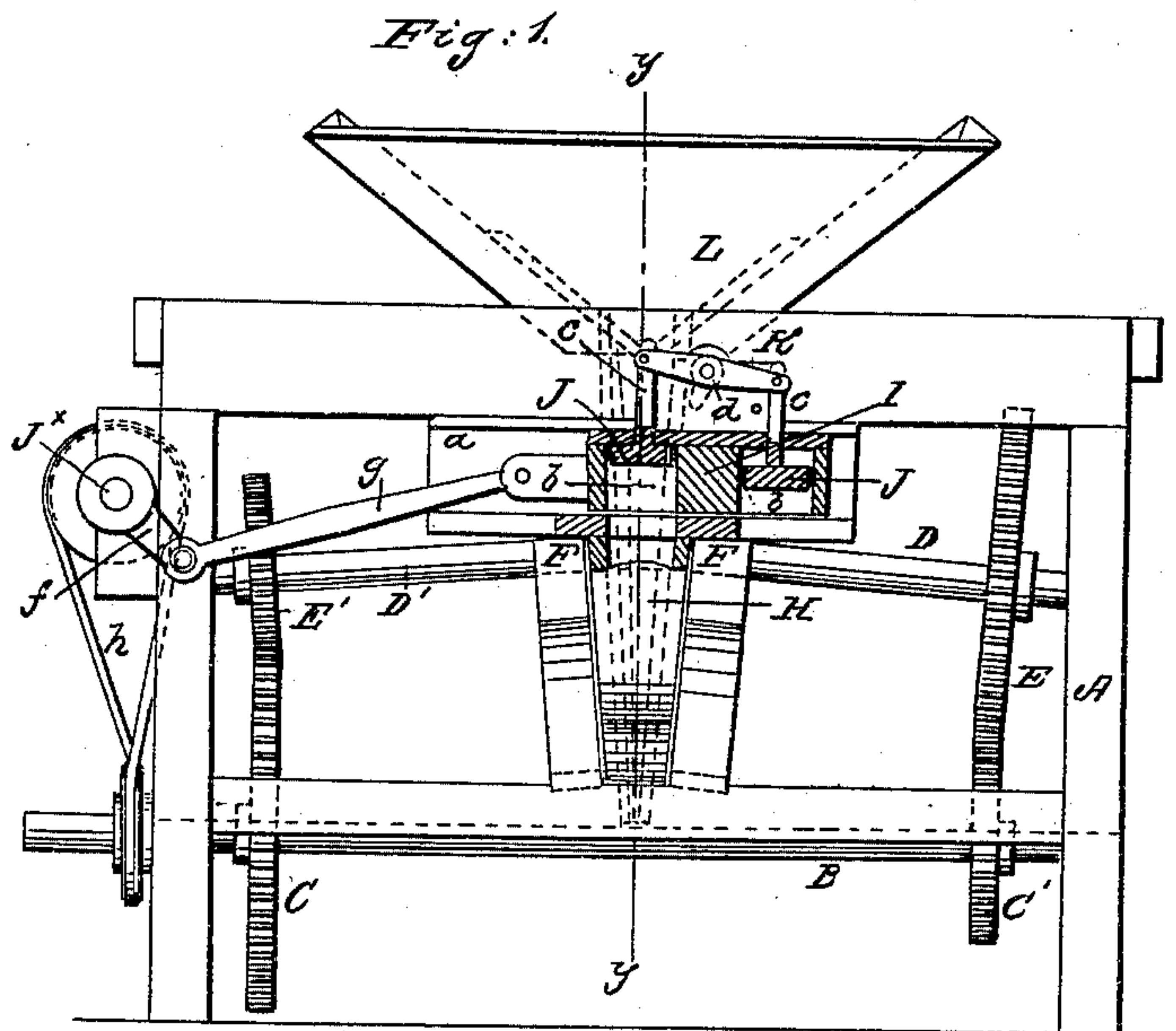


T. J. WELLS.

Peat Machine.

No. 63,342.

Patented March 26, 1867.



Witnesses:
F. A. Jackson.
J. A. Service.

Inventor:
T. J. Wells;
Per Mumford & Co.
attys.

United States Patent Office.

THOMAS J. WELLS, OF ST. ANTHONY, MINNESOTA.

Letters Patent No. 63,342, dated March 26, 1867.

IMPROVED PEAT MACHINE.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, THOMAS J. WELLS, of Saint Anthony, in the county of Hennepin, and State of Minnesota, have invented a new and improved Peat Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front sectional elevation of my invention taken in the line *x x*, fig. 2.

Figure 2, a transverse vertical section of the same taken in the line *y y*, fig. 1.

Similar letters of reference indicate like parts.

This invention relates to a new and improved machine for grinding peat and pressing it into moulds so that it may be used for fuel.

The invention consists of two rotary conical grinders, one revolving at a greater speed than the other, and placed within a suitable case, and also in reciprocating moulds arranged with the discharge end of the case of the guides, and provided with plungers, and operated substantially as hereinafter shown and described.

A represents a rectangular frame, which may be constructed in any proper manner to support the working parts. B is the driving shaft placed in the lower part of the frame A, and having two toothed wheels, C C', upon it, the wheel C being considerably larger in diameter than the wheel C'. D D' are two shafts placed in the frame A above the shaft B, and slightly inclined from a horizontal line, the inner ends of said shafts being the most elevated, as shown clearly in fig. 1. These shafts D D' are driven from the shaft B by means of wheels, E E', which gear into the wheels C C', the wheel E on shaft D, which is larger than E', gearing into the wheel C' on shaft B, and the wheel E' on shaft D' gearing into the wheel C on said shaft. By this arrangement of gearing the shaft D' is made to rotate more rapidly than the shaft D. On the inner elevated ends of the shafts D D' there are placed conical grinding plates, F F', the former, F, being on the shaft D, and the other, F', on the shaft D'. The conical grinding plates are enclosed within a case, G, which has a discharge spout, H, connected with it, the upper end of the latter having a horizontal position, and provided with guides, *a a*, at two opposite sides, between which a sliding box, I, is placed containing two moulds, *b b*, in each of which a plunger, J, is fitted, said plungers being each provided with a stem, *c*, which passes up through the top of the box. These stems are pivoted to opposite ends of a lever, K, the fulcrum pin *d* of which passes centrally through it into a bearing, *e*, on the top of the box I. A reciprocating motion is given this mould box by means of a crank, *f*, and connecting-rod, *g*, from a shaft, J^x, at one end of the frame A, said shaft J^x being driven by a bolt, *h*, from the shaft B. L is a hopper placed on the frame A over the grinding plates F F'.

The peat is placed in the hopper L, and the peat and woody fibre it may contain reduced to a homogeneous mass. This result is expeditiously attained in consequence of the plate F' rotating more rapidly than the plate F. The ground peat is forced, by the action or rotation of the plates F F', up into the moulds *b b*, the mould over the spout H having its plunger, J, forced upward, the plunger in the opposite mould being at the same time forced downward. The moulds *b b* are filled alternately, one mould being filled while the compressed peat or "brick" is forced out from the other, the reciprocating motion of the box I admitting of this result. The machine is extremely simple and efficient, is portable or compact, and may be constructed at a very moderate cost.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent—

The conical grinding plates F F', rotating at different speeds and enclosed within a case, G, provided with a discharge spout, H, substantially as and for the purpose set forth.

I further claim the reciprocating mould box I, provided with the moulds *b b* and the plungers J J, operated substantially as shown, in combination with the rotating conical grinding plates F F', enclosed within the case G, provided with the spout H, all arranged substantially as and for the purpose set forth.

Witnesses:

ORLANDO CLARKE,
DAN. M. DEMMON.

THOS. J. WELLS.