

T. H. Rodgers.
Brick Machine.

N^o 53, 879.

Patented Apr. 10, 1866.

Fig:1.

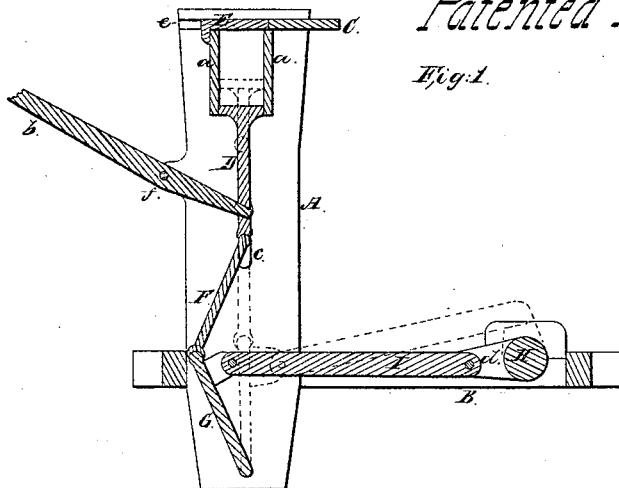


Fig: 2.

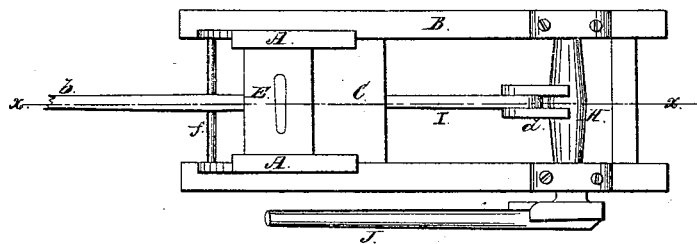
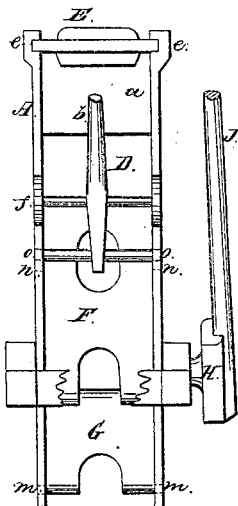


Fig:3.



Witnesses:

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Inventor:

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By his attorney,
W. C. Dodge

UNITED STATES PATENT OFFICE.

T. H. RODGERS, OF CHICAGO, ILLINOIS.

IMPROVED BRICK-MACHINE.

Specification forming part of Letters Patent No. 53,879, dated April 10, 1866.

To all whom it may concern:

Be it known that I, T. H. RODGERS, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Brick-Presses; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use the invention, I will proceed to describe it.

Figure 1 is a vertical section taken on the line *xx* of Fig. 2. Fig. 2 is a top-plan view, and Fig. 3 is a rear-end view.

My invention consists in a novel arrangement of levers and frame whereby I am enabled to produce a very cheap, strong, and compact press for making brick.

A represents a cast-iron frame, consisting of two upright flat pieces, connected near their upper end by two cross-pieces, *a a*, as shown in Fig. 1, and secured at the bottom to a wooden frame, B, of the form shown in Fig. 2. The side pieces, A, are placed at such a distance from each other that the space between them shall be equal to the length of the brick to be made, while the space between the cross-pieces *a* is equal to the required width of the brick, these parts, when thus arranged, constituting the mold in which the brick is pressed. In constructing these parts I prefer to cast them in one piece as the simplest and cheapest plan, though it is obvious that they may be cast separately and bolted together, if preferred.

D represents a metallic bar, having a plunger or piston-head of proper size and form to fit into the lower portion of the mold, as shown in Fig. —, its lower end being provided with a projection, *o*, on each side, as shown in dotted lines in Fig. 3, which projections fit into vertical slots *c*, made centrally in each of the pieces A of the main frame.

F represents another similar bar, having guide pieces or projections *n* at its upper end, also resting in the vertical slots *c*, its upper end engaging underneath the lower end of the plunger D, while its opposite end is jointed to another similar bar, G, the lower end of

which is secured, by journals *m*, to the lower side pieces, A, of the main frame. These two bars F and G thus constitute an elbow or knuckle-joint lever, and are connected, as shown in Fig. 1, by a rod, I, and arm *d*, to a shaft, H, secured to the opposite end of the frame B, this shaft H being operated by a lever, J. (Shown clearly in Figs. 2 and 3.)

Another lever, *b*, is journaled at *f'*, and has its inner end resting in a notch under the end of the plunger D, and as this plunger is not permanently connected to the rod or bar F, but rests loosely upon it, the plunger D can be elevated by depressing the lever *b* independently of the other parts.

E represents a sliding cover fitted to move in the grooves *e*, so that it can be shoved inward and cover the mold, as shown in Fig. 1.

C represents a platform or hopper for receiving the mortar or clay preparatory to filling the mold.

This press is more especially intended for making what are known as "gravel-brick," but may also be used for pressing clay brick.

Its operation is as follows: The cover E is drawn back and the mold filled with the material, the lever J being raised, whereby the plunger D is dropped to its lowest position. The cover is then shoved forward so as to close the top of the mold, the lever J being depressed, which elevates the plunger D, thereby compressing the material into a brick of the proper size. The cover is then withdrawn, and the lever *b* is used to throw the brick out of the mold by elevating the plunger D even with the top thereof. The brick being removed, the mold is again filled and the process repeated.

It will thus be seen that while, by the arrangement of the operating parts, I am enabled to bring a very great pressure upon the material, and thus make a very solid brick, I at the same time produce a very simple, compact, and cheap press, it being specially adapted to the wants of people in the rural districts residing at a distance from the places where bricks are usually manufactured. By this means a single individual, or two or three in a neighborhood, are enabled to own a press and manufacture their own brick, as needed.

Having thus described my invention, what I claim is—

1. The main frame A, provided with the mold, in combination with the plunger D and levers F and G, arranged and operating as and for the purpose set forth.

2. In combination with the above-described parts, the shaft H, provided with the lever J and connecting-rod I, for operating the press, as described.

3. In combination with the press constructed as described, the lever *b*, for elevating the plunger D and removing the brick, as shown and described.

T. H. RODGERS.

Witnesses:

W. C. DODGE,
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