W. Sangster.

Brick-Machine.

No 72421 Patented Dec. 17, 1867.

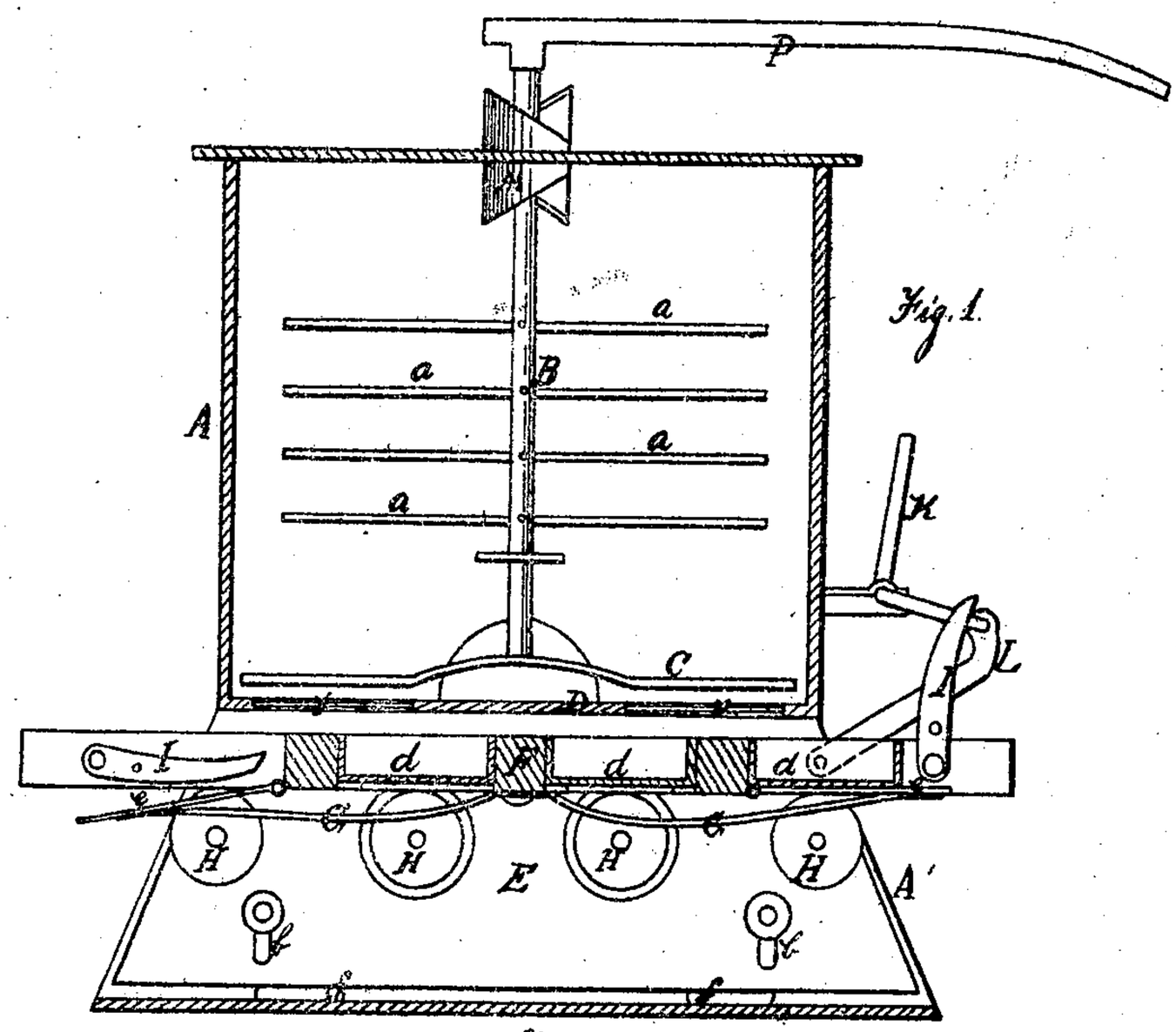


Fig. 1.

Fig. 2.

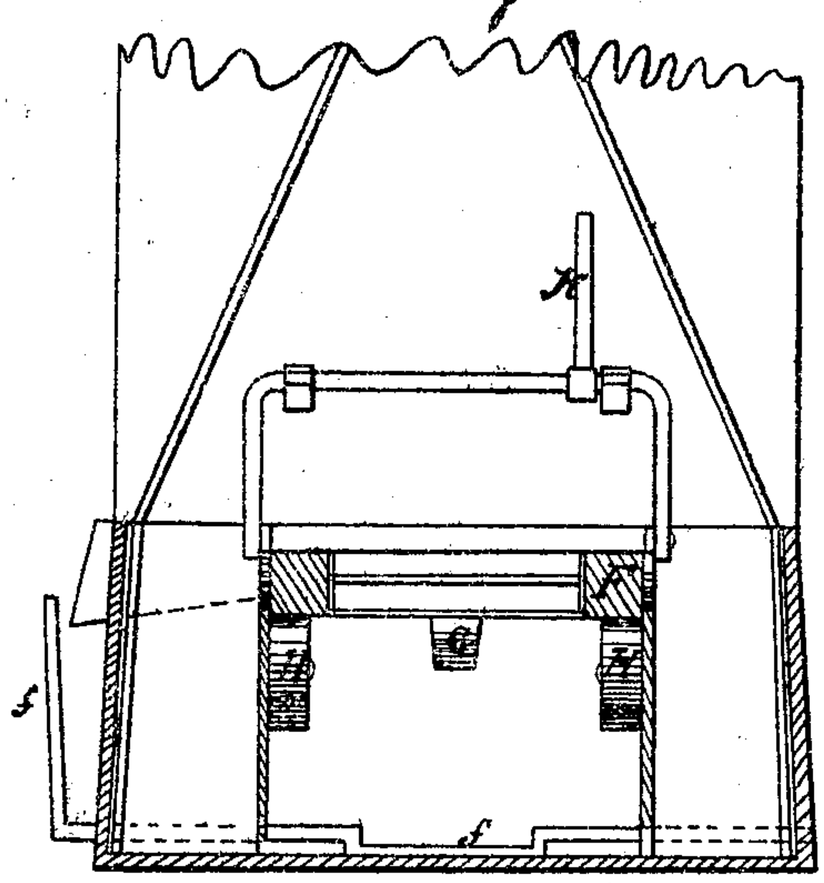
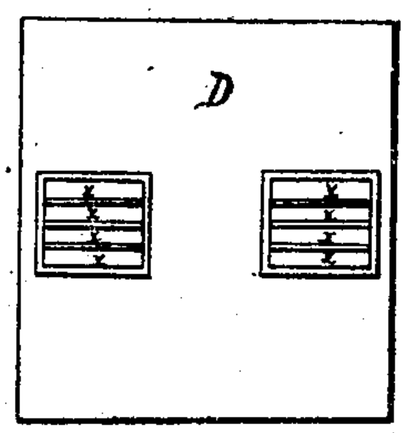


Fig. 3.



Witnesses

A. A. Seaton.

Cornelius Cox

Inventor

Wm. Sangster

per

Alexander Gibson

Attys.

United States Patent Office.

WILLIAM SANGSTER, OF JOLIET, ILLINOIS, ASSIGNOR TO HIMSELF, JAMES FLOYD, MICHAEL KERO, WILLIAM P. DELLMAN, JOHN SMITH, AND GEORGE STUFFLER.

Letters Patent No. 72,421. *dated December* 17, 1867.

IMPROVED BRICK-MACHINE.

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, WILLIAM SANGSTER, assignor to myself, James Floyd, Michael Kero, William P. Dellman, George Stuffler, and John Smith, all of Joliet, in the county of Will, and in the State of Illinois, have invented certain new and useful Improvements in Brick-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

Figure 1 represents a longitudinal vertical section,

Figure 2 an end view, and

Figure 3 a view of the bottom of the machine.

In the annexed drawings, A represents the frame or body of the machine, which is made in box-form, with its base or under portion, A′, made larger than the upper portion. This section of the body is divided from the top portion A by a partition, D, which forms a bottom on to which the clay is placed and worked. Each side of the vertical shaft in this section, the bottom has a series of openings, *x x*, of the form of a brick, by which means the worked clay is forced through. B represents the vertical shaft, which is provided with the usual horizontal lever P at the top, for attaching the horses to work the same. Upon this shaft, within the machine, is a series of horizontal arms, *a a a*, while upon the bottom of said shaft is the clay-worker and presser C, which forces the same down through the openings *x x x* into the moulds. Attached to the inner sides of the under section A′ of the machine are two plates, E, which are provided with narrow slots *b b*, through which pass suitable buttons or rivets for securing the plates. Directly under these plates or adjustable boards are two suitably-crooked rods *f f*, which lie crosswise of the machine, and extend outside of the same for the purpose of elevating these plates or boards, by means of their slots, to be near or far from the slotted bottom D. The sides of these plates have several friction-rollers H H, upon which rests the mould-frame F, which is operated laterally. This frame has suitable partitions, into which are placed moulds *d d* for the brick, and is provided with a hinged door, *e e*, at the bottom of each end, which are kept in place by means of a horizontal spring, G, which lies under the entire bottom of the mould-frame. It will be understood that this frame is moved laterally upon the friction-rollers, for the purpose of extracting the moulds after being filled, said moulds being passed down upon the doors *e*, and the bricks prevented from being broken. K represents a lever, secured to one end of the machine, which connects with a bent rod, which said rod is connected to two pivoted arms L L that are attached to the mould-frame, so that the said frame may be readily operated in or out by this lever. I I represent knives, which are fastened to each end of the frame F, for cutting the clay from the moulds as they are being taken out. These knives may be operated by the person receiving the mould from the mould-frame. Being connected together by a rod they act together, so that when pressed down, the overhanging clay is cut so that the mould may be easily extracted with the "formed" brick. This machine is provided with the usual winding collar M, through which pins, in the shaft B, are passed to cause the up-and-down motion of the arms *a* and the presser C.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A brick-machine, consisting of the case A, having shaft B, arms *a*, and slotted bottom D, arranged with the slotted plates E, with their rollers H for the vertical adjustment of the mould-frame F, provided with its knives I I, all constructed and operating as and for the purposes set forth.

In testimony that I claim the foregoing improvement, I have hereunto set my hand, this 8th day of June, 1867.

WILLIAM SANGSTER.

Witnesses:

A. R. MEAD,
S. J. WILLIAMS,
PETER WM. WEBER,
THOS. DOIY.