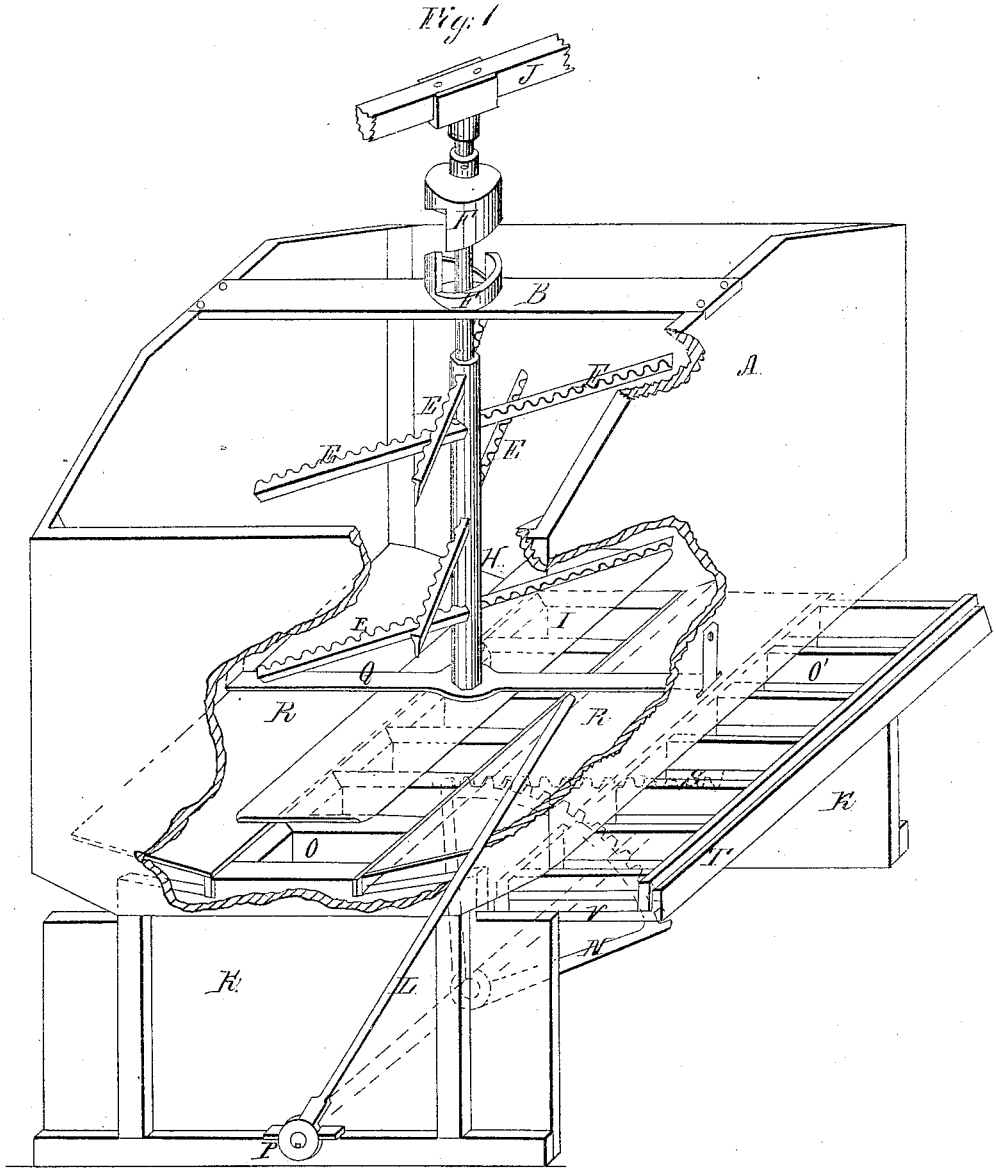
S. Shreffler,

Brick Machine.

No. 49,562. Patented Aug. 22, 1865.

Fig. 1



Witnesses:
James F. Magner
Fred Sibley

Inventor:
Samuel Shreffler

UNITED STATES PATENT OFFICE.

SAMUEL SHREFFLER, OF JOLIET, ILLINOIS.

IMPROVED BRICK-MACHINE.

Specification forming part of Letters Patent No. **49,562**, dated August 22, 1865.

To all whom it may concern:

Be it known that I, SAMUEL SHREFFLER, of Joliet, in the county of Will and State of Illinois, have invented an Improved Brick-Machine; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing and letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is a perspective representation of my improved brick-machine.

The object of my invention is to so construct a machine for making brick that the clay can be tempered or mixed to the proper consistency and then pressed into the molds by automatic power or by the weight of the mixing apparatus.

To enable others skilled in the art to make and use my invention, I will describe the method of constructing and using the same.

First, as a foundation for my machine, I use the strong supporting-frame K, and to the top of the frame K, I attach the mixing-box or part A, which is made in size to correspond with the required capacity of the machine.

In the bottom of the box A is an opening that corresponds in size and form with the brick-mold that is used. The object of the opening is to allow the clay to pass from the box A into the mold.

On the inside and between the frame K, resting on two horizontal slides, I place the carriage T, the object of which is to hold the molds O and O′ in position.

To the under side of the carriage T, as shown by the dotted lines S, is the ratchet which is used, in connection with the ratchet-wheel N, to move the carriage T for the purpose of alternately placing the brick-molds O and O′ under the opening of the mixing-box A at the bottom.

At R is represented the inclined bottoms, which are put in this position to better facilitate the passing of the clay through the opening in the bottom of the mixing-box A into the mold O.

At L is represented the lever which is used for the purpose of turning the ratchet-wheel N, and is attached to the shaft of the ratchet-wheel at P.

On the top of the mixing-box A, at B, is a strong cross-bar for the purpose of supporting the mixing and pressing gearing; and at G, near the bottoms R, and parallel with the part B, is a thin wide spring, and is used for the purposes of holding the shaft H in a vertical position and bringing the shaft H down to a proper position after it has been raised. The spring G is attached to the shaft H by means of a collar in such a manner as to allow the shaft to revolve on its axis.

At V the shaft H is diminished for the purpose of forming a shoulder to prevent the shaft being raised too high, and for the purpose of forming a proper bearing where the shaft passes through the cross-bar B.

At E is represented the triangular mixers, which are corrugated on the opposite edges for the purpose of presenting the corrugations alike to the clay as they revolve upon the shaft H.

At F′, and attached to the cross-bar B, is a double-inclined spiral plane with two vertical offsets.

At F is represented the exact counterpart of the part F′, and is secured to the shaft H by means of the shaft passing through the center of the same.

At I, and attached to the lower end of the shaft H, is represented the part that is used to press the clay into the brick-mold O, and is set parallel with the offsets in the part F′.

At J is represented the lever that is used to turn the shaft H, and is secured in place by any of the approved methods.

The method of using my improved brick-machine is as follows: I first fill the mixing-box A with the proper quantities of clay and water in the usual manner, then attach one or more horses to either end of the lever J as the motive power, and move the end of the lever around in the line of a circle, carrying with it the shaft H upon its axis. The triangular mixers E, being attached to the shaft H, will be forced through the clay, thoroughly grinding and incorporating the same. It will be seen that by the parts F and F′ the lever J can be turned only in one direction. After the clay has been sufficiently mixed for filling the molds O and O′, I then commence removing them from under the mixing-box A in the following manner: The mold O is supposed to be under the open-

ing in the bottom of the mixing-box A and pressed full of clay by means of the falling motion of the part I. I then, by means of the lever L and ratchet-wheel N, reverse the position of the molds by placing the mold O on the outside of the mixing-box A and the mold O′ in its place. I then take the mold O off of the carriage T and put an empty one in its stead. To remove the mold O it is only necessary to reverse the carriage T by means of the ratchet-wheel N.

Now, having completed the description of my machine, what I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. The combination of the pressing part I and mixers E with the shaft H, when operated by means of the device that is attached to the cross-bar B.

2. The combination of the spring G with the shaft H and mixing-box A, substantially as described and set forth.

SAMUEL SHREFFLER.

Witnesses:

JAMES P. WAGNER,

FRED. SEHRINO.