

*A. Morgan,*

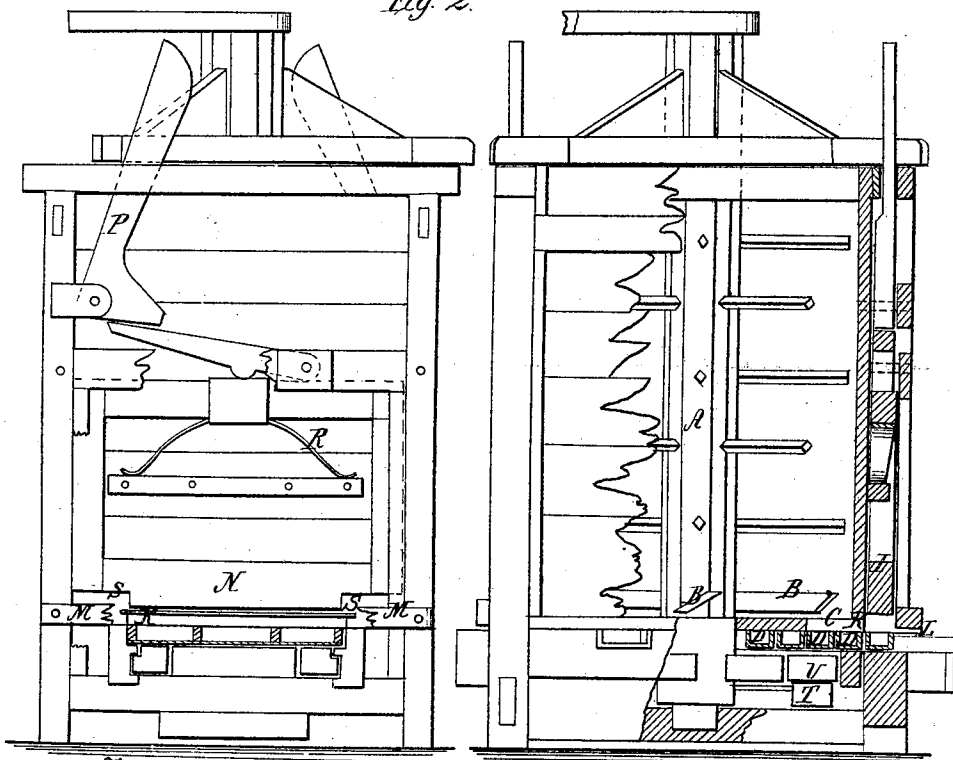
*Brick Machine.*

*No. 89680.*

*Patented May 4, 1869.*

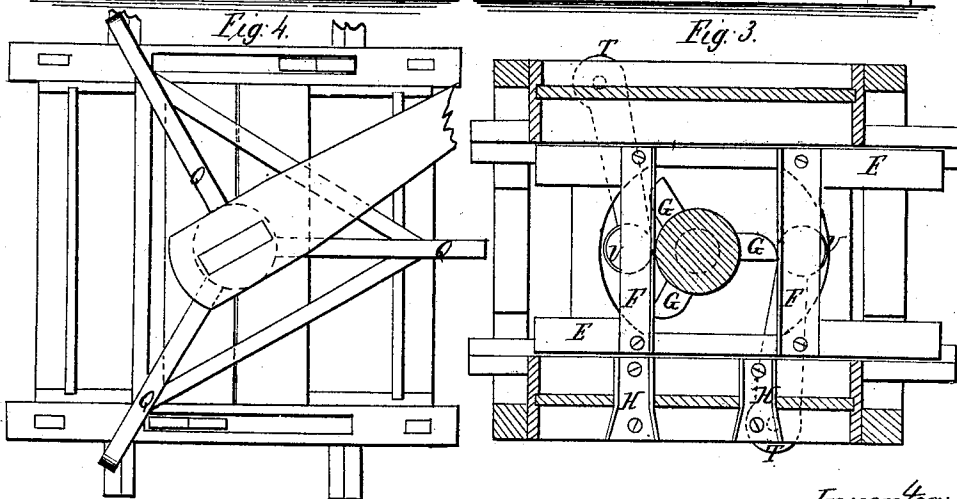
*Fig. 1.*

*Fig. 2.*



*Fig. 4.*

*Fig. 3.*



*Witnesses;*  
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# United States Patent Office.

ASA MORGAN, OF CEDAR BAYOU, TEXAS.

Letters Patent No. 89,680, dated May 4, 1869.

## IMPROVEMENT IN BRICK-MACHINES.

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, ASA MORGAN, of Cedar Bayou, in the county of Chambers, and State of Texas, have invented new and useful Improvements in Brick-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in brick-machines whereby it is designed to provide a simple and effective machine that can be constructed cheaply.

It consists in the arrangement of the presses and the means of operating them.

In the accompanying drawings—

Figure 1 represents a side elevation of a machine constructed according to my improvements, with parts broken away;

Figure 2 represents an elevation in section and end view;

Figure 3 represents a horizontal section of the same; and

Figure 4 represents a plan view of the same.

Similar letters of reference indicate corresponding parts.

A represents a vertical mixing and grinding-shaft, working in a curb in the usual manner, and provided with arms B, at the bottom, adapted in form and arrangement for pressing the clay through the openings C, in the bottom of the curb, (of which there are two, one on each of the two sides of the shaft,) into the moulds D, below, which rest on ways above a sliding carrier, E, provided with brackets F, for forcing the moulds out, pressing one against the other, and operated by tappets G on the shaft A, so arranged as to give it a to-and-fro movement, and allow it to have a period of rest between each movement, while the presses are acting.

The moulds D, which are of common construction, are fed into their position over the carrier by the operator through the channels H, and they are moved along to the place of receiving the clay by the action of the brackets F, which move them along a distance corresponding to the width of one mould at each movement, and from thence under the presses I, and finally out of the machine, when they may be taken away by any means.

The arms B will deliver an amount of clay to the moulds considerably thicker than their depth, which may be regulated by the height of the upper wall of the passage, through the side of the curb, as represented at K, and a knife, L, may be arranged on the under side of the cross-beam M, about on the line of the top of the press, for the purpose of trimming off the pressed clay at the top of the mould, or the rough and swelled-up portions of clay which may occur around the edges of the press.

The presses N consist of sliding frames, arranged in ways on the side of the machine, and are forced down by the levers O and P, the latter projecting at their free ends above the top of the curb, to be acted on by arms Q, arranged on the shaft A.

The said presses are provided with springs R, for raising them, and they are recessed in their lower faces, as represented at S, to afford room for the clay which exudes towards the ends to escape.

Two sets of pressing-apparatus are arranged upon the curb, and the mould-boxes are fed to them by the carriage E, carrying those on one side, while it withdraws from those on the other.

The number of movements of the presses and the mould-carrying slide may be governed by the number of arms Q, and tappets G, on the shaft, which may be more, or less, as desired.

In order to render the working of the mould-carrier as easy as possible, levers T, pivoted to the frame, and arranged so as to interpose friction-bowls U between the tappets G and the frame, may be employed to advantage.

It will be readily observed, that by this simple arrangement an inexpensive machine may be provided, which will be very easy of operation, and not as liable to breakage as many other machines are under the great power required for operating them.

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

The presses N, constructed as described, and operated through the medium of the levers O P, the arms Q of the shaft A, and the springs R, all arranged as and for the purpose herein described.

ASA MORGAN.

Witnesses:

T. HUNSTRONG,  
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