

W. L. KELLER.
BLOCK MACHINE.
APPLICATION FILED OCT. 20, 1908.

934,320.

Patented Sept. 14, 1909.
2 SHEETS—SHEET 1.

Fig. 1.

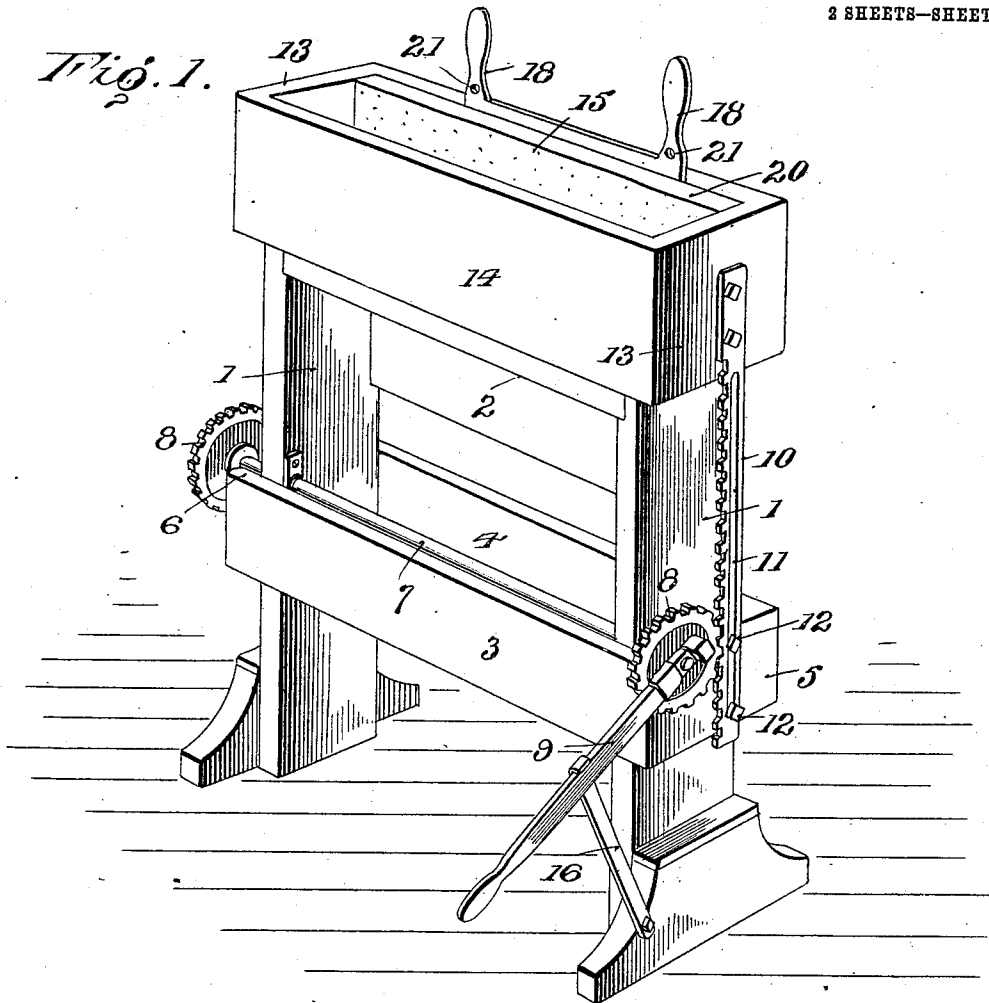


Fig. 5.

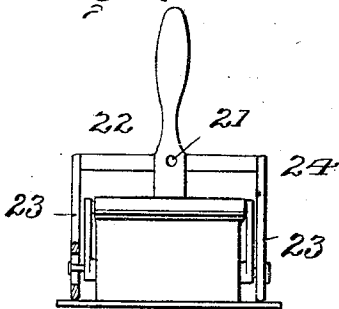
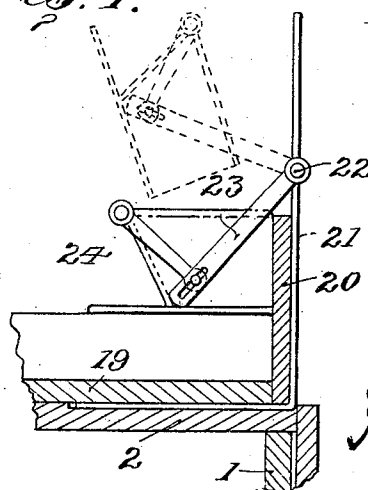


Fig. 4.



Inventor

W. L. Keller

W. L. Keller
Attorney

Witnesses

J. M. Miller
W. L. Woodson

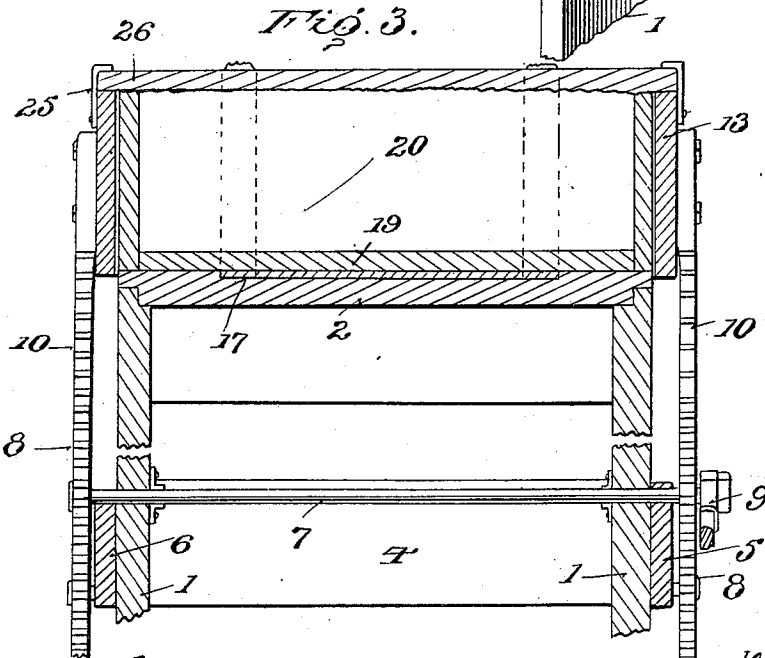
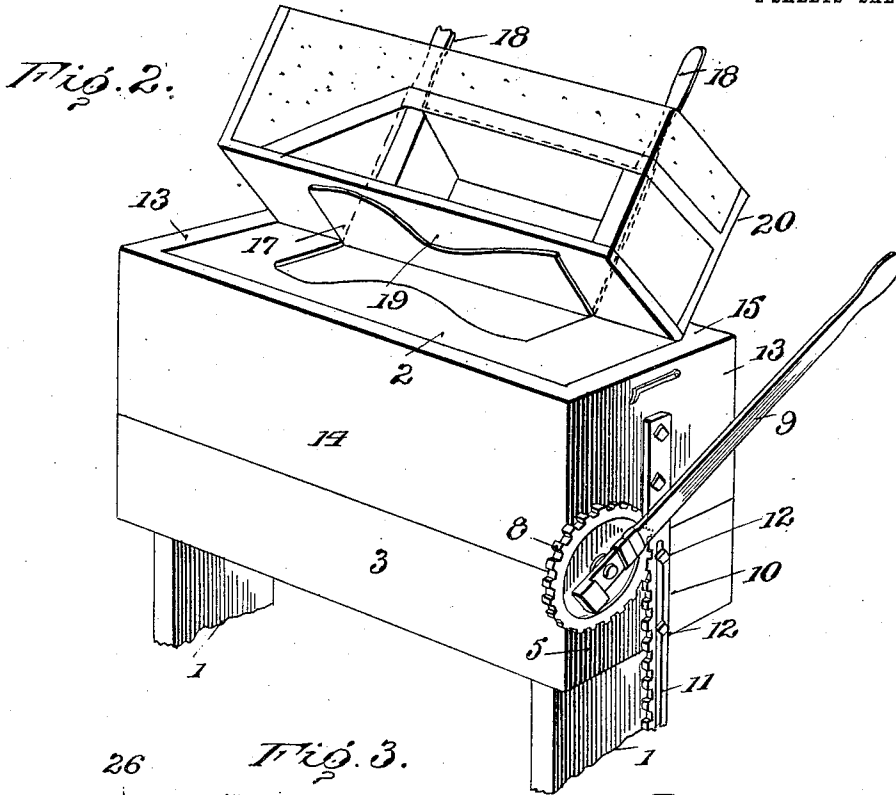
W. L. KELLER.
BLOCK MACHINE.

APPLICATION FILED OCT. 20, 1908.

934,320.

Patented Sept. 14, 1909.

2 SHEETS—SHEET 2.



Inventor

W. L. Keller

Witnesses

J. M. M. M. M.
W. R. Woodson

By

W. A. R. R. R.
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM L. KELLER, OF KEARNEY, NEBRASKA.

BLOCK-MACHINE.

934,320.

Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed October 20, 1908. Serial No. 458,700.

To all whom it may concern:

Be it known that I, WILLIAM L. KELLER, citizen of the United States, residing at Kearney, in the county of Buffalo and State of Nebraska, have invented certain new and useful Improvements in Block-Machines, of which the following is a specification.

This invention comprehends certain new and useful improvements in machines or apparatus for use in making concrete blocks for building or other purposes, and the invention has for its object, a simple, durable construction of device of this character which is composed of comparatively few parts that may be cheaply manufactured and easily assembled and which will be efficient in operation for making blocks of different designs or types.

With these and other objects in view as will more fully appear as the description proceeds the invention consists in certain constructions, arrangements and combinations of parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawings in which:

Figure 1 is a perspective view of my improved apparatus; Fig. 2 is a similar view of the upper portion of the apparatus; Fig. 3 is a longitudinal sectional view; Fig. 4 is a detail transverse sectional view showing the lug forming member in side elevation; and, Fig. 5 is a detail front elevation of such lug forming member.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

The stand of my improved block machine embodies standards 1 and a bed 2 extending across the bearings of the standards 1 and secured thereto in any desired way. The stand is provided with a frame which comprises a front 3, back 4 and ends 5 and 6 secured to the standards 1 between the upper and lower ends thereof, the said frame being rectangular as shown and serving as a support for the flask in the lowered position thereof, as well as a support for some of the actuating parts of the apparatus. A shaft 7 extends transversely across the stand through the standards 1 at about the level of the upper edge of said rectangular frame, the projecting ends of said shaft carrying

gear wheels 8, and one end of said shaft having a hand lever 9 secured to it. The gear wheels 8 mesh with the teeth of vertically extending rack bars 10, said rack bars being provided with longitudinally extending slots 11 which accommodate screws or bolts 12 that are secured to the ends 5 and 6 of the rectangular frame, so as to properly guide the rack bars up and down as the shaft 7 and the gear wheels 8 are turned by means of the hand lever 9. The bearings of the rack bars 10 are secured in any desired way to the ends 13 of the flask, the said flask being rectangular in the present instance as shown, and embodying in addition to the end piece 13, a front 14 and a back 15.

16 designates a latch bar which is pivotally connected at one end to the base of one of the standards 1, and which is provided with a hooked opposite end to engage the hand lever 9 in one position of the latter to hold the flask at the upper limit of its movement. A tilting bracket 17 is fulcrumed on the base 2, the normally upwardly projecting plate of said bracket, being formed with handle portions 18 and the other plate of said bracket is designed to directly support the pallet of the mold. The pallet in the present instance, is indicated at 19, being shown as a cheap pallet composed of a board of any size.

In practical operation, in addition to the pallet 19, I propose to use another cheap pallet 20, arranged on edge in a longitudinally extending vertically disposed position forming the back of the mold proper.

Each of the handle portions 18 of the bracket above mentioned is provided with a plurality of apertures 21 arranged one above the other, and through any one of which a bolt may extend and secure to the handle portion transversely extending bar 22, to which the arms 23 of a lug forming member of the mold are pivotally connected so that the said lug forming member may swing transversely about a horizontal axis. This lug forming member of the mold is provided with a loop handle 24 by which it may be swung over the mold or upwardly or backwardly out of the way.

In the practical use of my improved block molding machine, if it be desired to form a block with a lug thereon, of the type illustrated in my accompanying application for Letters Patent executed the 21st day of September 1908, the handle lever 9 is swung to

an upward position so that it stands vertically which will raise the flask the required distance to produce the body portion of the block, and which will also make provision
 5 for the thickness of the cheap pallet 19 which is laid on the bed 2. The mold proper is formed by the front and two end pieces of the flask, the pallet 19 on the bottom, and the corresponding pallet 20 at the rear side.
 10 The lug on the block is formed by the member 23 which is of the required shape and which is swung over on top of the flask. After the block has been thus formed, the lever 9 is swung over in a direction to lower
 15 the flask which will expose the completed block, it being understood that the lug forming member is swung back out of the way and the completed block will then be finally carried away on the cheap pallet 19. If it
 20 be desired to form deeper blocks, or corner or jamb blocks, the lever is swung in the opposite direction so as to raise the flask to the upper limit of its movement, and the lever is caught by the hooked end of the latch
 25 bar 16 so as to hold the flask in this upper position. After such block is formed, the operator by grasping the handles 18, after the flask has been again lowered, may tilt the completed block over upon the pallet 20,
 30 which has been assuming a vertical position, and the block may then be carried away on the pallet 20. This tilting movement is illustrated in Fig. 2.

Obviously the apparatus is not limited to
 35 the construction of any particular form or size of block.

If it be desired to make a block with a roughened or rock face imitation of hewn natural stone, a special pallet may be used
 40 in the bottom of the mold for that purpose and, after the block has been completed, it may be tilted up upon the cheap pallet 20 and carried away, leaving the rock ribbed or similar pallet in the mold for the formation
 45 of other blocks. By this means, it is evident that a considerable saving is effected as one of these pallets of special construction may be used in the manufacture of any desired number of blocks of the
 50 same character.

It is obvious that by providing the two handle members 18 of the bracket 17 with means for securing the bar 22 thereto, right or left hand blocks may be formed; that is to say, by changing the lug forming member
 55 23 from one handle portion to the other, the lug on the completed block may be at one end thereof or at the other.

If desired, as illustrated in Fig. 3, I may secure hooks 25 to the ends of the flask at
 60 the upper edges thereof, said hooks being designed to hold a rock face or similar form of pallet as indicated at 26, so that by working the handle 9 up and down, the flask may act in the nature of a press for the material
 65 in the mold.

It is to be understood that I use a plurality of different size lug forming members according to the exact size and shape of lug, it is desired to form. These lug forming
 70 members being detachable.

Having thus described the invention, what is claimed as new is:

1. A molding apparatus, comprising a stand, a flask mounted on said stand, an
 75 angular bracket pivotally mounted on the stand, and a lug forming member carried by one arm of said bracket.

2. A molding apparatus comprising a stand, a flask movable up and down on said
 80 stand, means for moving said flask, the stand being provided with a bed, angular brackets pivotally mounted on said bed and arranged to swing transversely thereon, and a lug forming member pivotally mounted on one
 85 arm of one of said brackets.

3. A molding apparatus, comprising a stand, embodying a bed, angular brackets pivotally mounted on said bed, one arm of each bracket being provided with an aperture,
 90 a bar arranged to be secured by a bolt in the aperture of either bracket, and a lug forming member pivotally mounted on said bar.

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

WILLIAM L. KELLER.

Witnesses:

H. F. NEAL,

M. J. GRAHAM.