

(No Model.)

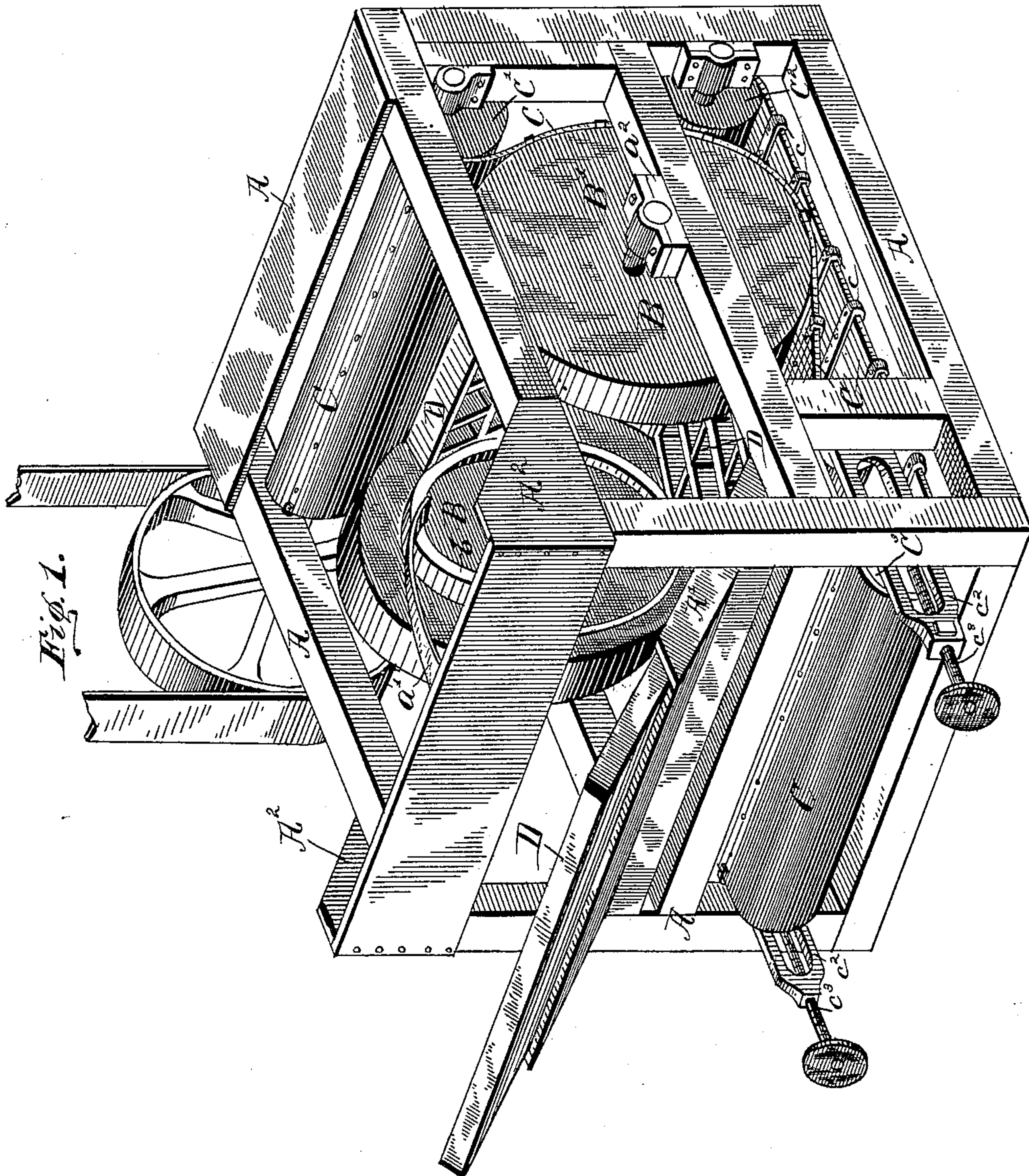
2 Sheets—Sheet 1.

G. POTTS.

MOLD SANDING MACHINE.

No. 397,247.

Patented Feb. 5, 1889.



WITNESSES.

G. W. H. Brown,

Frank H. Wood,

INVENTOR.

George Potts,
att. by E. W. Bradford,
ATTORNEYS.

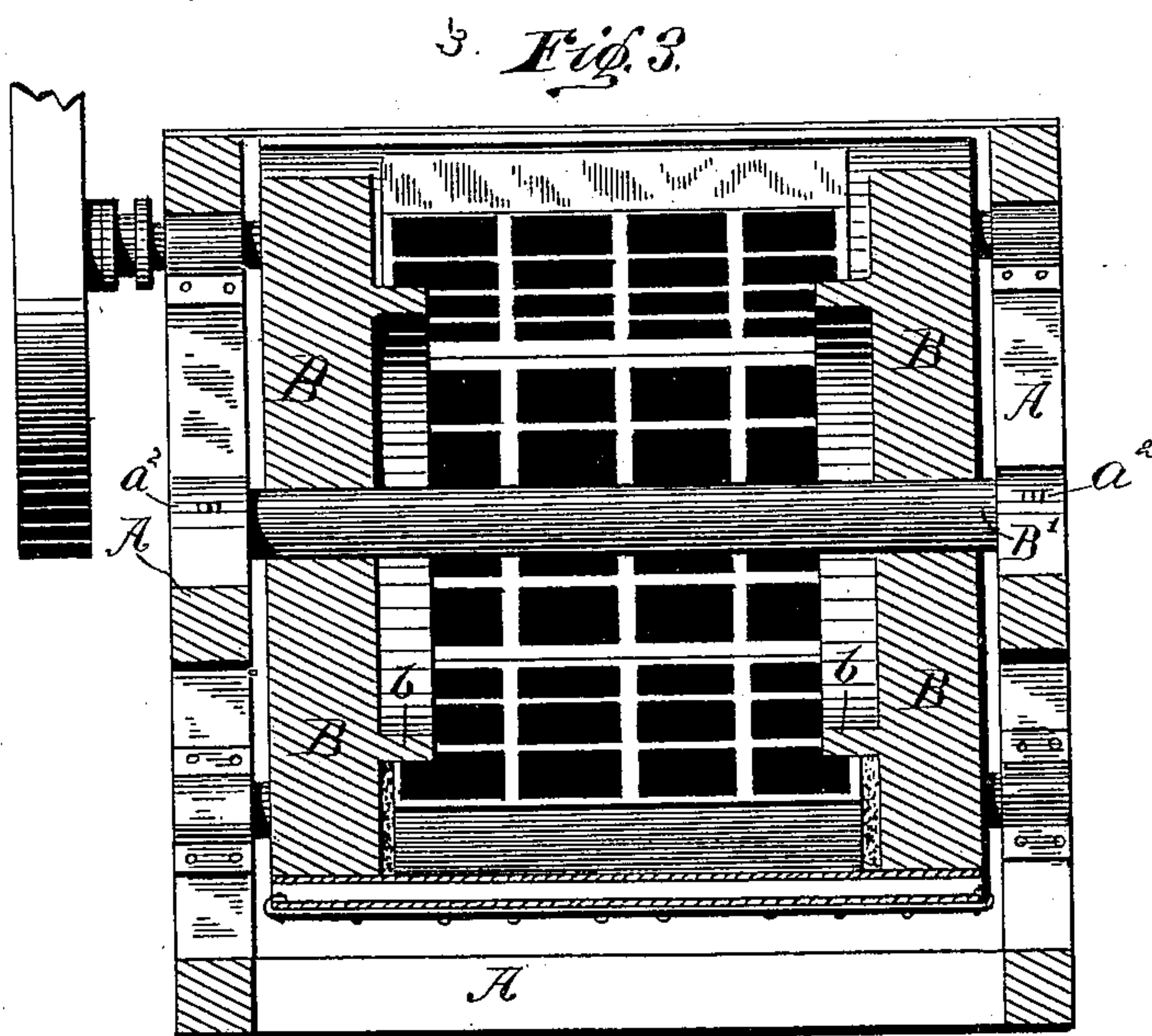
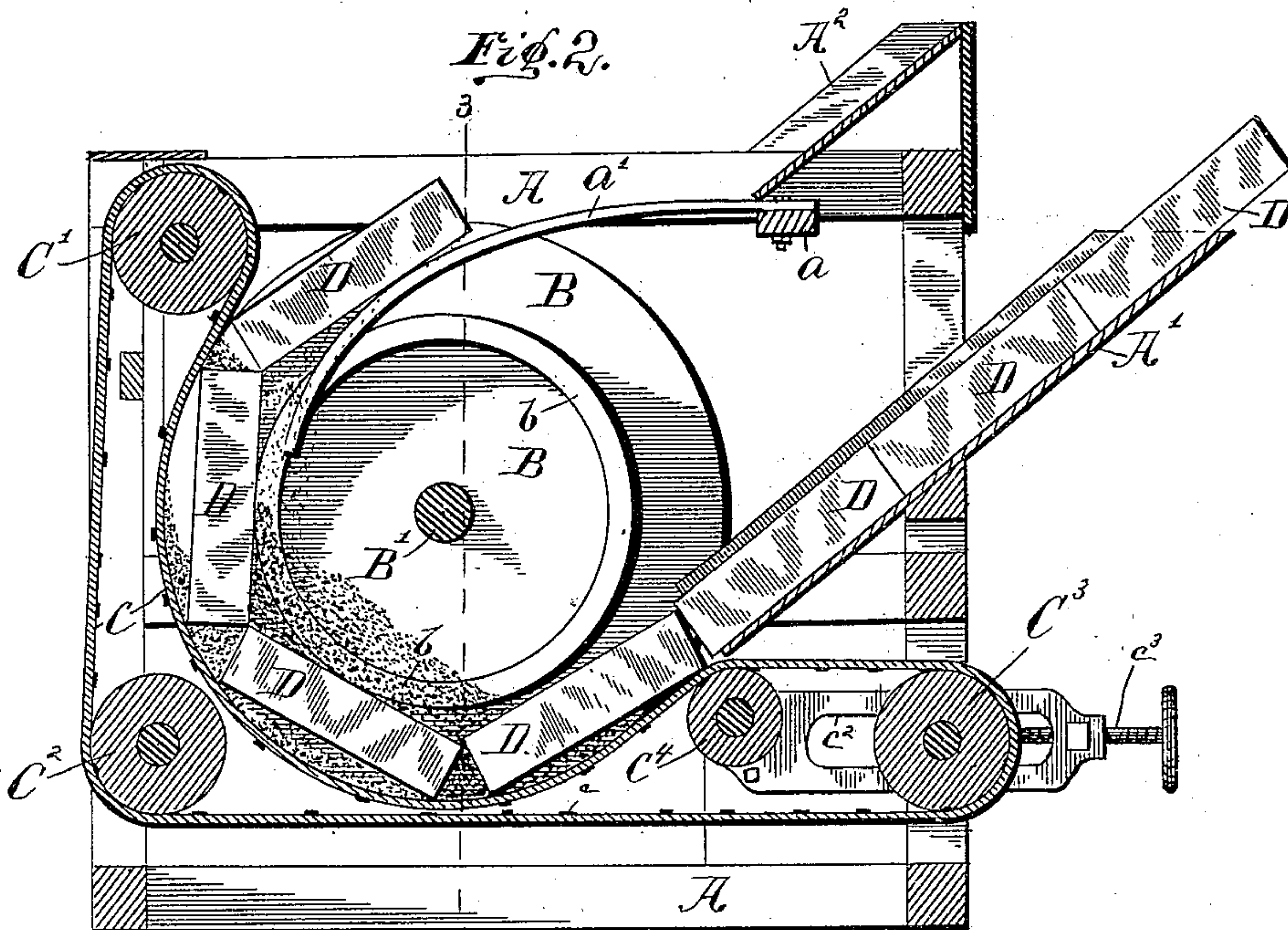
(No Model.)

2 Sheets—Sheet 2.

G. POTTS.
MOLD SANDING MACHINE.

No. 397,247.

Patented Feb. 5, 1889.



WITNESSES.

G. W. H. Brown,

Frank H. Hood,

INVENTOR.

George Potts,
Per E. W. Bradford,
ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE POTTS, OF INDIANAPOLIS, INDIANA.

MOLD-SANDING MACHINE.

SPECIFICATION forming part of Letters Patent No. 397,247, dated February 5, 1889.

Application filed July 20, 1888. Serial No. 280,537. (No model.)

To all whom it may concern:

Be it known that I, GEORGE POTTS, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Machines for Sanding Molds, of which the following is a specification.

My said invention relates to an improved construction of machines for sanding brick-molds and other molds for similar uses, whereby a very simple and inexpensive machine is provided, and one which is very efficient in operation, perfect in result, and of a large capacity.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a perspective view of one of my improved machines; Fig. 2, a central longitudinal section through the same, the molds therein being shown in elevation; and Fig. 3, a cross-section on the dotted line 3 3 in Fig. 2.

In said drawings the portions marked A represent the frame-work of the machine; B, the main guide and carrying-wheels; C, an endless apron, which carries the sand, and D the molds.

The frame A is of a suitable construction for the purpose, being preferably rectangular in form and so constructed as to furnish the necessary seats for the various bearings of the several shafts of the machine. On its front side is formed a chute or way, A', arranged to guide the molds down onto the apron, as will be presently described. A cross-bar, a, is secured across the front of the frame-work at its top, from which downwardly-curved arms a' project to a point where they will extend under the molds as they come up over the wheels B and guide them to a position from which they may be conveniently removed. At the top of said arms, above said cross-bar, is formed an inclined table, A², onto which said molds will slide from said arms, and from which they can be removed from the machine; but it is customary to remove them before they reach this position—usually as soon as they reach that point where they are free from between the apron and the wheel.

The wheels B are two large wheels mounted on a shaft, B', which is journaled in suitable bearings, a², on the frame-work. They are substantially duplicates, and are arranged one at each end of said shaft just within the frame-work, the space between them being the length of a mold. They are formed with wide faces for the purpose of giving a firm support to the apron and providing sufficient friction to carry on the operation. On their inner sides they are provided with annular flanges b at that distance from the periphery which will permit the molds to pass between said flange and the apron, in operation the flange bearing upon one side of the mold and the apron upon the other.

The endless apron C is formed of suitable flexible material and re-enforced by transverse metal strips c, riveted to the inside surface thereof, which serve to keep said apron straight in cross-section, so that it will rest closely against the molds and not sag at the center and allow sand to get below them or the apron to leave the wheels. It is of a width to correspond with the internal width of the machine, and is mounted behind and bears against the rear and under side of the large wheels B, as shown. At its top it is supported on a roller, C', which is mounted on the shaft c', journaled in suitable bearings at the top of the rear posts of the frame. One end of said shaft C' is extended out and provided with a suitable gear-wheel, (a band-pulley being shown,) to which the power may be applied and the machine driven, as will be readily understood. From the roller C' the apron passes down around the roller C², which is journaled in suitable bearings near the bottom of the rear posts of the frame and then passes forward around another roller, C³, which is journaled in bearings at the bottom of the front posts, and then over a smaller roller, C⁴, which is arranged in close proximity to the front side of the large wheels B, and then down under and up around the rear side of said large wheels, as before described. The bearings in which the roller C³ is mounted are preferably arranged in slides c² and attached to set-screws c³, mounted in screw-threaded perforations in the front side thereof, thus permitting a horizontal adjustment of said roller

for the purpose of regulating the tension of the apron.

The molds D are ordinary brick-molds or molds for a similar use, and need no description except incidentally in describing the machine.

The operation of my said invention is as follows: The molds are slid into the space between the annular flange *b* of the wheels B and the apron, through the chute A', into a quantity of sand which has been previously deposited in the trough formed by the apron where it passes under the large wheels. Said apron being in motion, the molds are caught between it and the flanges *b* of the wheels B and carried forward behind the sand, which falls back into and fills the molds, and as they pass around and up spills out again into the trough and the molds beneath. By this construction the operation is very perfectly accomplished, as the molds are completely filled with the sand, and then the loose sand is entirely spilled out when the molds reach their inverted position at the top of the wheels.

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

1. In a machine for sanding brick-molds, the combination of the frame-work, a large wheel arranged at each side of the frame-work and having rests for the molds on their inner adjacent sides a short distance from their peripheries, and an endless apron mounted upon suitable rollers journaled on said frame work and arranged to bear against the under and rear sides of said large wheels, substantially as set forth.

2. The combination, in a machine for sanding molds, of the frame-work, the wheels B, formed with the annular flanges *b* and mount-

ed upon the shaft B', which is journaled in suitable bearings on said frame-work, and the apron C, mounted upon suitable rollers and arranged to bear against the under and rear sides of said wheels B, one of said rollers being journaled in adjustable bearings, whereby the tension of said apron may be regulated, substantially as set forth.

3. In a machine for sanding molds, the combination of the frame-work, the wheels B, the apron C, arranged as described, the chute A', for guiding the molds into the machine, and the arms *a'*, for receiving them from said machine, substantially as set forth.

4. The combination, in a machine for sanding molds, of the frame, the wheels B, arranged to receive the molds between their adjacent sides and provided with the annular flanges *b*, upon which said molds may rest, and the apron C, mounted upon the rollers C' C² C³ and arranged to bear against the rear and under sides of said wheels B, the shaft of one of said rollers being provided with a gear-wheel by which power may be applied for driving the machine, substantially as set forth.

5. The combination, in a machine for sanding molds, of the wheels arranged to receive and support the molds, and the endless apron C, mounted on suitable rolls and formed of a width to extend across the machine from one wheel to the other and provided with the reinforcing strips *c*, substantially as described, and for the purposes specified.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 16th day of July, A. D. 1888.

GEORGE POTTS. [L. S.]

Witnesses:

E. W. BRADFORD,
F. W. WOOD.