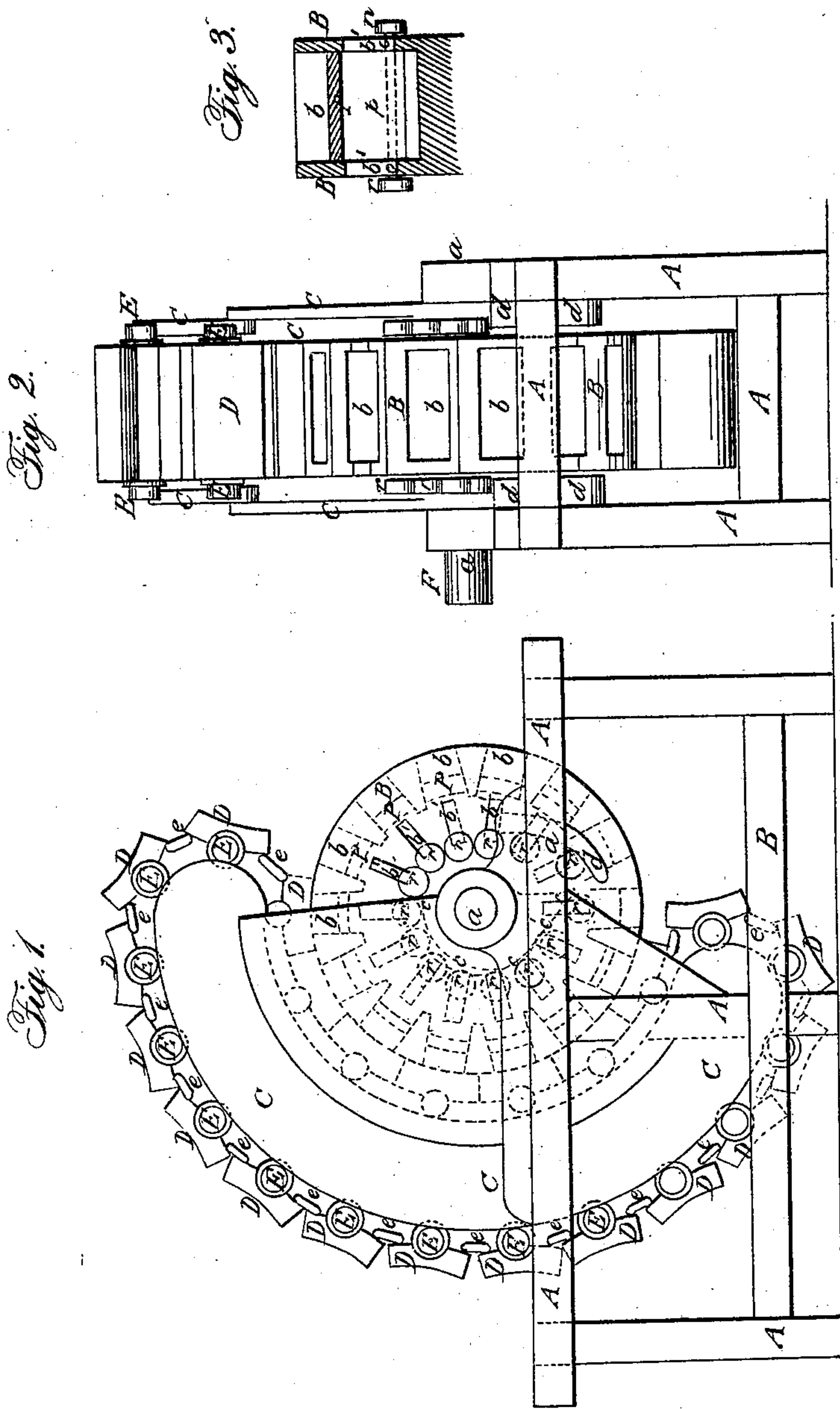


G. B. FISHER.

Peat Machine.

No. 70,983.

Patented Nov. 19, 1867.



Witnesses:

M. E. Maus
L. L. Coburn

Inventor:

Geo B. Fisher

United States Patent Office.

GEORGE B. FISHER, OF CHICAGO, ILLINOIS.

Letters Patent No. 70,988, dated November 19, 1867.

IMPROVED PEAT AND BRICK 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, GEORGE B. FISHER, of Chicago, in the county of Cook, and State of Illinois, have invented a new and useful Improvement in Peat and Brick Machines; and I do hereby declare and make known that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and the figures and letters marked thereon, which form part of this specification.

My said invention consists in an arrangement of a series of moulds upon the convex surface of a cylinder, or its equivalent, having movable plungers operating outward from the centre in said moulds, and also in an arrangement of covers to said moulds upon an endless chain, so placed that the revolution of said cylinder will also operate to place and secure the said covers automatically, while a stationary cam or eccentric gradually moves the said plungers out and presses the peat or clay in said moulds to the required degree of compression, and after the same is sufficiently pressed the covers to said moulds are removed, and the block of peat or the brick is pressed out from the mould, as hereinafter set forth.

To enable those skilled in the art to understand how to construct and use my said invention, I will proceed to describe the same with particularity, making reference in so doing to the aforesaid drawings, in which—

Figure 1 represents a side elevation of my invention.

Figure 2 is a front view or elevation of the same, and

Figure 3 is a longitudinal section through one of the moulds.

Similar letters of reference in the several figures denote the same parts of my invention.

A represents a suitable frame, supporting the operating parts of the machine, which consists of a cylinder, B, supported upon suitable bearings, as shown at *a*, and an endless chain, composed of a series of blocks E, hereinafter more fully described, connected by suitable links or connections, and arranged, as shown, upon a suitable supporting frame, C, so that said blocks lie close upon the circumference of said cylinder B for about half its entire circumference. In the circumference of said cylinder is arranged a series of moulds, in which the peat or clay is placed to be pressed, marked *b b*, each of said moulds being provided with a plunger or movable bottom, marked P, which move in and out from the centre of the cylinder B towards its circumference, and *vice versa*, by the operation of certain cams or eccentrics, as hereinafter described. To the said plungers P a radially-arranged attachment, *p*, is secured, provided with spindles *o o* projecting through slots *b' b'* in the ends of the cylinder, as clearly shown in the drawings. The said spindles are provided with anti-friction wheels or rollers, *r r*, which move over the aforesaid cams, which are secured at each end of the said cylinder inside the stationary frame, the outline or face of one of said cams being indicated by the letters *c c* in fig. 1, and the corresponding face of the other cam being represented by the letters *d d*, one of each of said cams being arranged upon both sides of the machine, so as to operate conjointly as desired. It will be observed that the configuration of the blocks D composing the said endless chain is such, being curved, as shown, upon their exterior face, as to fit closely upon the convex surface of the cylinder B, each block coming directly over and covering one of the moulds aforesaid in the said cylinder, so as to form a cover or top to the mould while passing beneath the curved frame C which supports the chain D. In case the machine is intended to be used for manufacturing brick, the cylinder B may be constructed of a polygonal form, and the faces of the blocks D be made plain, so as to press the bricks in a rectangular form, as desired. The length of the cylinder may also be made sufficient to form two or more rows of moulds around the same, if preferred, this giving it any capacity which may be desired. Each of the aforesaid blocks D is provided at each end with a spindle, upon which is arranged an anti-friction roller, E, which rolls along upon the way formed around the supports C, as indicated in the drawings.

Having described the construction of my invention, I will now proceed to describe its operation.

The clay or peat, having been previously prepared in the proper manner, is fed by means of a hopper, to be arranged in a suitable position at or over the front of the machine, into the moulds *b* upon the face of the cylinder as it is revolved, carrying the moulds over beneath the upper end of the endless chain of blocks, said cylinder being revolved by any suitable application of power upon the shaft *a* at F. In case of using the machine for peat-pressing, the plunger P should be perforated to allow the water to escape, but when used for pressing brick this provision is unnecessary. The revolution of the cylinder B, by its contact with the blocks D, causes the chain of blocks also to move around upon its supports, bringing one of said blocks successively over

each mould *b*, as the cylinder revolves, and forms, by reason of the fixed bearing against which the rollers *E* move, a strong and close cover to the moulds. As soon as each mould is thus securely covered, enclosing the clay or peat therein, the rollers *r r*, upon the ends of the spindles *o o* of the plungers, strike upon the upper end of cams *c*, which are of such configuration as to gradually force said plungers out towards the circumference of the cylinder, and thus press the peat or clay into the form required. When the rollers *r r* of each plunger reach that point on the cams *c*, at which the maximum pressure desired is obtained, there is a recession in the cam, allowing the cylinder to revolve until the mould is uncovered by the departure of its block *D*, without moving the plunger, when the cam thrusts the plunger out flush with the surface of the cylinder, thus removing the block of peat or the brick, which falls upon an apron below and is moved away. As soon as the rollers *r r* pass from the cams *c c* they are caught by cams *d d*, which force said plungers back to the bottom of the moulds, which then pass up, and are again filled, and the operation is repeated.

Having described the operation of my invention, I will now specify what I claim, and desire to secure by Letters Patent:

I claim, in combination with a cylinder provided with a series of moulds and plungers, operating as described, the arrangement of a chain of blocks *D*, for covering said moulds, substantially as specified and described.

GEO. B. FISHER.

Witnesses:

W. E. MARRS,
L. L. COBURN.