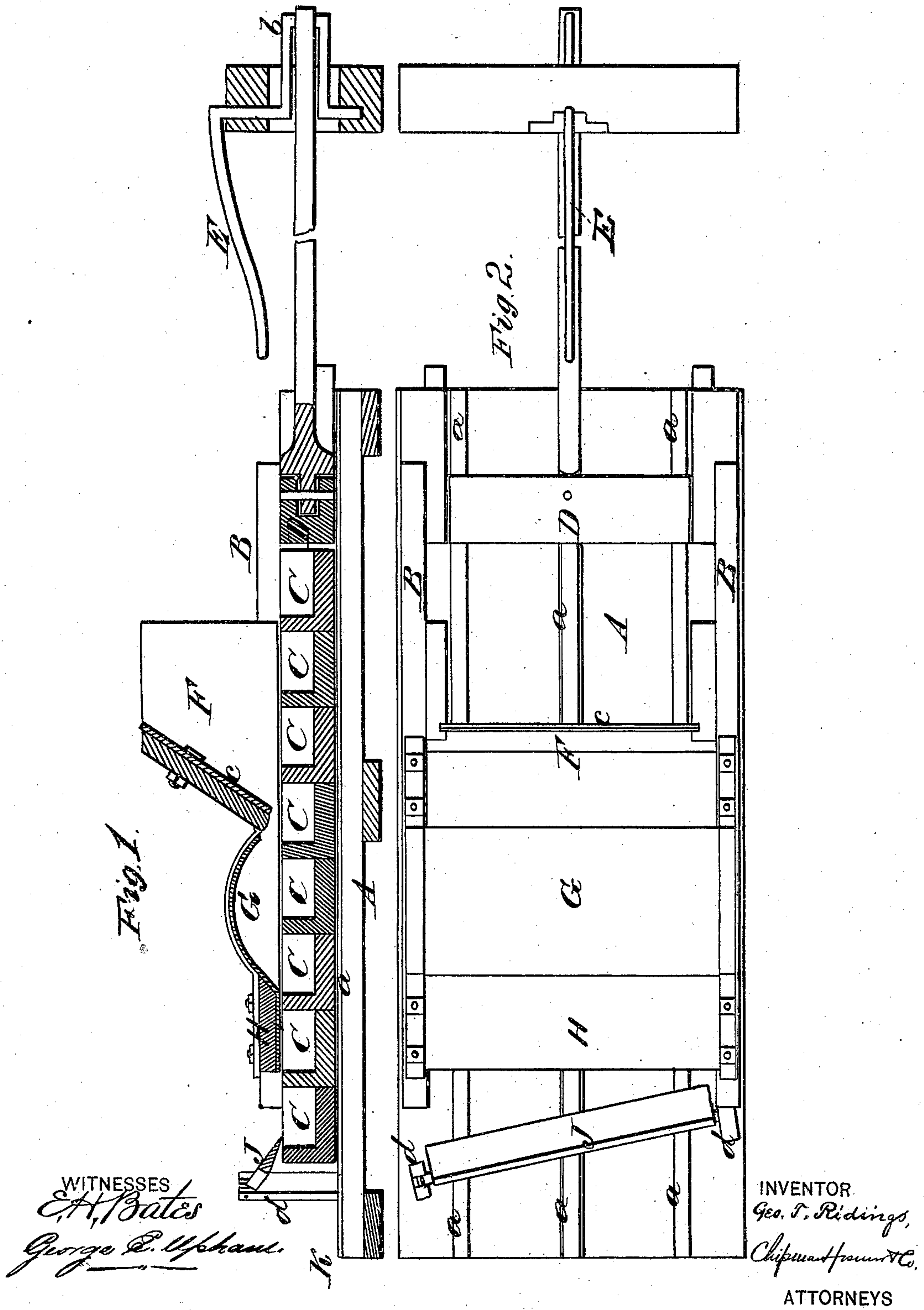


G. T. RIDINGS.  
BRICK-MACHINE.

No. 173,670.

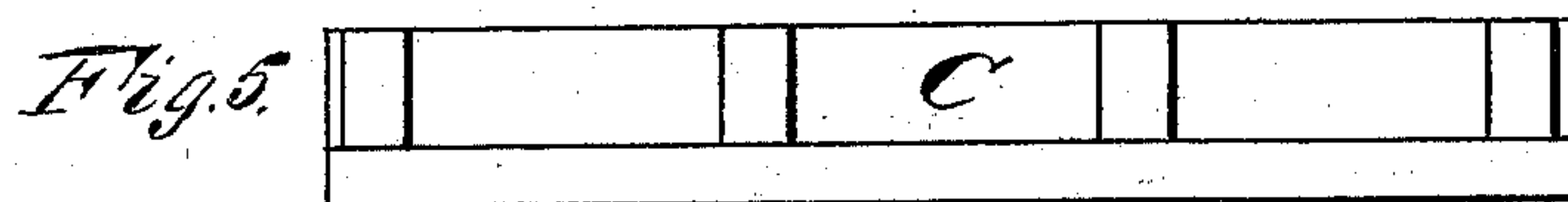
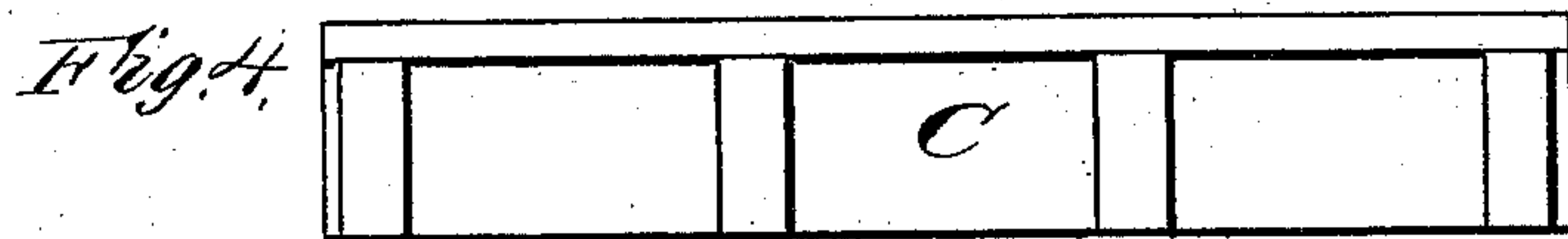
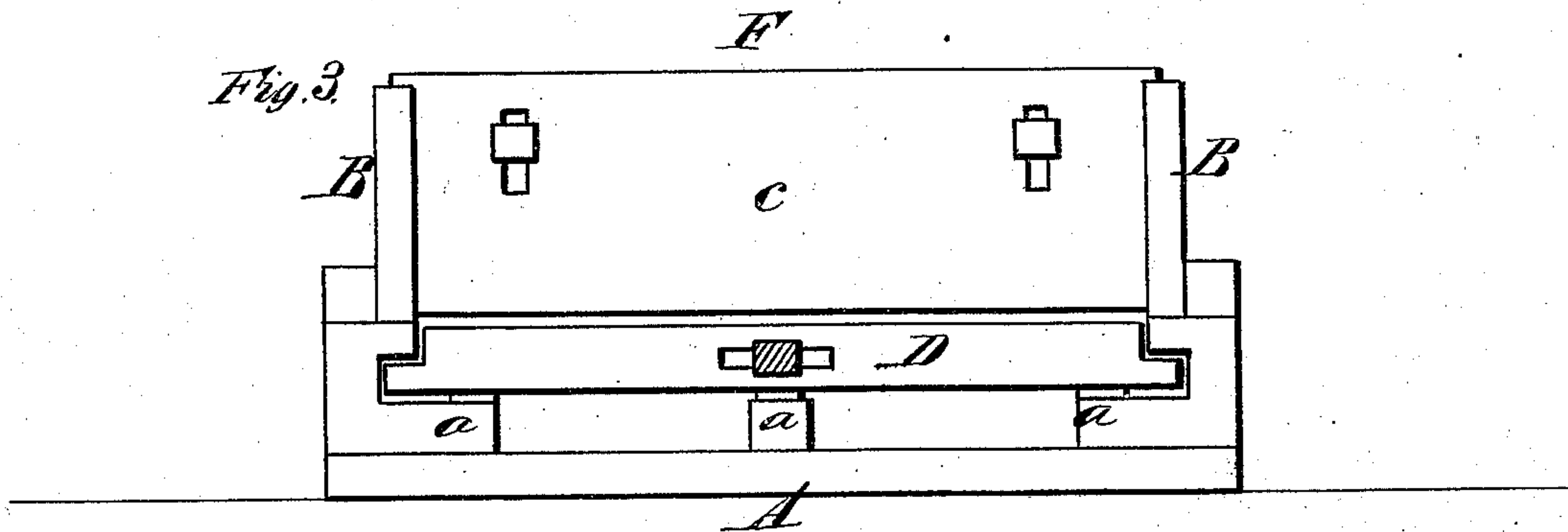
Patented Feb. 15, 1876.



G. T. RIDINGS.  
BRICK-MACHINE.

No. 173,670.

Patented Feb. 15, 1876.



WITNESSES  
*E. H. Bates*  
*George C. Upshaw,*

INVENTOR  
*Geo. T. Ridings,*  
*Chipman House & Co.,*



# UNITED STATES PATENT OFFICE.

GEORGE T. RIDINGS, OF MONROE CITY, MISSOURI, ASSIGNOR OF ONE-HALF HIS RIGHT TO BENJAMIN C. BISHOP, OF SAME PLACE.

## IMPROVEMENT IN BRICK-MACHINES.

Specification forming part of Letters Patent No. **173,670**, dated February 15, 1876; application filed June 19, 1875.

*To all whom it may concern:*

Be it known that I, GEORGE T. RIDINGS, of Monroe City, in the county of Monroe and State of Missouri, have invented a new and valuable Improvement in Brick-Making; 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 longitudinal vertical sectional view of my device, and Fig. 2 is a transverse vertical sectional view of the same; Figs. 4, 5, and 6 are detailed views.

This invention has relation to machines which are designed for making bricks; and the nature of my invention consists in the combination, with a guiding-frame, a hopper, and an arched receptacle for clay, of a reciprocating follower for pressing forward the mold-boxes, as will be hereinafter explained.

The invention also consists in the combination of a scraper, a pressure-bar, and an arched clay-receptacle with an open hopper; and a reciprocating follower, as will be hereinafter explained.

In the annexed drawings, A designates the foundation or bed of my improved brick-molding machine, and B B are two parallel guides of suitable height and length, and arranged at such a distance apart as to receive between them three united mold-boxes, indicated by the letter C. Between these guides B B are three rails, *a a a*, on which the mold-boxes, and also the follower D, slide. These rails *a* afford bearings for the ends, and also the middle, of the mold-boxes and follower, and they are preferably faced with metal, to give them durability. The follower D receives a rectilinear reciprocating motion from a crank, *b*, to which a sweep, E, is applied, by which means the mold-boxes C are moved beneath a hopper, F, an arched clay-

receptacle, G, and a pressure-plate, H, and discharged from the machine. The hopper F is formed of three sides only, the rear side being omitted for the purpose of preventing the clay from "bridging," or failing to feed properly. The front wall of the hopper is inclined, as shown in Fig. 1, and its lower end is lighter than the plane of the mold-boxes passed beneath it. To this front wall a plate or valve, *c*, is applied, which is adjustable up and down for the purpose of regulating the quantity of clay which enters the arched receptacle G. The pressure-plate H is rigidly secured to the guides B B, and lies closely upon the mold-boxes, which are forced beneath it.

After the mold-boxes leave the pressure-plate H, filled with clay, they pass beneath a blade J, which is pivoted in standards *d*, and which is arranged diagonally across the machine. This blade strikes off the superfluity of clay from the boxes and leaves the surfaces of the bricks smooth. The clay which is scraped from the boxes is discharged from one end of the blade, owing to its diagonal position.

It will be observed, by reference to Figs. 1, 4, 5, and 6, that the rear walls of the mold-boxes C are omitted. This is done for the purpose of facilitating the removal of the molded bricks therefrom, and also diminishing their weight. When these boxes are together in the machine the front wall of one box forms the rear wall of the adjacent box, as is shown in Fig. 1.

The operation of the machine is as follows: Motion is imparted to the follower D, and a number of molds, C, are arranged in front of it. These molds are moved by the follower beneath the hopper F, and there filled with clay. The boxes thus filled are moved into the arched receptacle G, which, when it is filled with clay, will cause the boxes to be evenly filled and pressed. The boxes are then forced beneath the plate H, and beneath the scraper J, and are finally delivered upon a table, K, from which they are removed and

emptied. The empty mold-boxes are adjusted in front of the hopper, to be filled again, as above described.

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

1. The arched clay-receptacle G combined with the hopper F and pressure-plate H in a machine, substantially as described.

2. In a brick-machine a guiding-frame,

hopper F, and reciprocating follower D, in combination with the arched clay-receptacle G, pressure-plate H, and diagonal scraper J, substantially, as described.

GEORGE T. RIDINGS.

Witnesses:

R. B. BRISTOW,  
S. H. HALLOCK.