(No Model.)

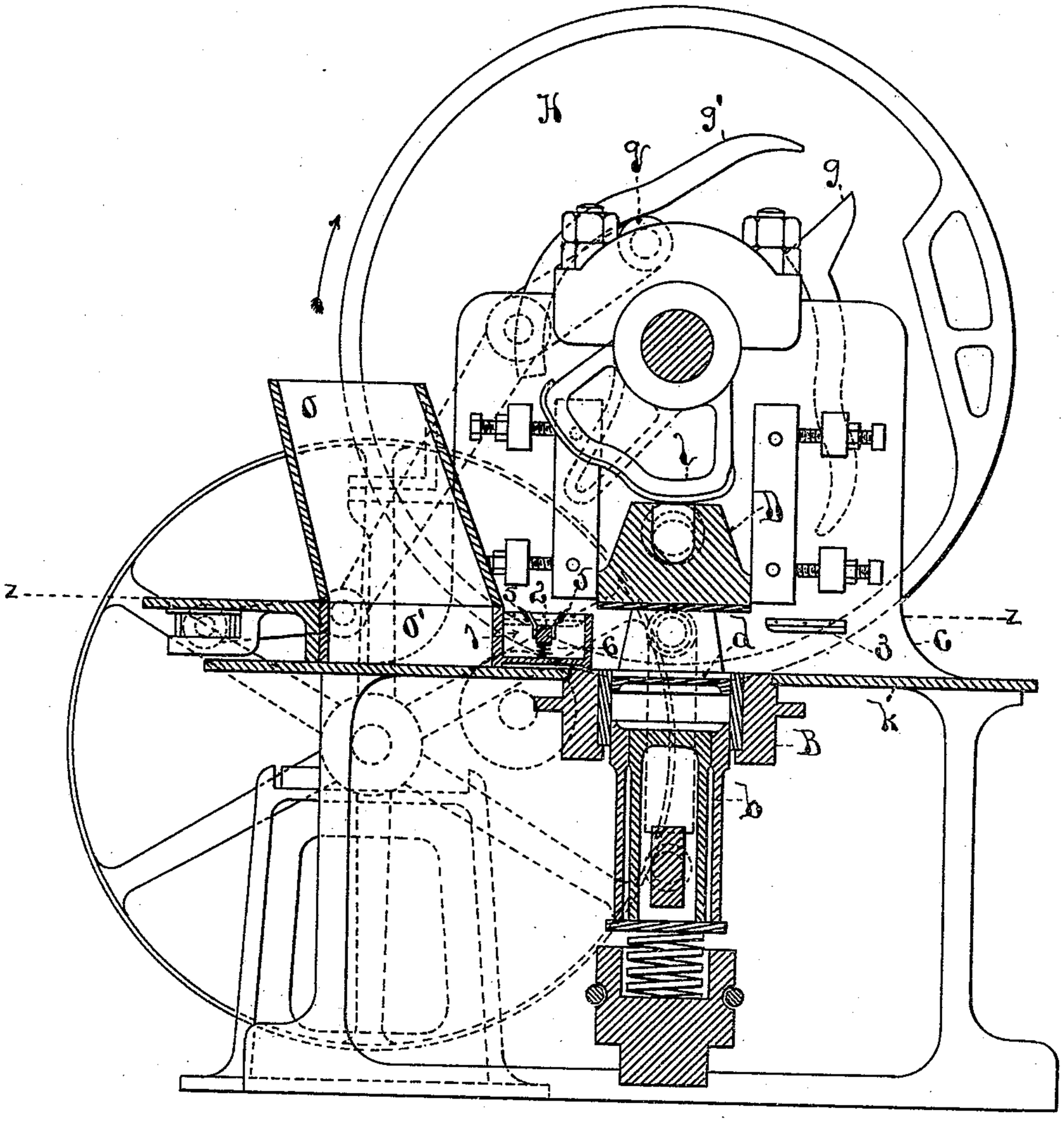
2 Sheets—Sheet 1.

D. H. RICE.

BRICK MACHINE.

No. 500,510. Patented June 27, 1893.

Fig. 1



Witnesses
Wm. S. Brown
A. P. Ockington.

Inventor
David Hall Rice

(No Model.)

2 Sheets—Sheet 2.

D. H. RICE.

BRICK MACHINE.

No. 500,510.

Patented June 27, 1893.

Fig. 4

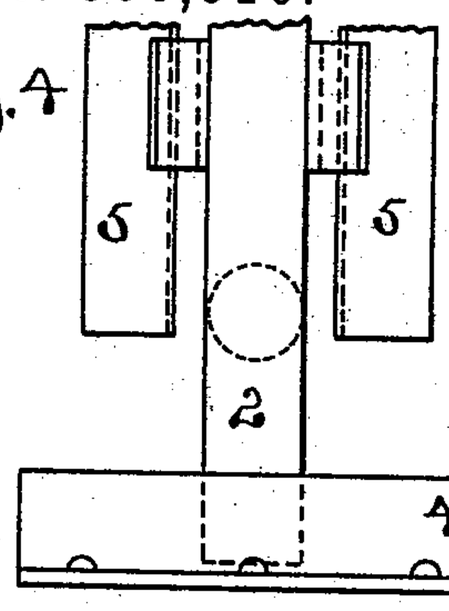


Fig. 3

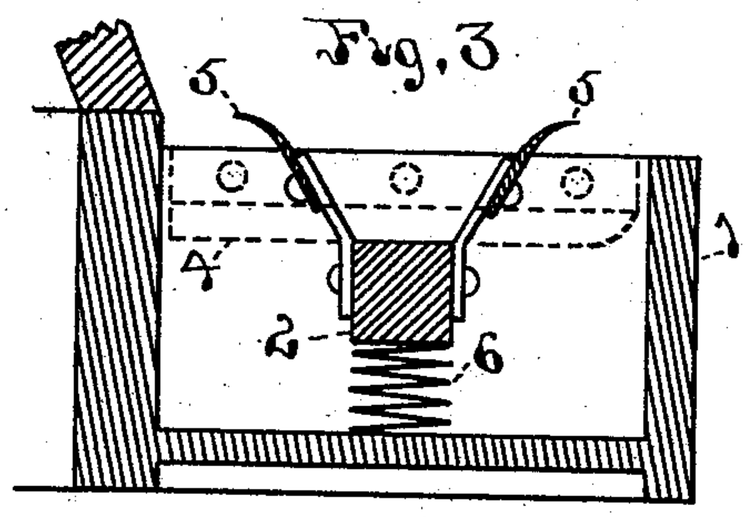


Fig. 5

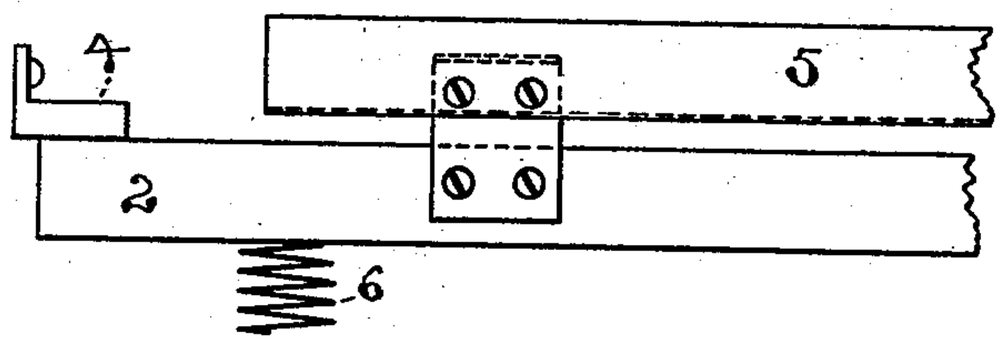
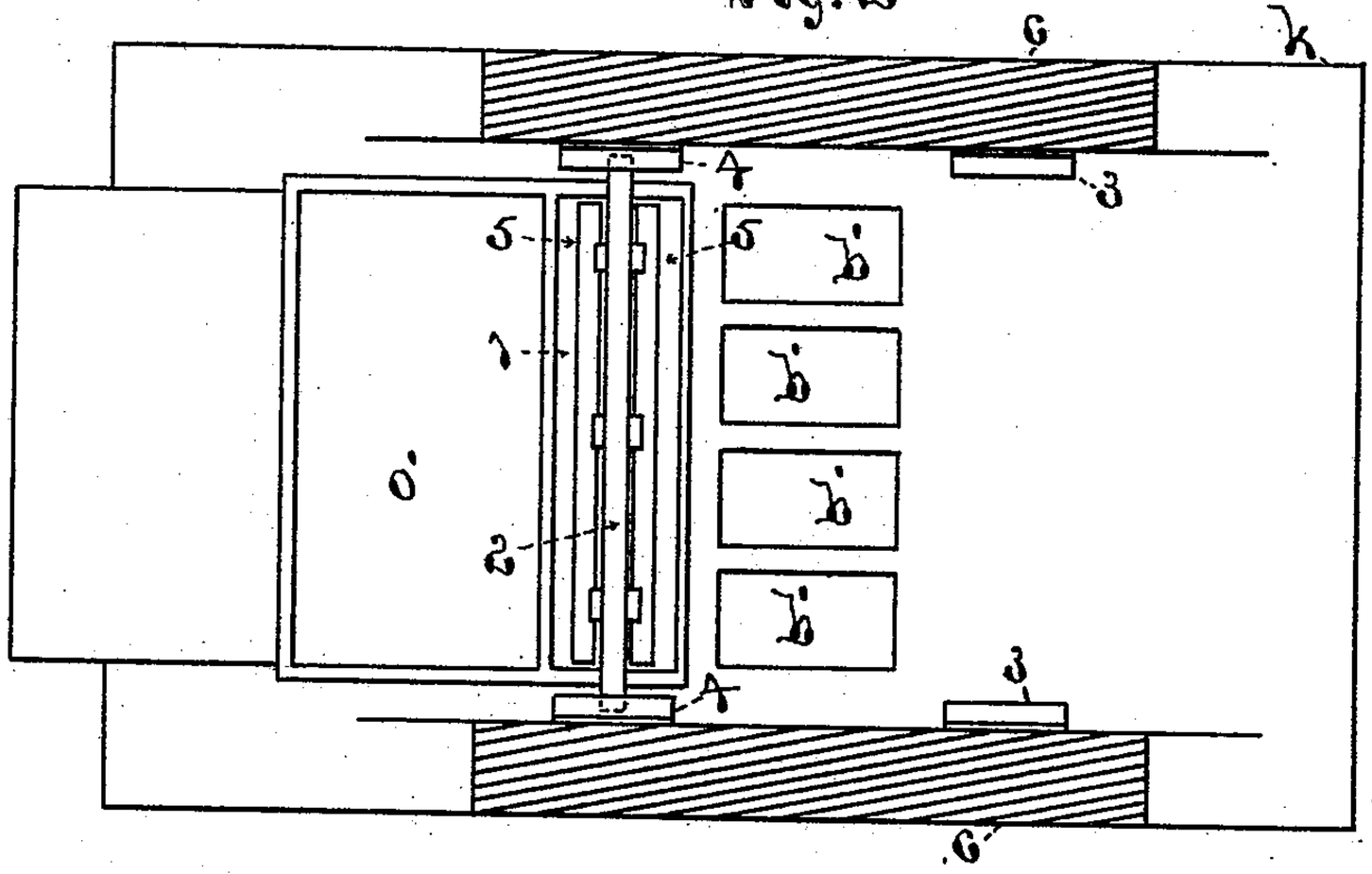


Fig. 2



Witnesses
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UNITED STATES PATENT OFFICE.

DAVID HALL RICE, OF BROOKLINE, ASSIGNOR TO THE SOMERSET & JOHNSONBURG MANUFACTURING COMPANY, OF SOMERSET, MASSACHUSETTS.

BRICK-MACHINE.

SPECIFICATION forming part of Letters Patent No. 500,510, dated June 27, 1893.

Application filed September 11, 1891. Serial No. 405,373. (No model.)

To all whom it may concern:

Be it known that I, DAVID HALL RICE, of Brookline, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Brick-Machines, of which the following is a specification.

My improvement relates to machines for pressing or molding clay into the form of bricks, and it consists in certain new and useful improvements in the construction and combination of the several parts of the same substantially as hereinafter described and claimed.

In the drawings: Figure 1 is a longitudinal vertical section through a machine for pressing clay into the form of bricks, having my improvement attached thereto. Fig. 2 is a top plan view, partly in section, of the platen and feed hopper of the machine with my improvement attached thereto, the upper parts of the machine being removed to show the invention more clearly. Fig. 3 is a longitudinal vertical section through the scraper and feed hopper, shown in Fig. 2, enlarged. Fig. 4 is a top plan view of a portion of the same. Fig. 5 is a front elevation of a portion of the scraper detached from its box.

This invention relates to machines for scraping or cleaning the upper platen or plunger of the machine, when it becomes fouled from the clay adhering to it, and it is represented in Fig. 1 as applied to the brick pressing machine shown and described in the patent to William Johnson, No. 415,343, granted November 19, 1889. Fig. 1 represents a longitudinal vertical section through the brick machine substantially the same as Fig. 1 of the said Johnson patent, except that the feed hopper is moved slightly outward from the platen, to allow of the attachment of my improvement, and the general construction and operation of the machine will be readily understood by reference to the said Johnson patent taken in connection with this drawing.

D is the upper platen or plunger.

H is the cam wheel on one side of the machine, which raises the plunger.

g, *g'*, are the cams which lift the plunger under its ends.

l is the double pressing cam to compress the bricks into the mold bed.

o is the hopper to receive the clay.

o' is the reciprocating charger, which conveys the clay from the hopper to the molds in the machine bed by the agency of the lever, *q*, as described in the Johnson patent.

d is the face plate of the upper plunger, which forms the upper side of the brick.

b is the lower plunger, which is raised at the proper time, as described in the Johnson machine, to eject the pressed brick from the mold.

B is the mold frame set in the bed, *k*, of the machine and *b'*, *b'*, [Fig. 2] are the molds, of the shape of the bricks, the machine being constructed to press four at once as described in the Johnson patent.

c, *c*, are the side frame plates of the machine, which support the working parts.

All the other parts of the machine are substantially as described in said Johnson patent and need not be further described here to be readily understood.

On the front side of the charger, *o'*, is attached the box, 1, of the same length as the charger transversely of the machine, and forming an extension forward of it, the box being opened at the top. The front side of this box serves to push the brick away when the charger is moved forward over the mold. In this box is mounted the bar, 2, which extends through it transversely of the machine bed and works up and down in slots, cut in the ends of the box vertically to receive it. This bar has its ends projecting beyond the box, so as to engage under the bars 3, 3, and 4, 4, which are attached to the inner faces of the side plates of the machine on each side of the platen, and form guide pieces to control the movements of the bar. Attached to the bar are the scraper blades 5, 5, which are so arranged as to have their upper edges traverse in a plane slightly below that of the upper platen, when the latter is raised and the bar is traversing under the guide pieces 3, 4, which it does by the movement of the charger to and fro. The bar 2 is held up by one or more springs 6, which press it upward against the guide pieces. The scraper blades are attached to the bar by arms, which leave spaces between the bar and the blades for the escape of clay downward into the box 1, if any drops behind

the blades. When the platen is raised the guide strips 3, 4, are in such relation to it that as the leading scraper blade, 5, passes under the platen the bar is released from its guide pieces and the full force of the spring, 6, is exerted to press the scraper blade against the lower surface of the platen, and after the leading scraper blade has passed beyond the platen the guide pieces on the opposite side again pass over the ends of the bar and control it. The ends of the guide pieces are rounded slightly to facilitate this effect. On the return movement of the charger the other scraper blade, 5, becomes the leading one and the guide pieces release the bar, so as to allow it to scrape the lower face of the platen in the same manner. If the lower face of the platen becomes fouled by clay adhering to it, the scaper blades thus clean it off at each movement of the charger forward and backward, the clay removed falling into the box 1, which is represented as closed at the bottom for that purpose. If preferred, however, the box may be left open at the bottom on each side of the spring 6, to allow the clay to escape. The scrapers thus keep the bottom face of the platen clean and avoid all necessity of stopping the machine to clean it off by hand.

What I claim as new and of my invention is—

1. In a machine for pressing bricks from soft clay, the combination of the reciprocating charger, *o'*, the mold, the upper platen face, *d*, and one or more scraper blades 5, 5, of unyielding material mounted upon yielding supports arranged to traverse with the charger and to clean the lower face of the platen with a yielding pressure against it as they move past it, substantially as described.

2. The combination of the mold, the upper platen, the reciprocating charger, *o'*, the box, 1, attached thereto, the bar, 2, provided with one or more scraper blades, the spring, 6, and the guide pieces 3, 4, substantially as described.

DAVID HALL RICE.

Witnesses:
C. J. TOLAND,
N. P. OCKINGTON.