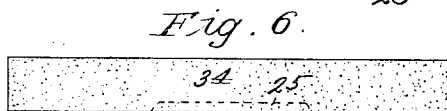
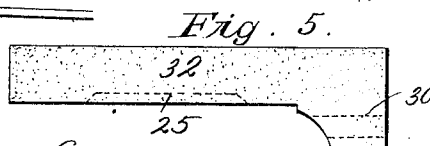
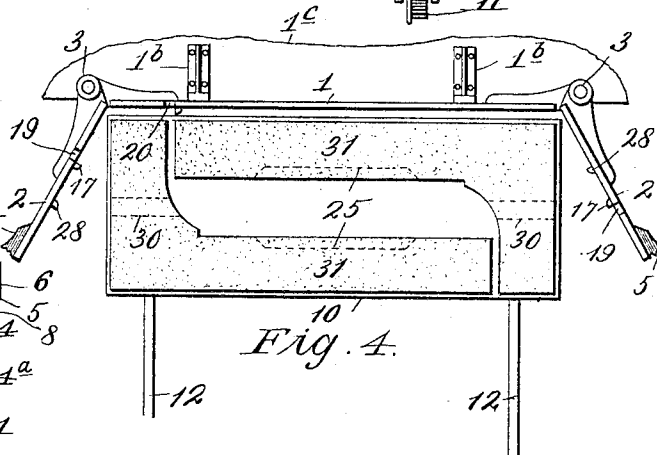
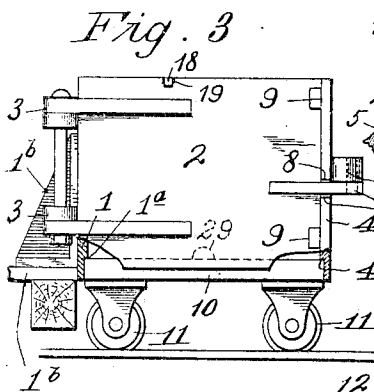
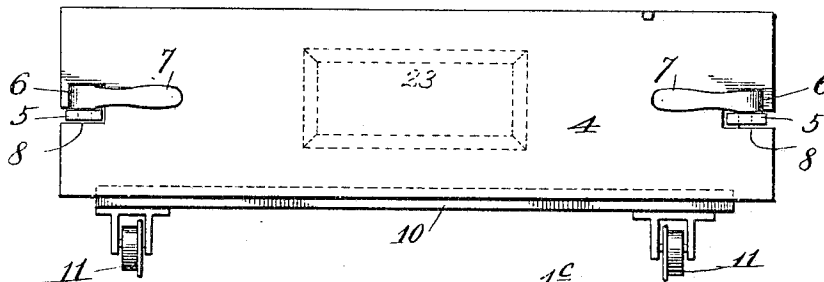
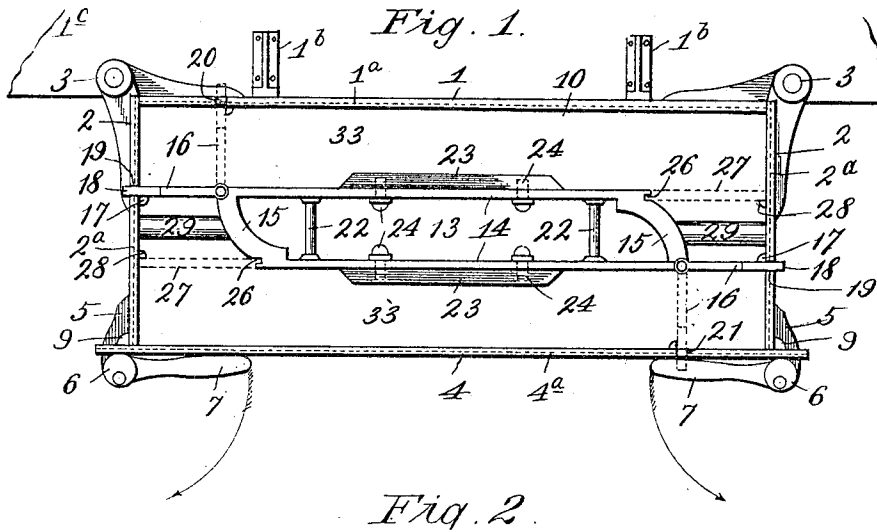


No. 819,229.

PATENTED MAY 1, 1906.

T. G. JOHNSON.
ADJUSTABLE MOLD.
APPLICATION FILED APR. 11, 1905.



Witnesses:
J. Moore.
R. Hamilton.

Inventor:
T. G. Johnson
By F. G. Fischer, Jr.

UNITED STATES PATENT OFFICE.

THEODORE G. JOHNSON, OF KANSAS CITY, MISSOURI.

ADJUSTABLE MOLD.

No. 819,229.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed April 11, 1905. Serial No. 254,959.

To all whom it may concern:

Be it known that I, THEODORE G. JOHNSON, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Adjustable Molds, of which the following is a specification.

My invention relates to improvements in adjustable molds employed in the production of building-blocks; and it consists in the novel construction, combination, and arrangement of parts hereinafter described, and pointed out in the claims.

In order that the invention may be fully understood, reference will now be made to the accompanying drawings, in which—

Figure 1 represents a plan view of my improved mold in position ready for use. Fig. 2 is a front elevation of same. Fig. 3 is a side elevation of same. Fig. 4 shows the mold in an open condition after two corner-blocks have been formed therein. Fig. 5 represents one style of block produced in my adjustable mold. Fig. 6 shows a veneering-block produced in the mold.

In carrying out my invention I employ a rectangular casing comprising a back plate 1, side plates 2, secured to the opposite ends of the back plate by hinges 3, and a face-plate 4. Side plates 2 are provided with lugs 5, to which eccentrics 6, having handles 7, are pivotally secured. Face-plate 4 has open slots 8 at its opposite ends for the reception of lugs 5 when the box is in a closed position, so that eccentrics 6 may be brought to bear against said face-plate in order to force it tightly into contact with the forward edges of side plates 2. Face-plate 4 is provided near its ends with lugs 9, which engage the side plates and prevent the latter from accidentally swinging open while the concrete or other material employed in the construction of the blocks is being tamped in the mold.

The lower portions of back plate 1, side plates 2, and face-plate 4 are reduced in thickness to form shoulders 1^a, 2^a, and 4^a, respectively, which overlap the edges of an off-bearing plate 10 to form tight joints between said plates. Off-bearing plate 10 is mounted upon rollers 11, and the truck thus produced is arranged to travel upon a track 12 when conveying the building-blocks from the mold.

13 designates a core comprising two parallel sides 14 and two quadrant-shaped ends 15, formed integral with said sides and provided

with hinged partitions 16, which may be arranged either in alinement with sides 14, as shown by full lines, Fig. 1, or at right angles thereto, as shown by dotted lines in said figure. When the partitions occupy either of the positions shown, they abut against lugs 17 on the interior of the casing and are further held from accidental movement by spring-latches 18, adapted to engage notches 19 in the side plates or notches 20 21 in the back and face plates, respectively. Core 13 is provided with a pair of transverse handles 22, so that it may be raised vertically from the casing without chipping or otherwise injuring the blocks.

23 designates filling-blocks detachably secured to the opposite sides of the core by pins 24 for the purpose of forming recesses 25 in the inner sides of the blocks to save material and lighten said blocks. (See Fig. 4.)

26 designates two vertical grooves arranged diagonally opposite each other in the ends of the core for the reception of detachable partitions 27, inserted in the core-box when it is desired to produce the veneering-blocks. The outer ends of partitions 27 abut against lugs 28, formed integral with the side plates to prevent said partitions from swinging backwardly from pressure of the material being tamped in the mold.

29 designates two strips, semicircular in cross-section, secured to the off-bearing plate 10 for the purpose of forming air-channels 30 in the ends of blocks 31 32.

1^b designates a pair of brackets secured at their lower horizontal portions to a platform 1^c and at their vertical portions to the back plate in order to support the casing, so that when the latter is opened the off-bearing plate, with its blocks, may be moved a suitable distance from the mold to dry.

In practice when it is desired to produce building-blocks 32 for a two-piece wall the hinged partitions 16 are adjusted to the position shown by full lines, Fig. 1. The material is then placed in compartments 33, where it is thoroughly tamped, and after said compartments have been filled the upper sides of the blocks are leveled by drawing a straight-edge across the upper surface of the casing. The casing is then opened by removing face-plate 4 and swinging the side plates outwardly to the position shown in Fig. 4. Core 13 is then raised vertically from between the blocks, pins 24 being previously removed, so that the filling-blocks 23 will remain in the

building-blocks. The latter are then conveyed from the mold a suitable distance on the off-bearing plate 10 and left to dry, another off-bearing plate being placed beneath the casing preparatory to the production of two more blocks. The filling-blocks 23 are removed from the building-blocks before the latter are conveyed from the mold, so that they may be again attached to the core after the latter has been placed in position in the casing. When it is desired to form corner-blocks 31, partitions 16 are adjusted to the dotted positions shown in Fig. 1, and when it is desired to produce veneering-blocks 34 partitions 27 are placed in their respective positions.

By thus providing a mold wherein two blocks may be formed it is evident that considerable time will be saved, as the operator need not stop to open and close the casing for each block. By mounting the off-bearing plate upon rollers and having the latter travel upon a track only one workman will be required to produce and take the blocks from the mold, whereas heretofore it has required the services of two men to lift the off-bearing plate, with its load, and carry it from the mold.

The advantage in making the ends of the core quadrant-shaped is that it permits of additional thickness at the corners of blocks 31 32, so that the latter will not be liable to become broken at these points.

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

1. An adjustable mold consisting of a casing, an off-bearing plate adapted to be placed and removed from beneath said casing, a core separable from the casing and the off-bearing plate, partitions hinged to said core, and means for locking said partitions from accidental movement.

2. An adjustable mold consisting of a casing having notches in its upper surface, an off-bearing plate arranged beneath said casing, a core separable from the casing and the off-bearing plate, partitions hinged to two diagonal corners of said core adapted to be arranged in alinement with the sides of the core or at right angles thereto, and latches se-

cured to the partitions adapted to engage the notches in the casing.

3. An adjustable mold consisting of a casing, an off-bearing plate adapted to be placed and removed from beneath said casing, a core separable from the casing and the off-bearing plate and adapted to rest upon the latter, and partitions detachably secured to said core and casing.

4. A mold for building-blocks consisting of a casing, an off-bearing plate arranged beneath said casing, a core arranged in the casing and resting upon said off-bearing plate, filling-blocks of less height and length than said core, and pins for detachably securing said filling-blocks to the core, said pins being arranged to be withdrawn through the interior of the core so the latter may be removed from the casing and leave the filling-blocks embedded in the building-blocks, substantially as described.

5. In a mold for building-blocks, the combination of a track, a platform located at one end thereof, a casing supported by said platform above the track, and a truck consisting of an off-bearing plate arranged beneath the casing and rollers carrying said off-bearing plate and arranged to travel upon the track, substantially as described.

6. In a mold for building-blocks, in combination, a track, a truck arranged to travel thereon, and a casing fixed above said track and provided with adjustable walls adapted to embrace the upper portion of the truck, substantially as described.

7. The combination with a track, of a truck consisting of an off-bearing plate and rollers mounted upon the track and carrying said off-bearing plate, an adjustable casing arranged to inclose the off-bearing plate, a core separable from the casing and the off-bearing plate arranged to rest upon the latter, and strips secured to the off-bearing plate and arranged between the casing and the core.

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

THEODORE G. JOHNSON.

Witnesses:

J. MOORE,

F. G. FISCHER.