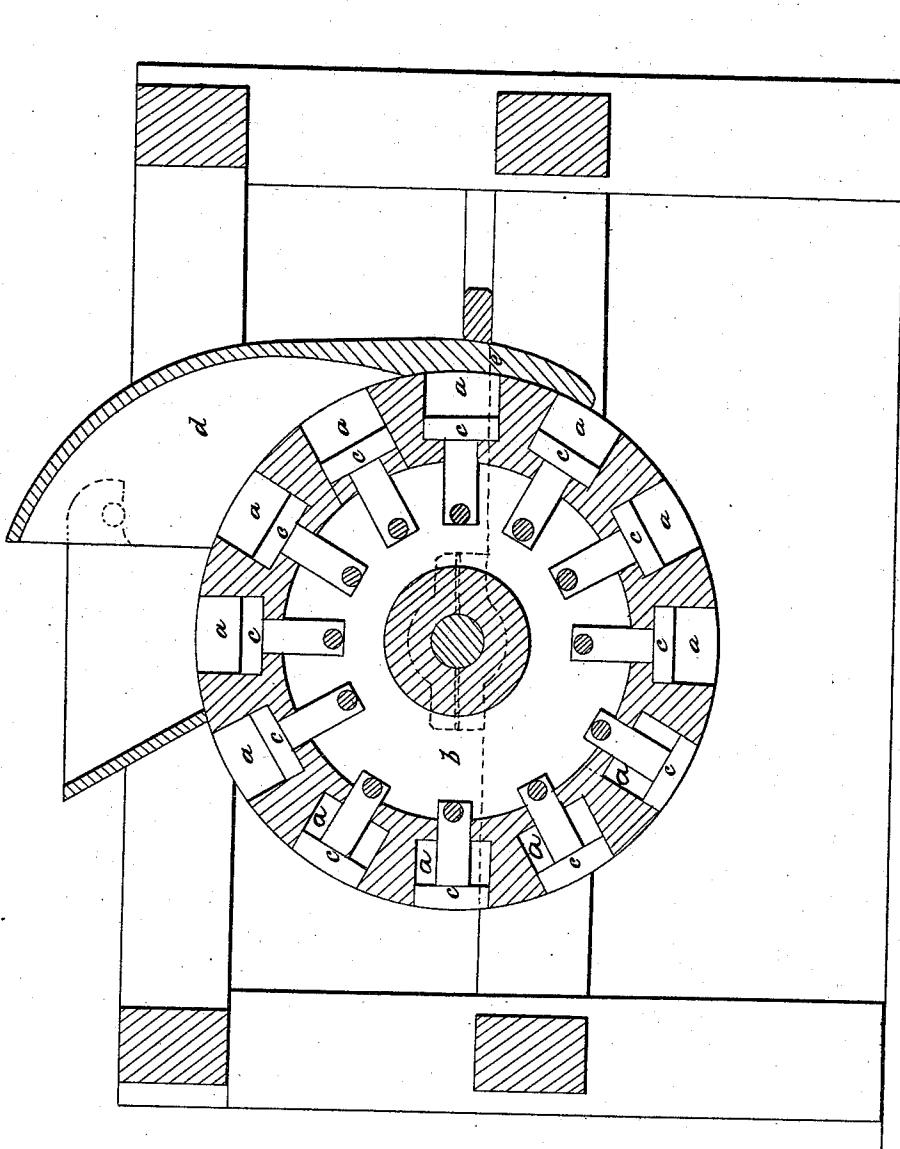


J. J. RIDDLE.
BRICK MACHINE.

No. 8,021.

Patented Apr. 1, 1851.



UNITED STATES PATENT OFFICE.

JNO. J. RIDDLE, OF COVINGTON, KENTUCKY.

BRICK-PRESS.

Specification of Letters Patent No. 8,021, dated April 1, 1851.

To all whom it may concern:

Be it known that I, JOHN J. RIDDLE, of Covington, in the county of Kenton and State of Kentucky, have invented new and
5 useful Improvements in Brick-Presses; and I do hereby declare the following to be a full, clear, and exact description of the nature, construction, and operation thereof, reference being had to the annexed drawing,
10 which makes part of this specification, which drawing is a longitudinal section through the mold wheel and its appurtenances.

In order to the formation by simple pressure from untempered clay of bricks possessing the requisite unity and coherency of structure, it is absolutely essential that the pressure should be uniform throughout their entire mass. This result has never to my
15 knowledge been attained except by the application of pistons on opposite sides of the brick, but this mode although (while the machinery remains in working order) adequate to the formation of a good article,
20 is practically ineligible on account of its liability to clog and become deranged. The fact is a brick machine should have as few working joints as possible, especially on those parts which are in immediate connection with the clay. Machines in which the bricks are formed either in the circumference of a large wheel or in a straight bed of molds in connection with a wheel by a
30 simple rolling motion, have the requisite simplicity, but the pressure not being applied to all parts of the clay at once the mass while being pressed down at one part, rises up at other parts which have passed the point of pressure it cracks and becomes
40 unequal in consistence and having once taken its set no pressure afterward is adequate to rectify the defect. These diffi-

culties I have entirely overcome by a working machine containing the following devices to wit:

The molds *a* are placed around the perimeter of a wheel *b* and the pressed brick may be extruded by followers *c* which may fall back against a solid shoulder in the wheel as usual.

The distinguishing features however of my arrangement exist in the peculiar construction of the feed trough *d* and its appendages; the trough is made to gradually narrow until it comes closely in contact
55 with the rim of the wheel, and is thence extended forward in the form of a lip or flange *e* hugging closely the wheel, and made to bear hard up against it, so that the clay after its introduction into the trough, is
60 squeezed into a smaller and smaller compass, as it descends and by this means is pressed forcibly into the mold, until coming in contact with the lip, the entire mass receives its ultimate compression powerfully and
65 equally applied in every part.

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

The lip *e* hugging closely the rim of a
70 wheel containing molds, the said lip being a prolongation of a gradually narrowing feed trough formed and operated after the manner and for the purposes substantially
75 as herein described; namely; the formation (by pressure of untempered clay) of a uniform and coherent brick.

In testimony whereof, I have hereunto set my hand before two subscribing witnesses.

JOHN J. RIDDLE.

Witnesses:

GEO. H. KNIGHT,
JAS. L. SINGER.