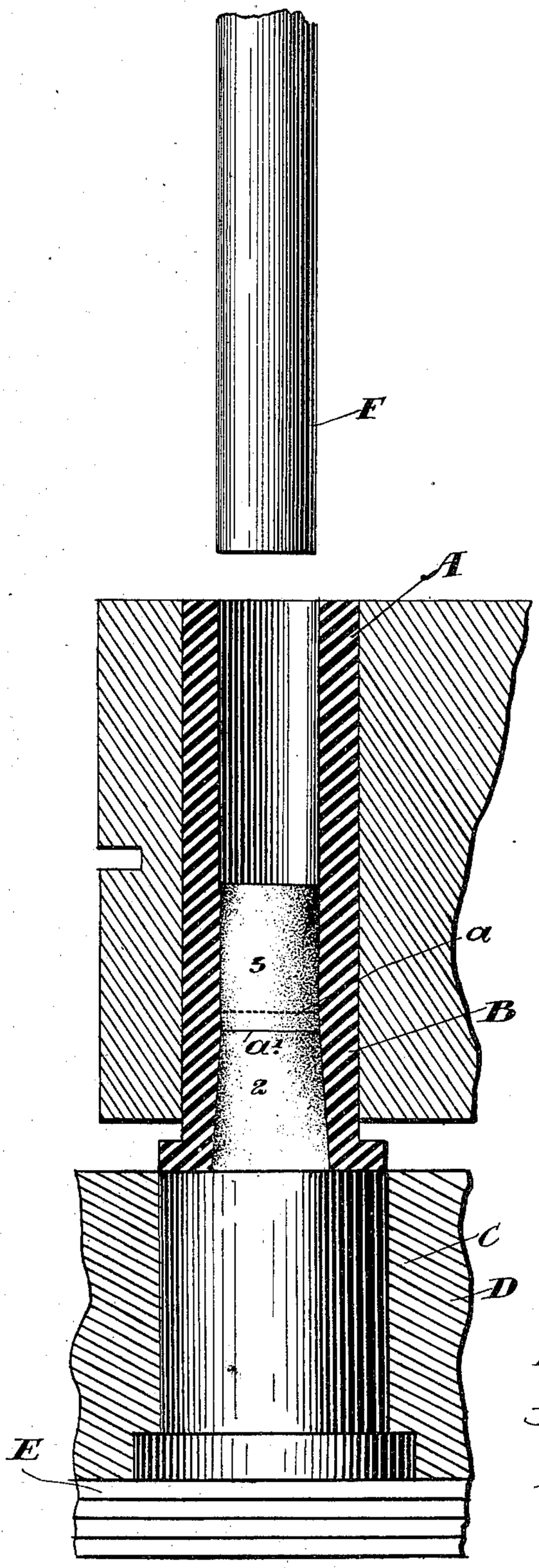
No. 735,476. PATENTED AUG. 4, 1903.

A. DOBSON.

METHOD OF PRESSING PEAT BLOCKS.

APPLICATION FILED JULY 21, 1902.

NO MODEL.



Witnesses.
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No. 735,476. Patented August 4, 1903.

UNITED STATES PATENT OFFICE.

ALEXANDER DOBSON, OF BEAVERTON, CANADA.

METHOD OF PRESSING PEAT-BLOCKS.

SPECIFICATION forming part of Letters Patent No. 735,476, dated August 4, 1903.

Application filed July 21, 1902. Serial No. 116,445. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER DOBSON, millwright, of the town of Beaverton, in the county of Ontario, in the Province of Ontario, Canada, have invented a certain new and useful Improved Method of Pressing Peat-Blocks, of which the following is a specification.

My invention relates to an improved method of pressing peat-blocks; and the object of the invention is to devise a method of pressing a peat-block whereby when the block is finally pressed all air will be excluded from it, and consequently cracking will be avoided; and it consists, shortly, in giving the peat in its loose state one blow and after being formed into a block a second blow in the same die and in both cases against a fixed resistance.

The drawing shows a die, compression-plunger, and fixed resistance.

A is the die, which is preferably provided at the bottom end with a flaring exit B of such a depth as will be found from practice to be sufficient for the proper final compression of the block.

C is a plug fitted into a suitable bed-plate D and upheld by a suitable spring E of several leaves, if preferred and as indicated.

The plug C is preferably held against the spring E, and the force of the spring is so great that it is practically to all intents and purposes a fixed resistance.

F is the plunger.

My method is as follows: When the pulverized peat is placed in the die, the plunger is caused to descend by a means which it is not necessary here to describe, so as to compress the requisite amount of peat into a block against a fixed resistance, such block extending when compressed above the top of the tapered exit, as indicated by the top of the uppermost block. (Shown in the drawing.) The plunger is then withdrawn and the air from the partially-compressed block, I find in practice, escapes from the top of the die, the withdrawal of the plunger serving to provide suction to help the escape of the air. An ejecting-plunger is then employed to drive the block farther down, it being understood that the die is previously removed from over the fixed resistance. Sufficient peat is next fed into the die to form another block, and the die is then brought again over the fixed resistance. The compressing-plunger is then brought down again, so as to form the upper block 3, which on being compressed still further serves to press the under block 2 against the fixed resistance to the line a' approximately level with the top of the flaring exit or discharge end of the die. By this means practically all air having escaped from the block below, the second blow consolidates and, I find in practice, contracts such block to a maximum extent, prevents expansion, and produces a polished surface to the contour of the block without cracks and such as I find will not crack on exposure to the air.

It is not necessary here to describe the manner in which the lower block is discharged; but I may say, for the sake of clearness, that such block is discharged by an ejecting-plunger.

In practicing my method I have found it important to keep the interior of the die thoroughly lubricated, as it is desirable to reduce to a minimum the frictional resistance of the interior of the die.

The machine in which I use my method is that covered by a former patent, and it will be understood that the class of machine referred to is one in which there is a compression-plunger and ejecting-plunger for the die, the dies being arranged, preferably, in a series and being designed to be rotated around a fixed center, and I merely mention my previous patent to show the practicability of my method of finally contracting a block between a block being formed by a plunger and a fixed resistance and finally ejecting the block after such contraction and at the same time depressing the block above into the flaring exit in the place of the block ejected.

Of course it will be understood in my method that it will be possible to give two blows instead of one in compressing and forming a finished block; but I prefer to feed the pulverized peat for the formation of the second block for the reason that by this means I do not reduce the capacity of my machine.

On starting the machine my method is carried out as hereinbefore described as to each die so as to form a foundation-block at the bottom of the die; but upon the block once being formed in each die such blocks in the bottom of the die will always be ready previously to being ejected to receive the second blow from the compressing-plunger as it is

partially compressing the block above, and such lower block, therefore, when ejected will be completely compressed.

What I claim as my invention is—

The herein-described method of forming peat-blocks consisting in compressing a quantity of peat to a suitable degree against a fixed resistance, then allowing the air to escape, then compressing a further quantity of peat on top of the block so formed and a fixed resistance beneath it, so as to further compress the lower block, then removing the compression from the last partially-compressed block above and allowing the air to escape and periodically removing the lower block after the second compression and so on continuously as specified.

ALEX. DOBSON.

Witnesses:
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