

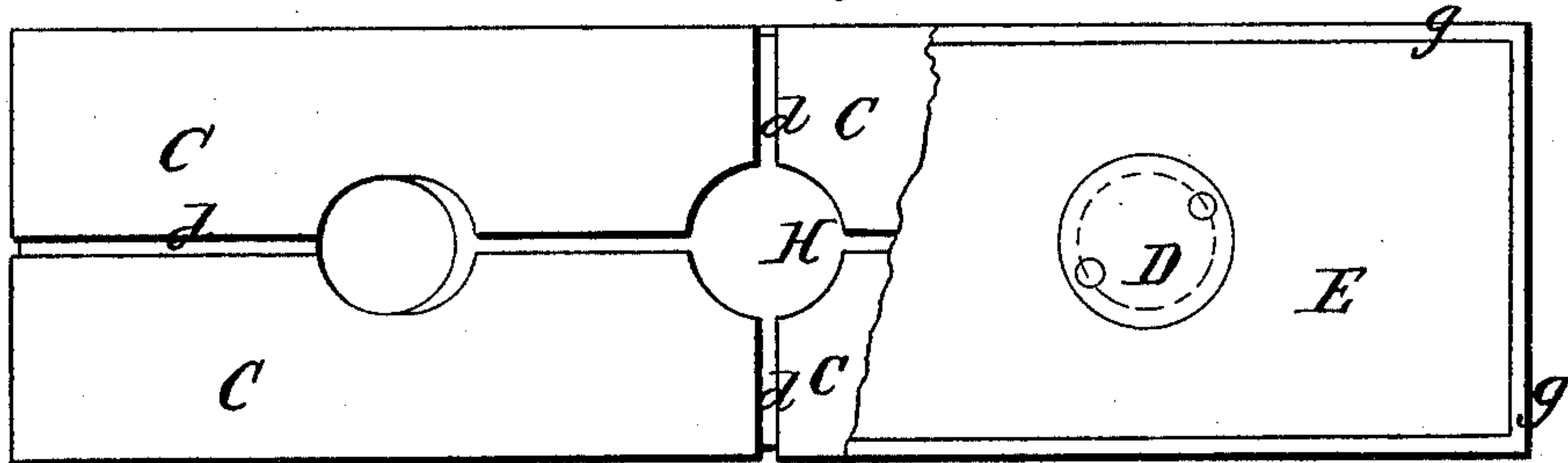
*L. Sylvester,*

*Brick Mould Piston.*

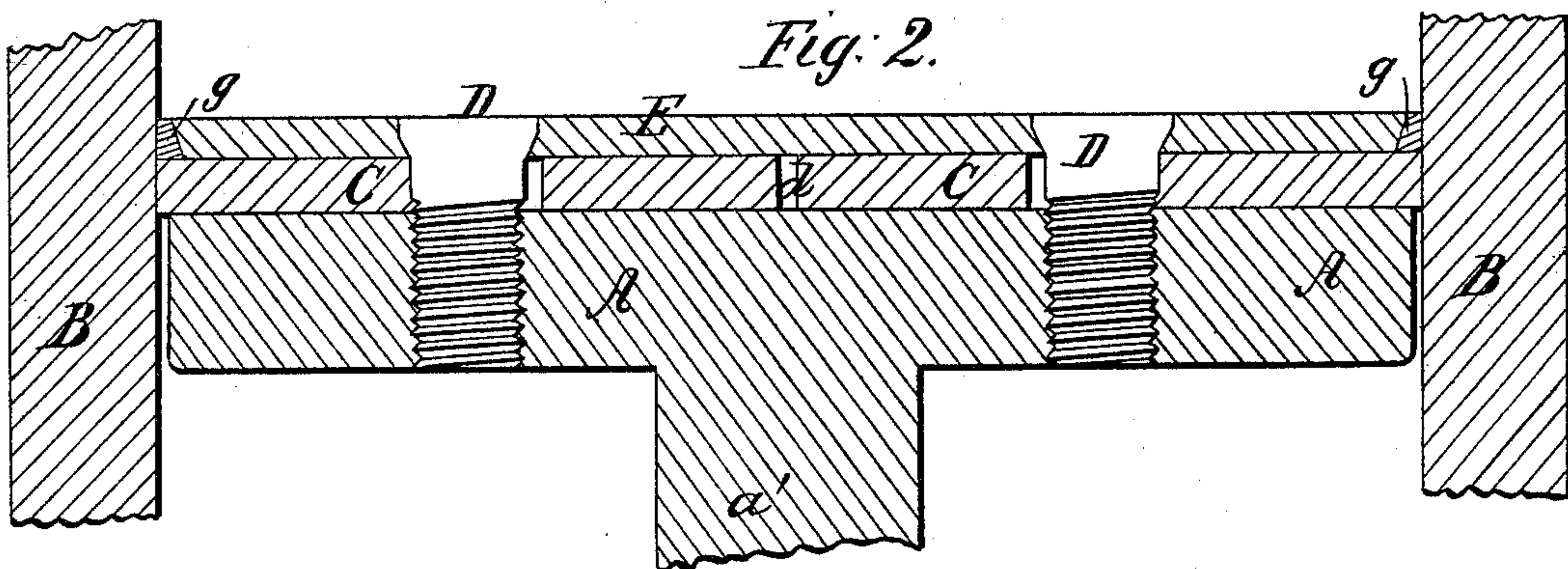
*N<sup>o</sup> 67,684.*

*Patented Aug. 13, 1867.*

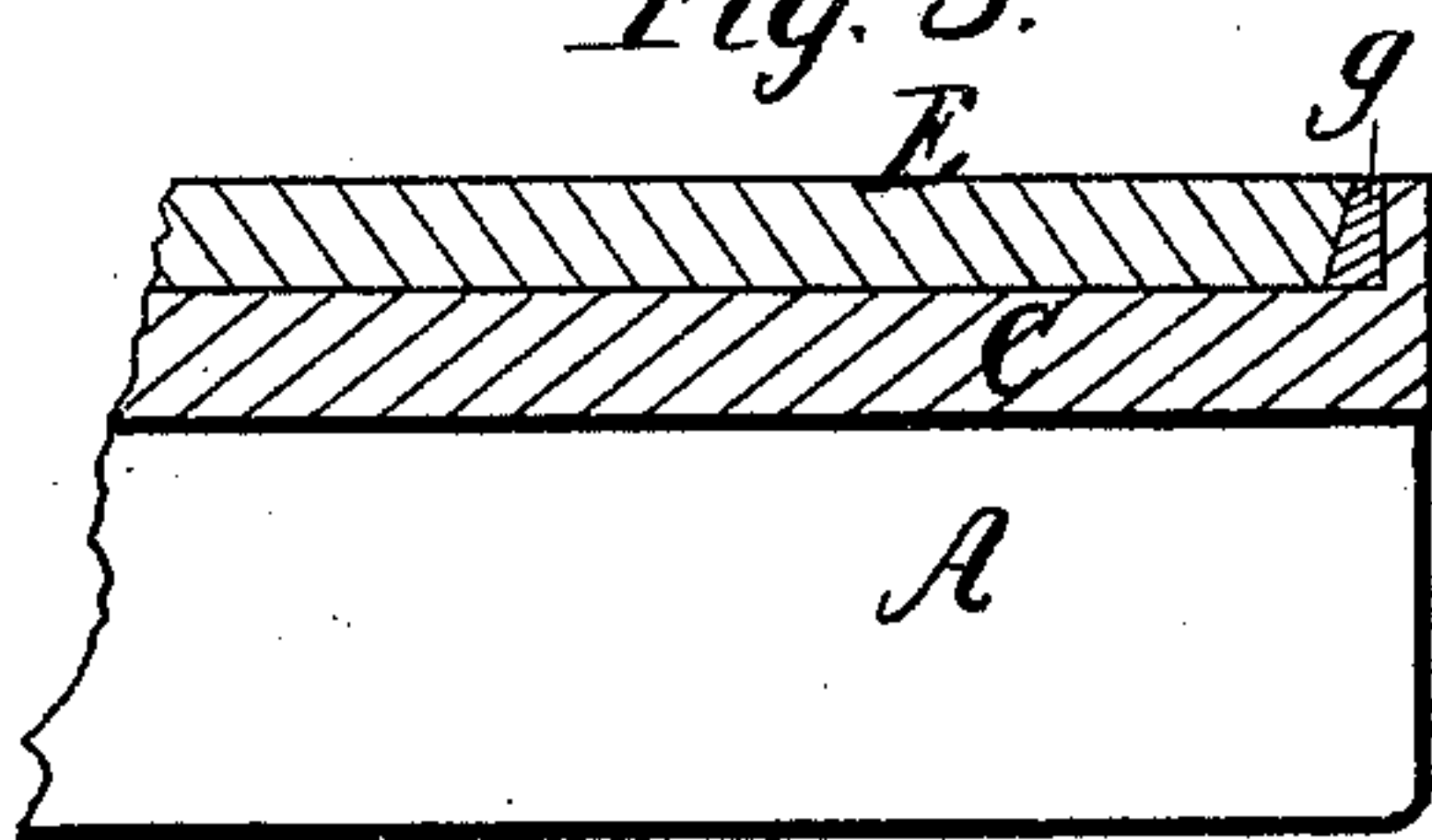
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses;*  
*Edw<sup>d</sup> Brown*

*Stanley C. Kipton.*

*Inventor;*

*Lewis Sylvester.*

# United States Patent Office.

LEWIS SYLVESTER, OF PHILADELPHIA, PENNSYLVANIA.

*Letters Patent No. 67,684, dated August 13, 1867.*

## IMPROVED BRICK-MOULD PISTON.

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, LEWIS SYLVESTER, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Piston for Brick-Moulds; and I do hereby declare the following is a full, clear, and exact description thereof, reference being had to the annexed drawings and to the letters of reference marked thereon.

My invention relates to the construction of the piston of a brick-mould which is used for pressing or delivering bricks in a brick machine; and the object of the invention is so to make the piston that it can be expanded laterally and endwise in order to take up the loss resulting from wear, and at the same time to give a smooth, even surface to the face of the piston which comes in contact with the brick.

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, broken so as to show part of the face of the piston, and part of the interior.

Figure 2 is a section longitudinally through the centre.

Figure 3 shows a modification of the same design.

A is the body of the piston, cast with a stem, *a'*, by which the pressure of the machine is communicated. B B are portions of the ends of the brick-mould. C C C C are four expanding plates, separated from each other, and leaving a joint or interstice, *d*, between. E is the follower, of wrought iron, secured to the body A by the screws D, which may be inserted either from the front or back of the piston. The follower E does not quite fill the mould, but a space, *g*, is left round the edge, into which I pour Babbitt metal, or some similar hard composition, easily melted. This recess is bevelled or dove-tailed, as shown at *g*, so as to retain the metal when once cast in. In fig. 3 is shown the expanding-plate C slightly modified, and turned up at right angles, so that the wear is taken altogether by the plate C, instead of by the plate and composition conjointly, as in fig. 2. The plates C and body A I make of cast iron. If the plates C are cast solid with the body A, the composition metal must then be relied upon for sustaining the wear and keeping the piston tight.

The operation of expanding my piston is this: The screws D are removed, and the follower E taken off; the plates C are then set out, so as to fill the mould, and a piece of hard wood driven into the central opening H. The follower is now screwed down and the composition metal poured round so as to fill the space *g*. Some of it will run down into the spaces *d*, thus effectually preventing the plates C coming together. The piston is now raised above the mould, and the filling *g* filed down so as to present an even surface with the follower. This expanding of the piston may be performed just as easily in a false mould made especially for this purpose. Should the corners of plates C become worn, the edges of the plates can then be filed away till the corners are brought up sharp again.

What I claim as my invention, and desire to secure by Letters Patent, is this:

1. I claim the expanding-plates C, constructed and operating substantially as described.
2. I claim a solid piston, having a recess, *g*, filled with composition metal, cast in, for making a close-fitting piston, substantially in the manner described.
3. I claim the follower E, surrounded by soft metal *g*, and secured to the body A, in combination with or without the plates C, as described

LEWIS SYLVESTER.

Witnesses:

EDWD. BROWN,

STANLEY C. HYLTON.