

F. ERPICUM.
BRICK MOLDING MACHINE.
APPLICATION FILED JUNE 25, 1910.

1,033,092.

Patented July 23, 1912.

Fig. 1.

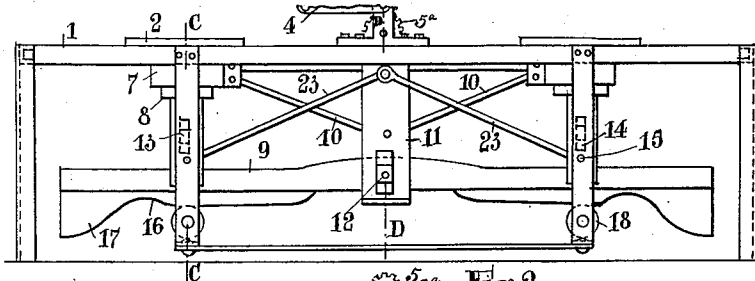


Fig. 2.

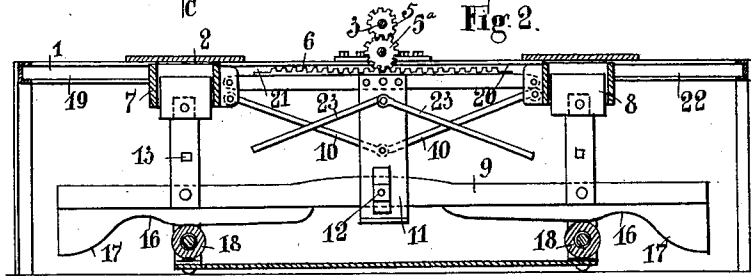


Fig. 3.

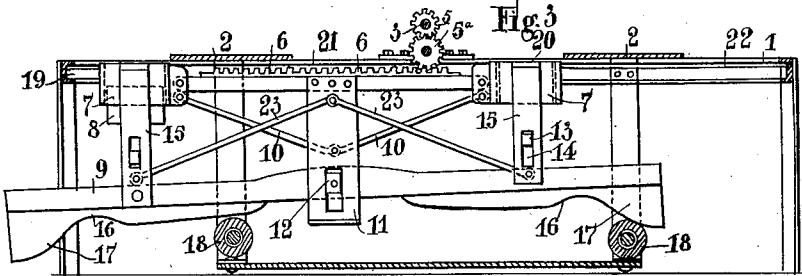


Fig. 4.

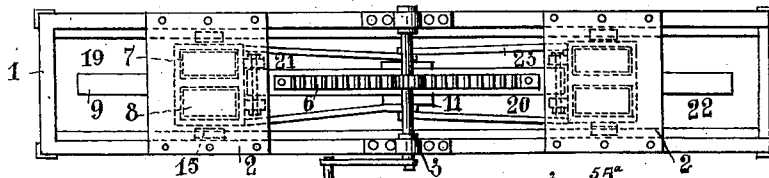


Fig. 5.

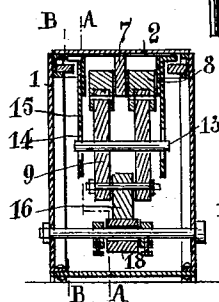


Fig. 7.

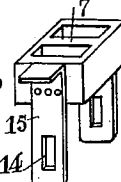
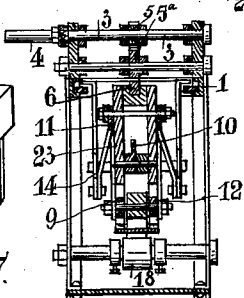


Fig. 6.



Witnesses:
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Inventor:
Francis Erpicum,
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UNITED STATES PATENT OFFICE.

FRANÇOIS ERPICUM, OF GRAND AXHE, BELGIUM.

BRICK-MOLDING MACHINE.

1,033,092.

Specification of Letters Patent.

Patented July 23, 1912.

Application filed June 25, 1910. Serial No. 568,921.

To all whom it may concern:

Be it known that I, FRANÇOIS ERPICUM, a subject of the Belgian King, and resident of Grand' Axhe, Belgium, have invented certain new and useful Improvements in Brick-Molding Machines.

This invention relates to a double acting brick molding machine.

Figure 1 of the accompanying drawing shows a side elevation view of the machine; Fig. 2 is a longitudinal section of same on line A—A of Fig. 5. Fig. 3 is a similar section on line B—B of Fig. 5, the parts of the machine being shown in another position. Fig. 4 is a top plan view of the machine; Fig. 5 is a sectional view on line C—C of Fig. 1; Fig. 6 is a cross section on line D—D of Fig. 1; Fig. 7 shows finally a perspective view of one of the molds removed from the machine.

The press comprises a framework 1 receiving on the right and on the left two stationary tables 2 and in the middle the shaft 3 of a hand lever 4 which carries a wheel 5 meshing with an idler pinion 5^a geared to a toothed rack 6. The toothed rack 6 is secured at each end to one of the molds 7 provided in pairs and positioned under the stationary tables when the toothed rack occupies its central position (Figs. 1 and 2). The molds 7 are open at their top; their bottoms are formed by pistons 8 having a suitable form and connected with the cam bar 9. The molds 7 are held besides by rods 23 and 10 which are secured to slotted members 11 carrying also the toothed rack 6 and on which the cam bar 9 rests through the medium of a sliding member 12 which allows the shaft of the cam bar 9 to move upwardly and downwardly a certain length. The pistons 8 are guided in the vertical direction by means of tenons 13 which engage corresponding slots 14 of the lateral flanges 15 of the molds 7. The bar 9 is provided near each end with a cam 16 of the outline shown in Figs. 1, 2 and 3, as well as with triangular projection 17. The bar 9 which is readily seen carries the entire movable parts of the machine, rests itself on rolls 18 which are carried by the framework 1 of the machine. It follows therefrom that when in the position shown by Fig. 1 of the machine, the crank 4 is rotated anti-clockwise the entire movable system of the machine will be shifted toward the left (Fig. 3); the left hand cam 16 leaves the rollers

18 whereby the pistons 8 of the molds 7 are lowered and the molds 7 are brought under the openings 19 of the framework 1. On the right hand side the molds 7 have been brought to the place 20 while the cam 17 has engaged the corresponding roller 18 and has pushed the pistons 8 into the molds 7 whereby the bricks contained in the latter have been raised. The molds 7 of the left hand side of the machine which have been moved to the place 19 can again be filled with clay. When hereafter the crank handle 4 is again actuated so that the entire molding mechanism is again shifted toward the right hand side, the left hand molds 7 are again conveyed under the table 2 which forms the cover, while the cam 16 which engages the corresponding roller 18, raises the left hand end of the bar and therewith the left hand pistons which press the clay into the molds between themselves and the table. When the rotation of the crank handle is continued in the same direction, the molds are conveyed in front of the table to the place 21 while the cam 17 raises the left hand pistons 8 and this pushes the bricks upward out of the molds. At this moment the molds 7 of the right hand side of the machine are at 22, the pistons 8 are lowered in such a manner that the molds can be filled on this side of the machine, while the molds are emptied on the left hand side. The guide slots guiding the sliding blocks 12 allow of the cam bar being vertically moved without any possibility of being locked.

It is needless to say that several of these molding devices may be applied to one machine and that in this case the driving mechanism shown can if necessary be modified as to its construction according to requirements.

I claim:

1. In a molding machine, a frame, a carriage movably mounted on said frame, molds carried by said carriage, a bar pivotally supported by said carriage and movable therewith, pistons carried by said bar, said pistons working in said molds, and means to co-operate with said bar to operate said pistons when said carriage is moved.

2. In a molding machine, a frame, tables carried by said frame, a carriage movably mounted on said frame, molds carried by said carriage, said molds being positioned under said tables when in an article pressing position, a bar pivotally supported by said

carriage, pistons carried by said bar, said pistons working in said molds, and means to coöperate with said bar to operate said pistons when said carriage is moved to move
5 the molds from beneath said tables.

3. In a molding machine, a frame, a carriage movably supported on said frame, molds carried by said carriage, slotted members carried by said carriage, bearings slid-
10 ably mounted in said slots of the slotted members, a bar pivotally supported by said blocks, pistons carried by said bar, said pistons working in said molds, and means to coöperate with said bar to operate the
15 pistons.

4. In a molding machine, a frame, a carriage movably mounted on said frame, a movably mounted bar carried by said carriage, molds carried by said carriage, lateral flanges carried by said molds, said lateral flanges being provided with slots, pistons carried by said bar, said pistons working in said molds, means to coöperate with said bar to actuate said pistons, and projections carried by said pistons, said projections being positioned in said slots to limit the movement of said pistons.

5. In a molding machine, a frame, platens carried by said frame, a carriage movably
20 mounted on said frame, molds at opposite sides the center of said carriage, a cam bar having a rocking connection with said carriage, plungers connected to said cam bar, said plungers working in said molds, means
30 for moving said carriage to move said molds from beneath said platens, and means for rocking said cam bar to raise the plunger in a mold at one side of the center of said carriage and to lower the plunger in a mold at the opposite side of the center of said carriage.

6. In a molding machine, a frame, platens carried by said frame, a carriage movably mounted on said frame, molds carried at opposite ends of said carriage, a cam bar having a rocking connection with said carriage, said rocking connection being located centrally of the length of said rock bar, plungers connected to said rock bar, said plungers working in said molds, means for moving said carriage to move said molds from beneath said platens, rollers carried by said frame, and cams carried by said rock bar, said cams adapted to coöperate with said rollers to raise the plunger in the mold at one end of said carriage and lower the plunger in the mold at the opposite end of said carriage.

In testimony whereof I have hereunto set my hand in presence of two witnesses.
FRANÇOIS ERPICUM.

Witnesses:

O. DEWONCK,
Y. COÉME.