L. PAROTTI.

MOLDING MACHINE.

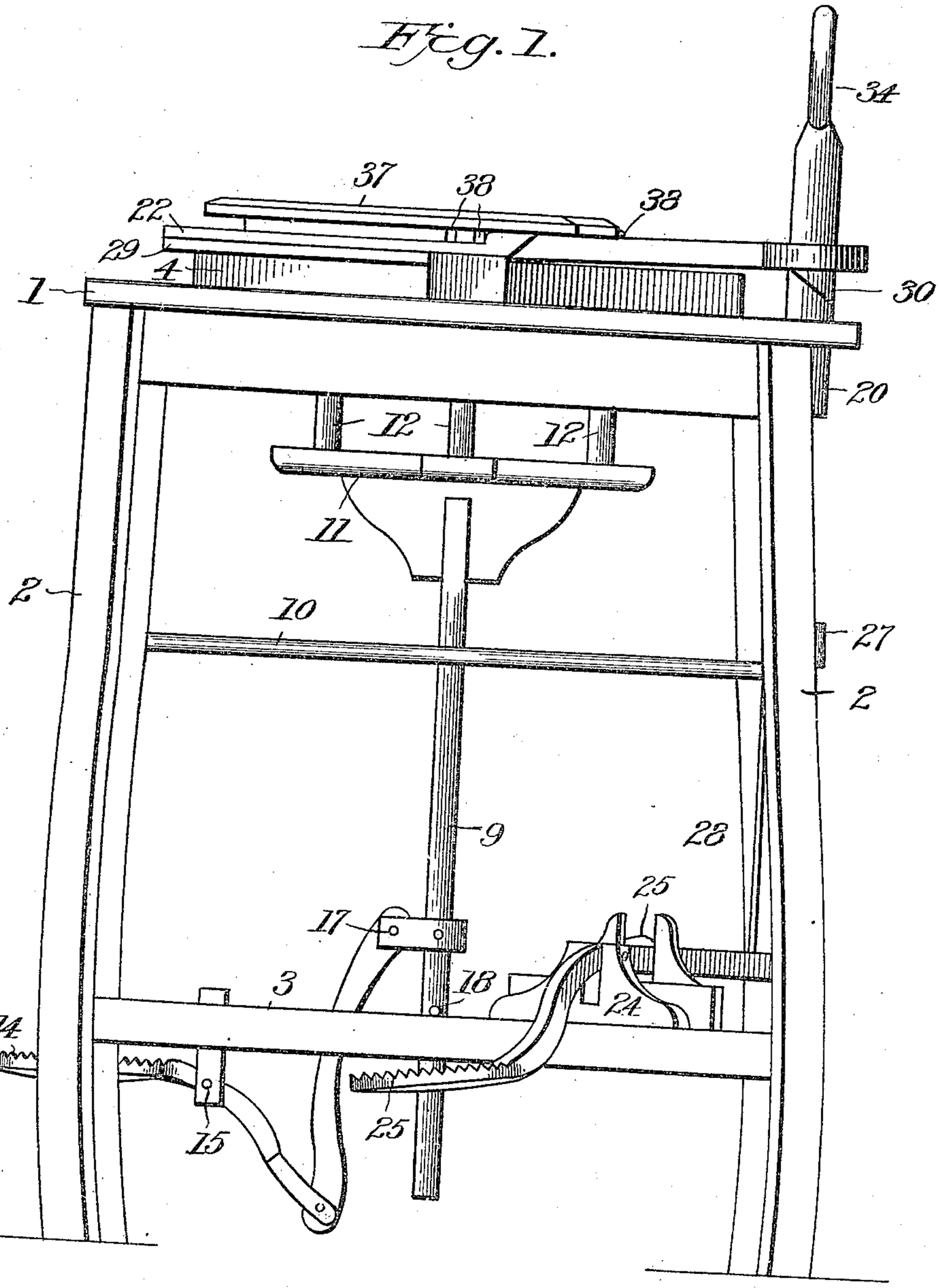
APPLICATION FILED JAN. 14, 1908. RENEWED SEPT. 13, 1909.

951,838.

Patented Mar. 15, 1910.

3 SHEETS—SHEET 1.

Fig. 1.



Witnesses

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3 SHEETS—SHEET 2.

Fig. 2.

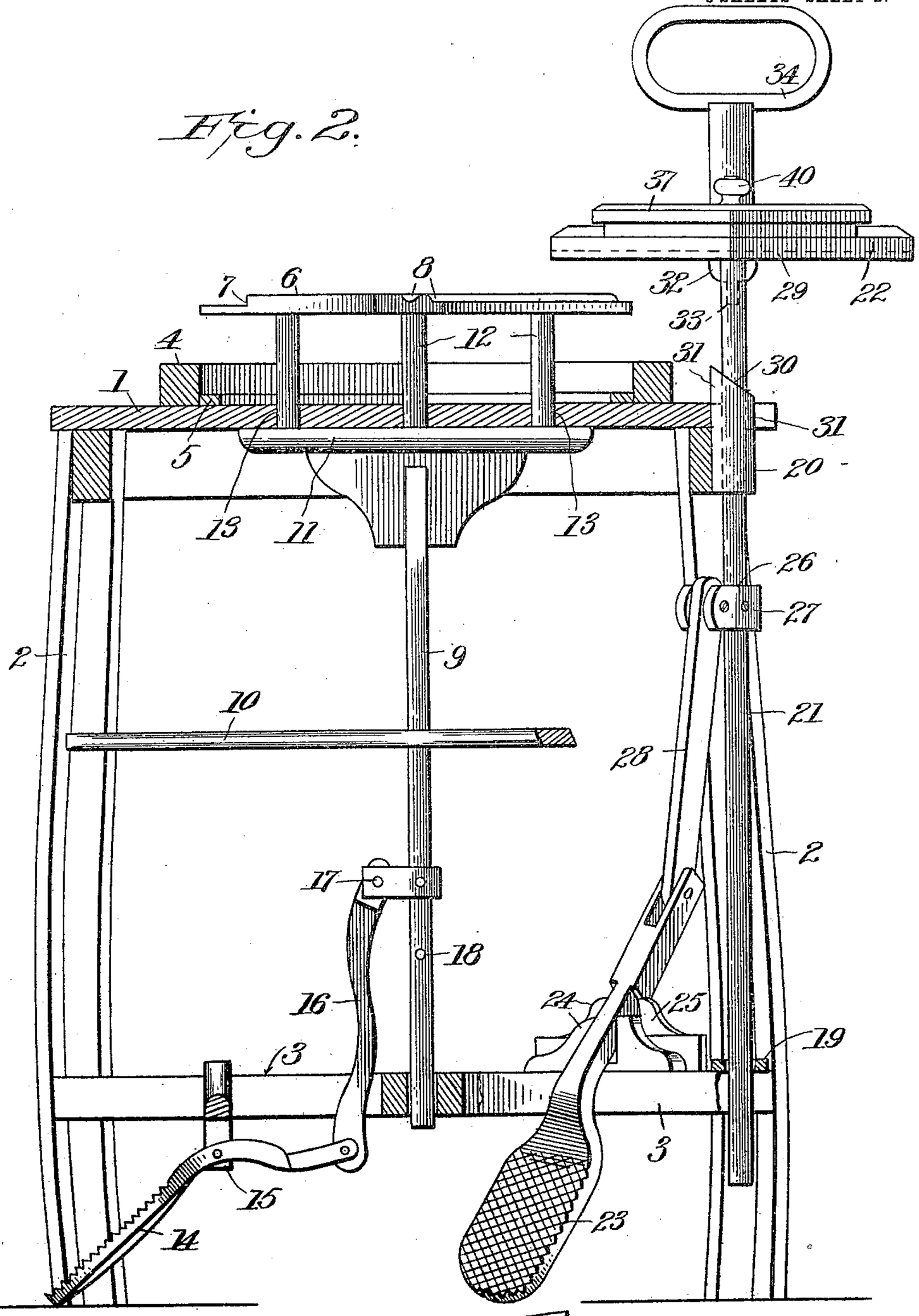
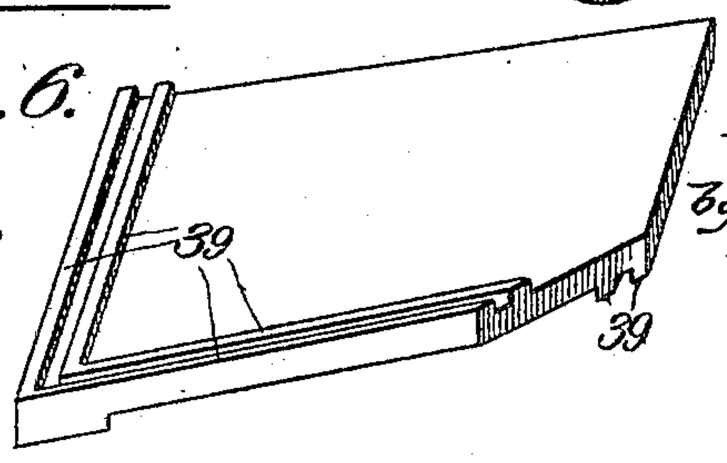


Fig. 6.



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3 SHEETS—SHEET 3.

Fig. 3.

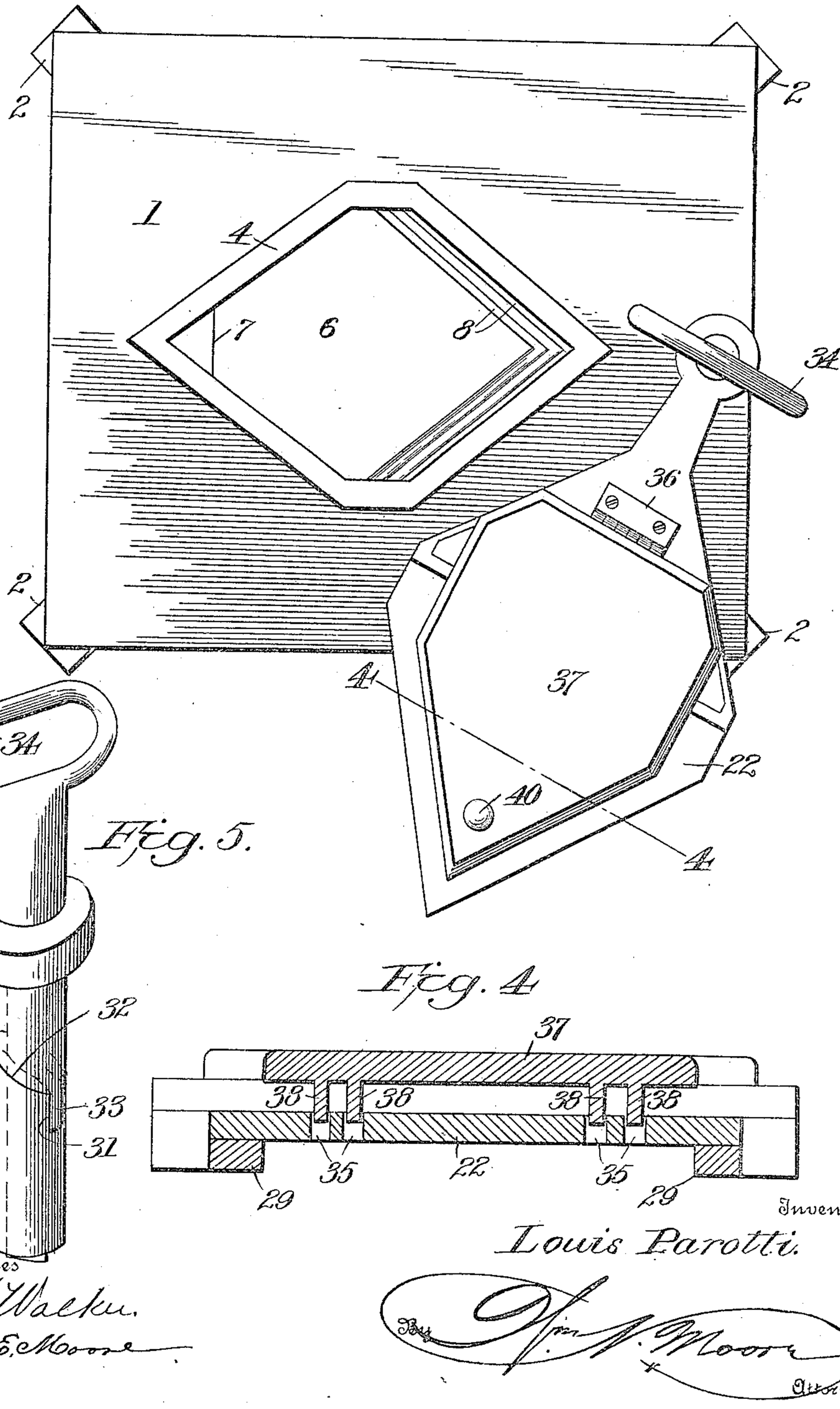

Fig. 5.

Fig. 4

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UNITED STATES PATENT OFFICE.

LOUIS PAROTTI, OF HERRIN, ILLINOIS.

MOLDING-MACHINE.

951,838. Specification of Letters Patent. Patented Mar. 15, 1910.

Application filed January 14, 1908, Serial No. 410,724. Renewed September 13, 1909. Serial No. 517,479.

To all whom it may concern:

Be it known that I, LOUIS PAROTTI, a citizen of the United States, residing at Herrin, in the county of Williamson and State of Illinois, have invented certain new and useful Improvements in Molding-Machines, of which the following is a specification.

My invention relates to improvements in molding machines, and refers in particular to devices of this character for producing cement or artificial stone shingles, tiles and the like, and the principal object of the invention is the provision of a simple and practical device for this purpose which may be operated with ease and will have a large capacity for work and which will be efficient in every way.

Another object of the invention is the provision of a molding machine capable of producing blocks or tiles of various shapes, and a further object is to provide an improved form of mold box and means for removing the completed product from the mold.

With these and other objects in view, my invention comprises in combination with a mold box and a pallet therein, a cover to the mold box, means for lifting said cover, and means for freeing the pallet from the mold box for removing the completed article.

My invention further consists of a device of the character set forth embodying certain other novel features of construction, combination and arrangement of parts substantially as disclosed herein and as illustrated in the accompanying drawings, in which:

Figure 1, is a side elevation of the complete invention with the mold box closed. Fig. 2, is a like view parts being shown in section, with the mold open for discharging the completed article. Fig. 3, is a plan view of the machine. Fig. 4, is a transverse sectional view of the same on line 4—4 of Fig. 3. Fig. 5, is a broken detail view of the mechanism for lifting the mold cover and for locking the cover in proper position with respect to the mold box. Fig. 6, is a detail view of one form of shingle or tile produced by the machine.

In the drawings: The numeral 1, designates the table or top of the machine which is supported upon the standards or legs 2, the foot of the legs preferably being connected by the cross braces 3. A mold box 4, is mounted upon the table and this mold box corresponds to the outline of the tile or block which is to be formed therein. The machine here illustrated is for manufacturing double pointed shingles and the mold box is accordingly in the shape of a diamond, but of course any other form of mold box may be employed as desired.

A ridge or shoulder 5, is provided at the base of the walls of the mold box upon which is supported the pallet 6. This pallet forms the bottom of the mold, and may have grooves or indentations in its face to form corresponding ribs or ridges on the underside of the molded article. The pallet shown in the present instance has a shouldered portion 7, at one end to provide a lug on the underface at one end of the completed shingle and parallel spaced grooves 8, are provided along the edges of the opposite end of the pallet to form parallel ridges in the corresponding end of the shingle. The shape of the pallet would also vary in accordance with the article which it is desired to produce.

A lifter rod 9, is slidably mounted in the cross braces of the frame and in the additional upper guide or brace 10, the rod supporting a head 11, on its upper end which carries a series of studs or posts 12. These posts project through guiding openings 13, in the table and are adapted to engage the under face of the pallet to lift the same free of the mold box. A pedal 14, is pivoted in the hanger 15, and the inner end of the pedal is connected by the link 16, to the lifter rod, the link being pivoted at 17, to such rod, so that by depressing the pedal, the lifter rod is elevated thereby lifting the pallet out of the mold box. The lifter rod returns to its original non-active or non-supporting position by reason of its own weight, and the stop 18, on the rod limits its downward movement.

A guiding brace 19, is provided at the rear side of the frame and a sleeve 20, is secured in the rear edge of the table. A rod 21, is slidably engaged in the sleeve and the guiding brace, and carries at its upper end the cover plate 22, which extends over and forms the top to the mold. A pedal 23, is pivoted in the bracket 24, the rearward portion of the pedal being engaged between the guides 25. The rod 21, is provided with a shouldered portion 26, upon which is engaged the boxing 27, or the boxing may be engaged upon the rod in any other suitable manner. The link 28, forms the connection between the pedal 23, and the boxing so that

by depressing this pedal or lever the rod and the cover plate carried thereby, are elevated. The forward edges of the cover plate are preferably formed with a depending flange 29, to overhang the forward edges of the mold thereby providing a close joint between the mold and its cover. The upper end of the guiding sleeve is inclined or beveled on a downward and outward slant as at 30, and oppositely disposed recesses or seats 31, are formed in the inner and outer edges of the upper end of this sleeve. An inclined shoulder 32, is provided on the rearward side of the rod which is adapted to coact with the inclined end of the sleeve and the lug 33, depending from said inclined shoulder is adapted to interlock with the recesses in the angular end of the sleeve. It will thus appear that when the cover is in engagement with the mold, it is locked there until the rotary support is lifted to free the locking lugs of the locking recesses. A handle 34, serves for rotating the rod.

The cover plate has a pair of parallel V-shaped grooves or slots 35, formed near its forward edge, the outermost of which slots is in alinement with the inner edge of the mold, and these slots serve to form a pair of parallel ribs along the upper forward edges of the shingle. The forward half of the cover plate is downwardly offset from the rear portion thereof and to the raised rear portion of the cover is hinged at 36, the flap 37, which flap carries on its under face the V-shaped parallel flanges 38, adapted to mesh with the corresponding slots in the cover plate. By means of the mold described, an improved form of shingle is produced having interlocking parallel ridges 39, on its opposite sides and located at opposite ends of the shingle as clearly illustrated in Fig. 6. The flap is operated by means of the knob or handhold 40. These converging flanges on the flap only partially enter the converging slots on the cover plate thereby serving to compress the material forming the ridges 39 of the tile and to assist in freeing the tile from the cover plate without breaking the ridges.

Where different forms of shingles or tiles are to be made, the mold box, the cover and the pallets would vary accordingly. The articles might be made of any suitable plastic material such as cement, clay and the like.

I claim;

1. A molding machine comprising a table, a mold box thereon, a pallet adapted to be seated in the mold box, means for freeing the pallet from the mold box, a cover to the mold box, a flap carried by the cover and adapted to form in conjunction with the cover the top to the mold, means for causing the cover to interlock with the mold box and to guide it in such position, and means for disengaging the cover from the mold box said means comprising a rotary support for the cover and a pedal for lifting such rotary support.

2. A molding machine comprising a mold box, a cover to the mold box, a rotary support for the cover, and means for guiding the support to hold the cover in line with the mold box.

3. A molding machine comprising a mold box and a cover to said mold box, a rotary support for the cover, means for guiding the rotary support of the cover, and means for lifting the cover to free the guiding means and permit the cover to swing on the rotary support free of the mold box.

4. A molding machine comprising a mold box and a cover thereto, a pallet in the mold box, means for freeing the pallet from the mold box, a rotary support for the cover, means for automatically guiding the cover in line with the mold box, means for elevating the support to free the cover of the mold box, and grasping means for rotating the support to swing the cover clear of the mold box.

5. A molding machine comprising a mold box and a cover thereto, a pallet forming the bottom to the mold box and shaped to form ridges in the tile or other article to be molded, means for elevating the pallet, a rotary support for the cover, means for guiding the rotary support to hold the cover in line with the mold box, means for elevating the support to free the cover from the mold box, grasping means for rotating the support to swing the cover clear of the mold box, the cover plate being provided with slots to cause the formation of ridges in the tile or other article being molded, and a flap carried by the cover provided with ribs to intermesh with the slots in the cover.

6. A tile molding machine comprising a mold box, a pallet in the mold box, means for freeing the pallet from the mold box, a cover to the mold box, a rotary support for the cover, means for guiding the rotary support of the cover, and means for lifting the cover to free the guiding means and permit the cover to swing clear from the mold box.

7. The combination with a mold box and a cover to the mold box, of a rotary support for the cover, means for guiding the rotary support, means for lifting the rotary support to free the guiding means, and means for removing the molded product from the mold box.

In testimony whereof I affix my signature, in presence of two witnesses.

LOUIS PAROTTI.

Witnesses:

JOHN HERRIN,

GEO. G. OTEY.