C. CARNELL.

BRICK PRESS.

No. 7,017. Patented Jan. 15, 1850.

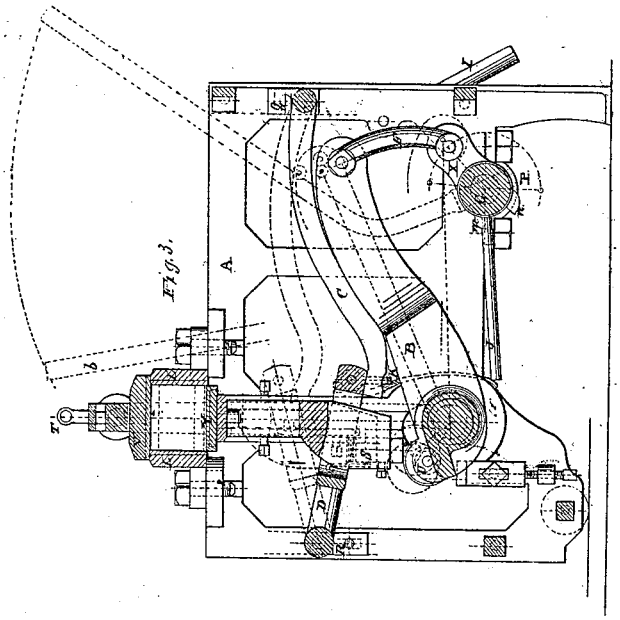

Fig. 3.

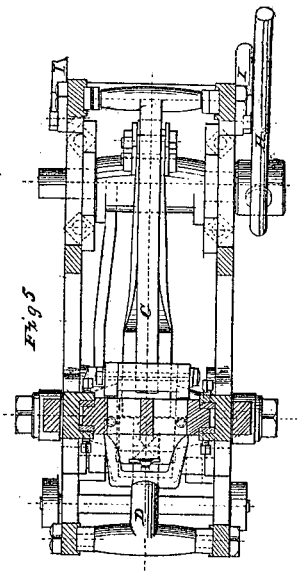

Fig. 5

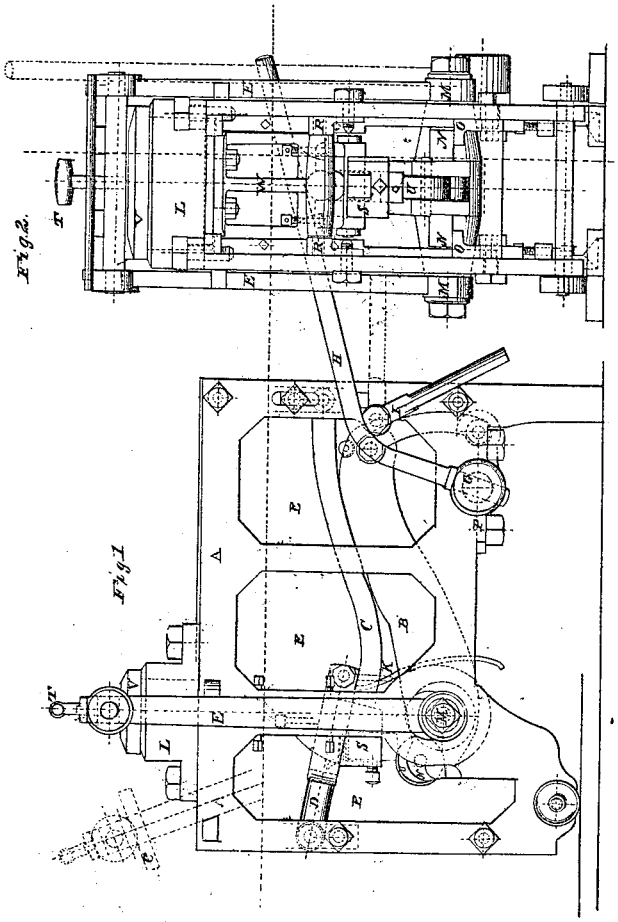

Fig. 2.

Fig. 1

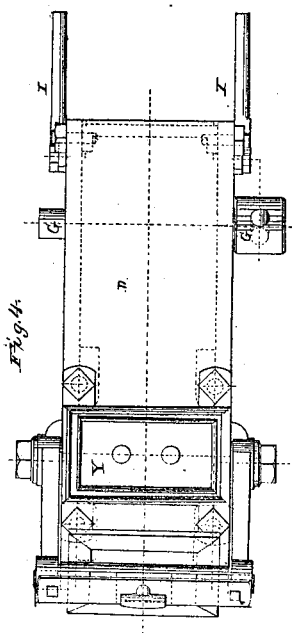

Fig. 4.

UNITED STATES PATENT OFFICE.

CHARLES CARNELL, OF KENSINGTON, PENNSYLVANIA.

BRICK-PRESS.

Specification of Letters Patent No. 7,017, dated January 15, 1850.

To all whom it may concern:

Be it known that I, CHARLES CARNELL, of Kensington, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Brick-Presses; and I hereby declare that the following is a full and exact description thereof.

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

In the accompanying drawings Figure 1 represents a side view of the press; Fig. 2, an end view; Fig. 3, a side section; Fig. 4, a top view; Fig. 5, a top section.

Like letters represent like parts in each figure.

A, frame; B, main lever; C and D, small lever. D passes around piston W and is connected to C. E, side straps passing from fulcrum M to cap V; F, side straps connecting arm X and lever B; G, shaft; H, handle lever; I, handles connected to the frame in such a manner that they can be raised for the purpose of moving the press and drop down out of the way when the press is in use; J, arm from shaft G bearing against spring K, which arrangement is for the purpose of holding the press in a position to allow the operator the use of both his hands in handling the brick; L, case or mold in which the bricks are pressed; M, fulcrum to main lever; N, lugs on main lever; O, lugs on frame which can be raised by means of screws as represented in Fig. 2; P, box to main shaft G having a projection *n*; *m*, projection on shaft G which coming in contact with *n* stops the machine in the right position; *q*, boxes to lever C; R, boxes to lever D which are raised or lowered to bring the piston to the right height; S, chamber in piston which is for the reception of thin plates of metal which are put in to bring the piston head to the desired position, for different thicknesses of bricks; T, handle to cap V; U, roller in end of lever B, on which stop ◇ rests; V, cap over mold; W, piston; X, arm to shaft G; Y, piston head; ◇, stop piece in piston, the upper end resting against the plates in chamber S and lower end on roller U. I fit a case made of boards in the spaces E in Fig. 1 and F in Fig. 2 and as represented by light lines D in Fig. 4. The pieces are fastened to the frame by buttons so as to be easily removed and are for the purpose of keeping the dirt off the machinery. M, screws in piston W resting on lever D, for the purpose of regulating the bearing and prevent the piston head from bearing against the side of mold L. The piston is so formed that it can be raised out of the top of the mold for the purpose of cleaning and is raised by placing a block between levers B and C.

Having shown the construction I will proceed to describe the operation of my improved press. By raising lever H to position indicated by dotted lines *a*, the lugs on lever B coming in contact with lugs O, on frame it raises the fulcrum M and consequently the cap V. I then move the cap off to C. I then place the brick to be pressed in case or mold L and bring the cap back over the mold. I then bear down on lever H which brings the fulcrum M to its bed and cap V down on case L and then by continuing the downward motion the roller U raises the piston and presses the brick then by raising lever H to dotted lines *a*, the cap is again free from case L and moved off to C and at the same time levers B and C coming in contact I continue the upward motion of lever H to dotted lines *b*, which raises the brick out of the case L. I then bring lever H back to *a* and the press is ready to receive the next brick. It will be observed that levers B and C first come in contact at about their centers, which gives the operator power to start the brick out of the case and as the bearing on the levers changes the motion of the piston is increased.

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

The arrangement of levers B and C by which arrangement the bearing of C is near the fulcrum of B, thereby giving the operator power to start the brick out of the mold and by which arrangement the motion of the piston is increased by the bearing of C on B.

CHARLES CARNELL.

Witnesses:

I. B. MURPHY,

P. A. FITZGERALD.