A. J. HAWS.

Brick Press and Former.

No. 168,743.

Patented Oct. 11, 1875.

Fig. 1

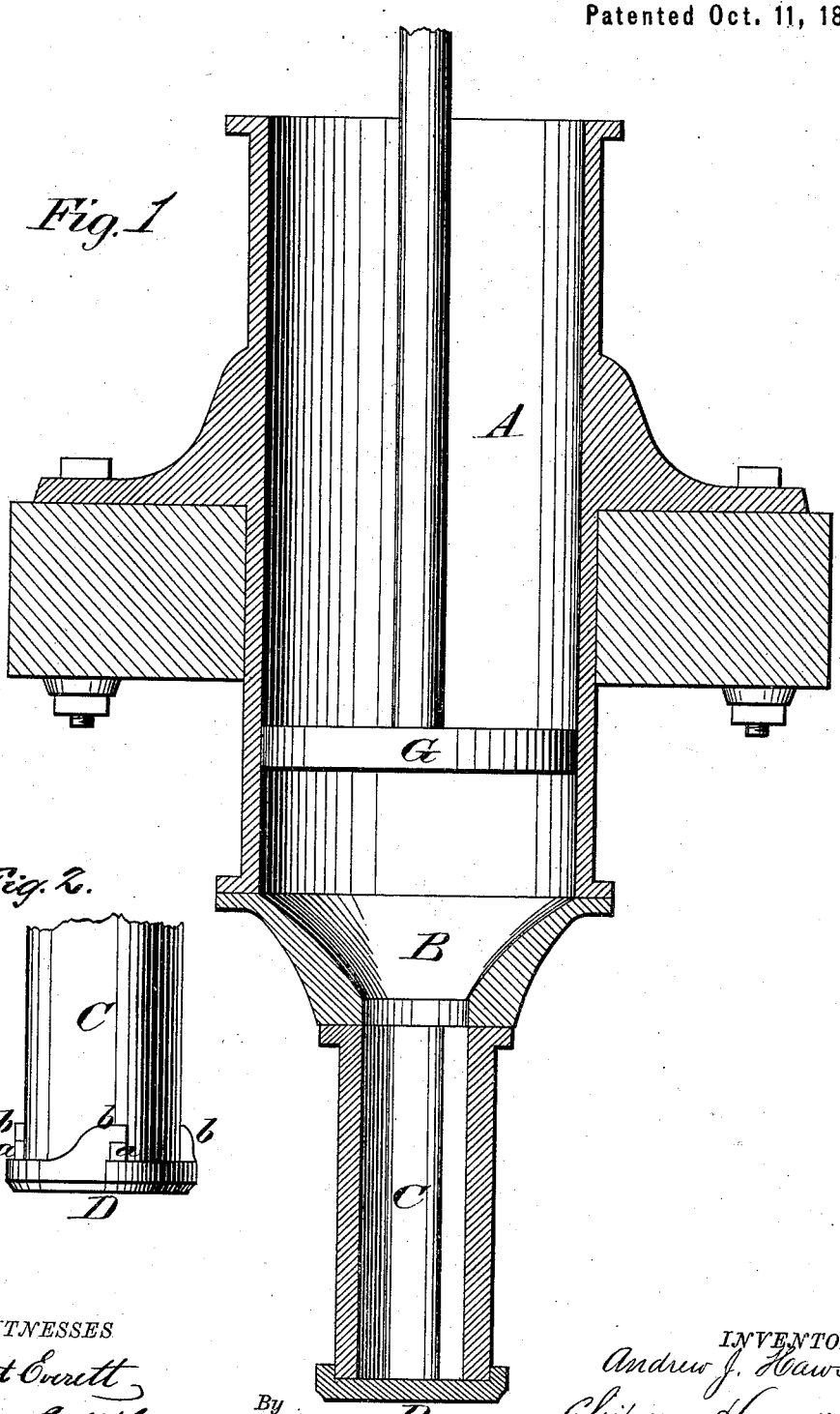

Fig. 2.

WITNESSES

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ANDREW J. HAWS, OF JOHNSTOWN, PENNSYLVANIA.

IMPROVEMENT IN BRICK PRESSES AND FORMERS.

Specification forming part of Letters Patent No. **168,743**, dated October 11, 1875; application filed August 14, 1875.

To all whom it may concern:

Be it known that I, ANDREW J. HAWS, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and valuable Improvement in Brick Presses and Formers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a vertical central section of my machine, and Fig. 2 is a detail view thereof.

This invention relates to machines for forming and pressing either fire-brick or common red brick in any shape or length, and out of very stiff worked clay.

The nature of my invention consists in a cylinder, in which works a plunger, in combination with a contracted mold, which is secured to the lower funnel-shaped end of said cylinder, and provided with a removable clutch-plate or stopper, as will be hereinafter explained.

In the annexed drawings, A designates a cylinder of any suitable length and diameter, which is made of metal, so that it will sustain considerable pressure. Inside of this cylinder is a piston, G, which may be worked by steam, hydraulic, or lever power. This cylinder is designed to stand in an upright position, and to be sustained in a strong frame. B designates a conical contractor, which is bolted to the lower end of the cylinder A, and which has secured to its lower end a former or mold, C, the configuration inside of which gives the required shape to the bricks produced in it. This former or mold may be of any desired length, and on its exterior surface, near its lower end, lugs *a* are formed, adapted to receive hooks *b*, which are formed on a removable stopper, D, which tightly closes the lower end of the mold. The mold C is fastened to the funnel B by means of bolts, which allow one mold to be detached and another substituted.

The cylinder A is filled with clay, and the stopper D secured in its place. A portion of the clay is forced, by the descent of the plunger or piston G, into the mold C, and after being properly condensed therein the stopper D is removed, and the pressure continued, which forces out the molded clay, to be cut off in proper lengths by means of a wire held in the hands of the attendant.

By these means the bricks can be formed and pressed very rapidly, and also made perfectly smooth and of any shape or length.

What I claim as new, and desire to secure by Letters Patent, is—

The cylinder A, having plunger G, in combination with the cone B, mold C, having lugs *a*, and removable stopper D, provided with hooks *b*, the whole constructed, arranged, and operated in the manner and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ANDREW J. HAWS.

Witnesses:

WALTER C. MASI,

B. H. MORSE.