

B. F. Nave,
Brick Machine.

2 Sheets, Sheet 2.

N^o 16,449.

Patented Jan. 20, 1857.

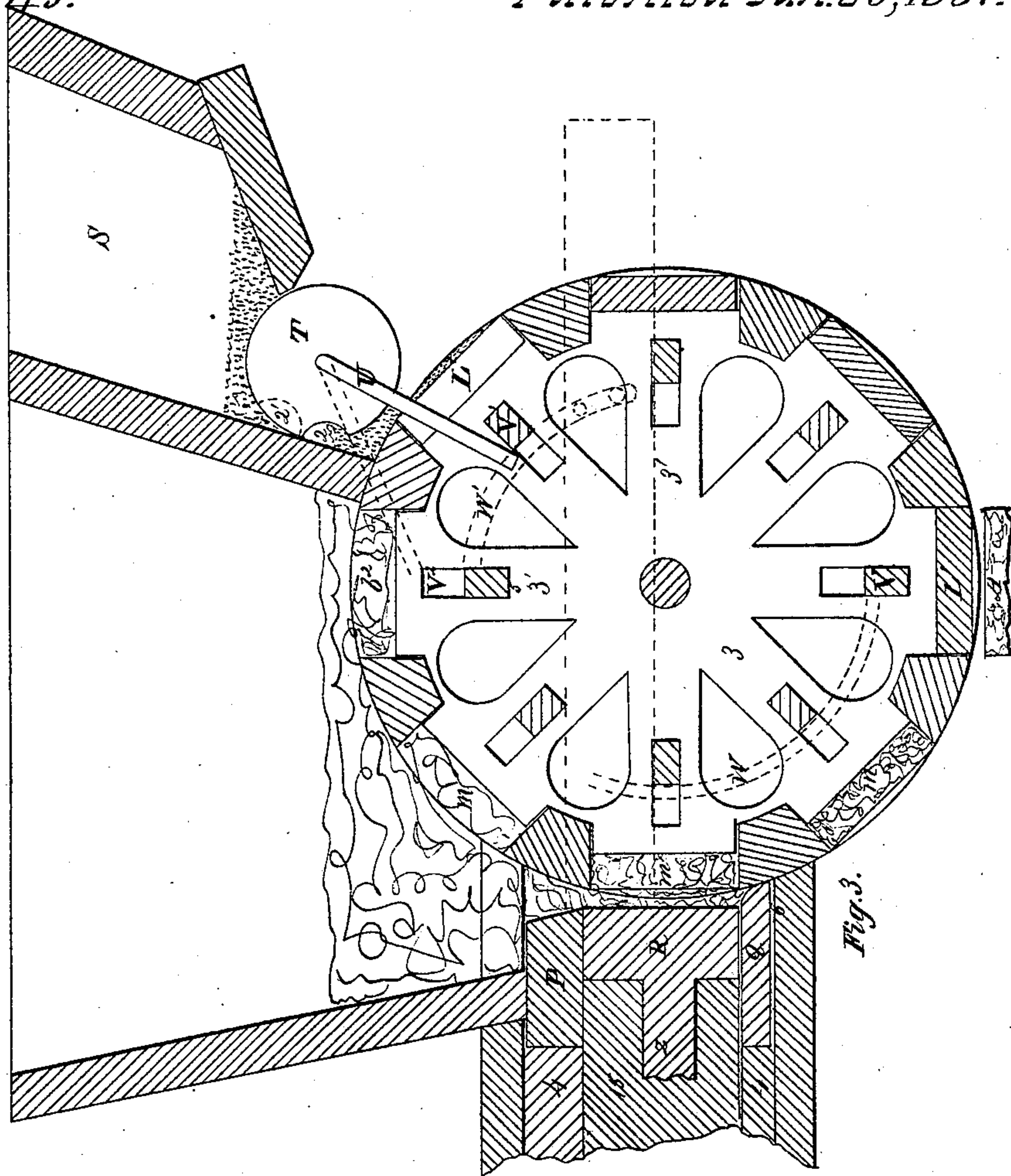


Fig. 3.

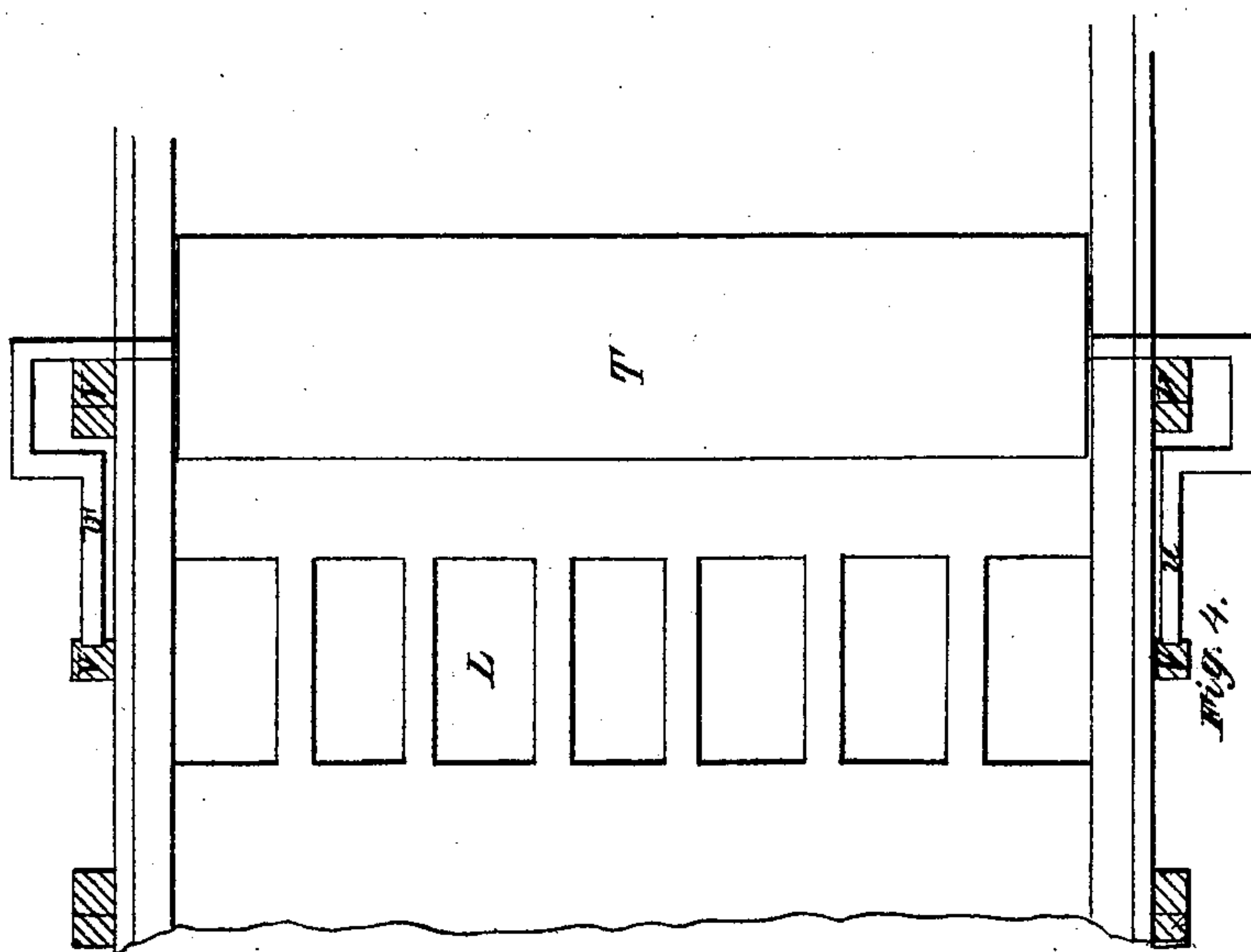


Fig. 4.

B. F. Nave,
Brick Machine.

2 Sheets. Sheet 1.

N^o 16,449.

Fig. 1. Patented Jan. 20, 1857.

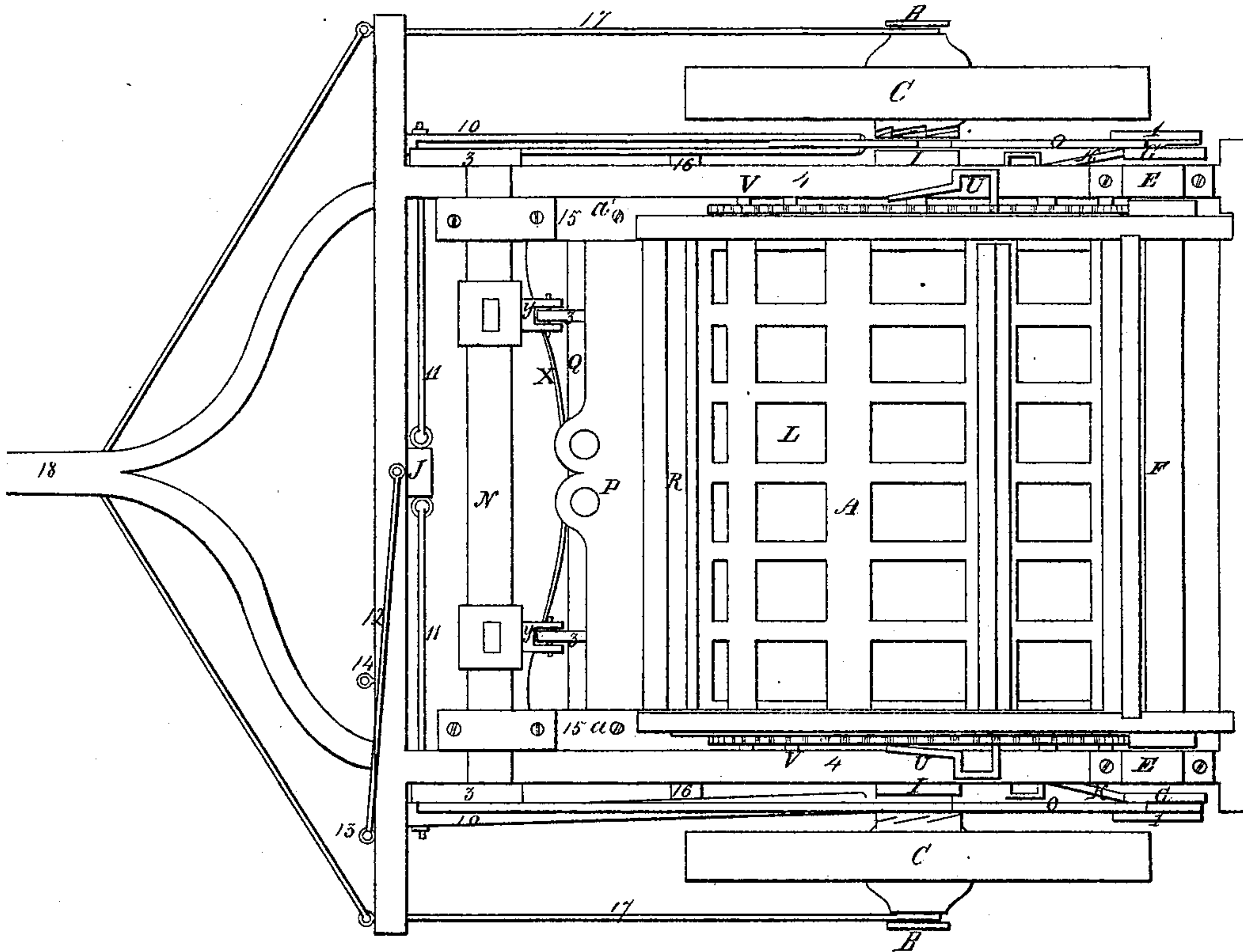
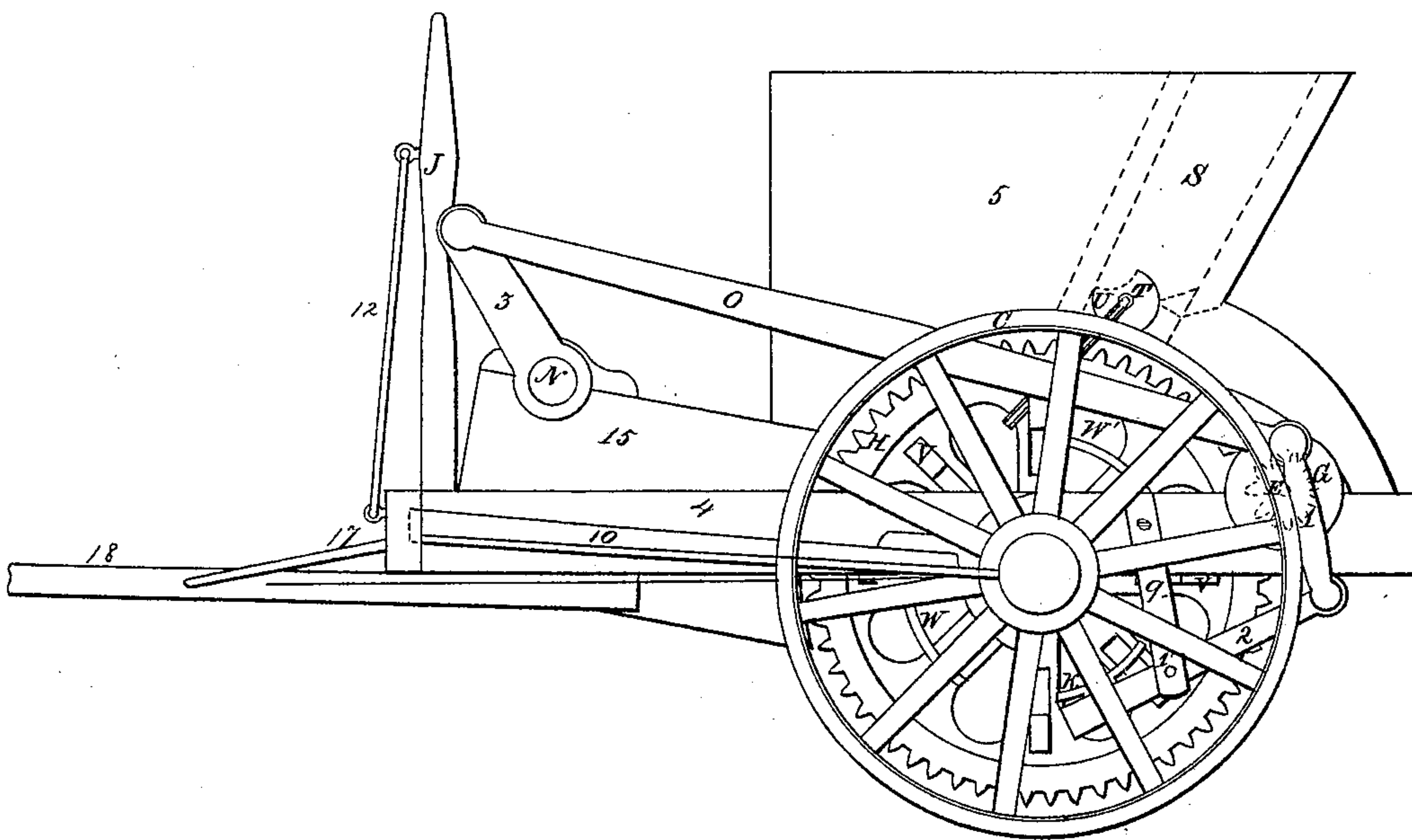


Fig. 2.



UNITED STATES PATENT OFFICE.

B. F. NAVE, OF ROANOKE, INDIANA.

BRICK-MACHINE.

Specification of Letters Patent No. 16,449, dated January 20, 1857.

To all whom it may concern:

Be it known that I, B. F. NAVE, of Roanoke, in the county of Huntington and State of Indiana, have invented a new and useful
5 Improvement in Brick-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.
10 The nature of my invention relates to the peculiar manner of operating the sand gage T.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction, and operation.

Figure 1, is a plan of the machine. Fig. 2, is an elevation of the same. Figs. 3, and 4, are designed more fully to represent the operation of the sand gage, T, the lettering
20 on each, referring to the same parts.

B, B, ends of the shaft or axle; 4, 4, the carriage frame; 5, 5, the hopper; S, the sand box; T, the sand gage; U, U', levers and journals to sand gage; 9, brackets,
25 which support the step, K, hung on the pin or journal, 1; 10, 10', the side levers, which work the clutch I; 11, 11', rods connecting the hand lever J with the clutch levers, for throwing it in gear with the wheels, which
30 operation is performed when molding and dropping the bricks, and out of gear when it is not dropping. The ends of the clutch levers rest in a groove cut in the back face of the front piece of the frame 4, 4. They
35 are hinged in their middle to the studs 16, 16', by a pin or journal; 12, is the hook, for keeping the hand lever J, in place when the clutch is in or out of gear, 13 when out of gear, and, 14, when in gear; 15, the blocks or side pieces to which the rock shaft, N, mud gage, P, presser R and facer Q are attached. The ends of the mud gage, and
40 ends of the facer, both work in grooves cut in the sides of the blocks, 15; the mud gage is secured by the set screws and the facer is regulated and kept in its place to work by the spring, X; the presser R works between the facer and mud gage resting on the facer and working freely between them, and re-
45 ceives its motion, from cog wheel, H, pinion E, crank G, pitman O, levers 3, rock shaft N, levers Y, and connecting rods Z.

W, W', are circular shields, which are attached to the inside of the sill pieces of

the frame 4, 4, by bolts or screws, and serve
55 to keep the cross bars V, V', in their proper place, until operated on by the step K, and also for keeping them in place after the brick is deposited on the ground, and the mold has passed the sand gage T. 60

As the machine is moved forward and the cross bar V, after having been depressed, to deposit the brick, by means of the step K, is kept extended by shield W', until it comes in contact with lever U, as shown at
65 V', Fig. 3, when the sand gage T, is turned up, so that the cup 2, occupies the position shown by 2', Fig. 3, at which time the cross bar in control with lever U, having arrived, at the position shown by V², Fig. 3 and no
70 longer being kept extended by shield W', is forced down by the clay above, to the bottom of the mortise 5. The cup 2 now being full of sand, the sand gage T, is turned down by the weight of lever U, back
75 to its original position and sands the bottoms of the molds as shown at L', Fig. 3; it then passes on and is filled with clay as shown at 6², and thence on to the presser R, and facer Q; the brick is now pressed and
80 faced, as shown at M, and ready to be deposited to the ground, by the step K, which completes the molding operation of the machine, and deposing the bricks on the
85 ground.

It will be seen by reference to Fig. 3, that by my mode of operating the sand gage T, the bottom of the molds are sanded while they are kept extended to the outer surface
90 of the molding wheel, by means of shield W', also that the sand is allowed first to fall on the front of the advancing mold, and as the mold passes under the hopper, the sand is brushed back smoothly over the bottom of the mold, and by which arrangement each
95 mold is sanded equally and alike. This is due to the peculiar construction of the sand gage T, it being of a cylindrical form, with a longitudinal groove, or cup extending its entire length, from which the sand is
100 dropped at intervals upon the bottoms of the molds. When it is desired to move to any other part of the yard, the hand lever J, is taken hold of, and the brace is re-
105 moved back into the eye 13, which relieves the clutch I, from the wheel, when the machine is relieved from molding or dropping the brick on the yard.

Having thus fully described my improved brick machine what I claim as new and desire to secure by Letters Patent, is—

The peculiar manner of operating the
5 sand gage, T, by means of bent levers U, U',
in combination with cross bars V, and
shields W', when the above parts are con-

structed and arranged for joint operation in
the manner and for the purposes set forth.

B. F. NAVE.

Witnesses:

J. H. MERRILL,
JOHN S. HOLLINGSHEAD.