

Oct. 7, 1930.

A. T. BATEMAN ET AL

1,777,289

MOLD STAND

Filed Feb. 25, 1929

2 Sheets-Sheet 1

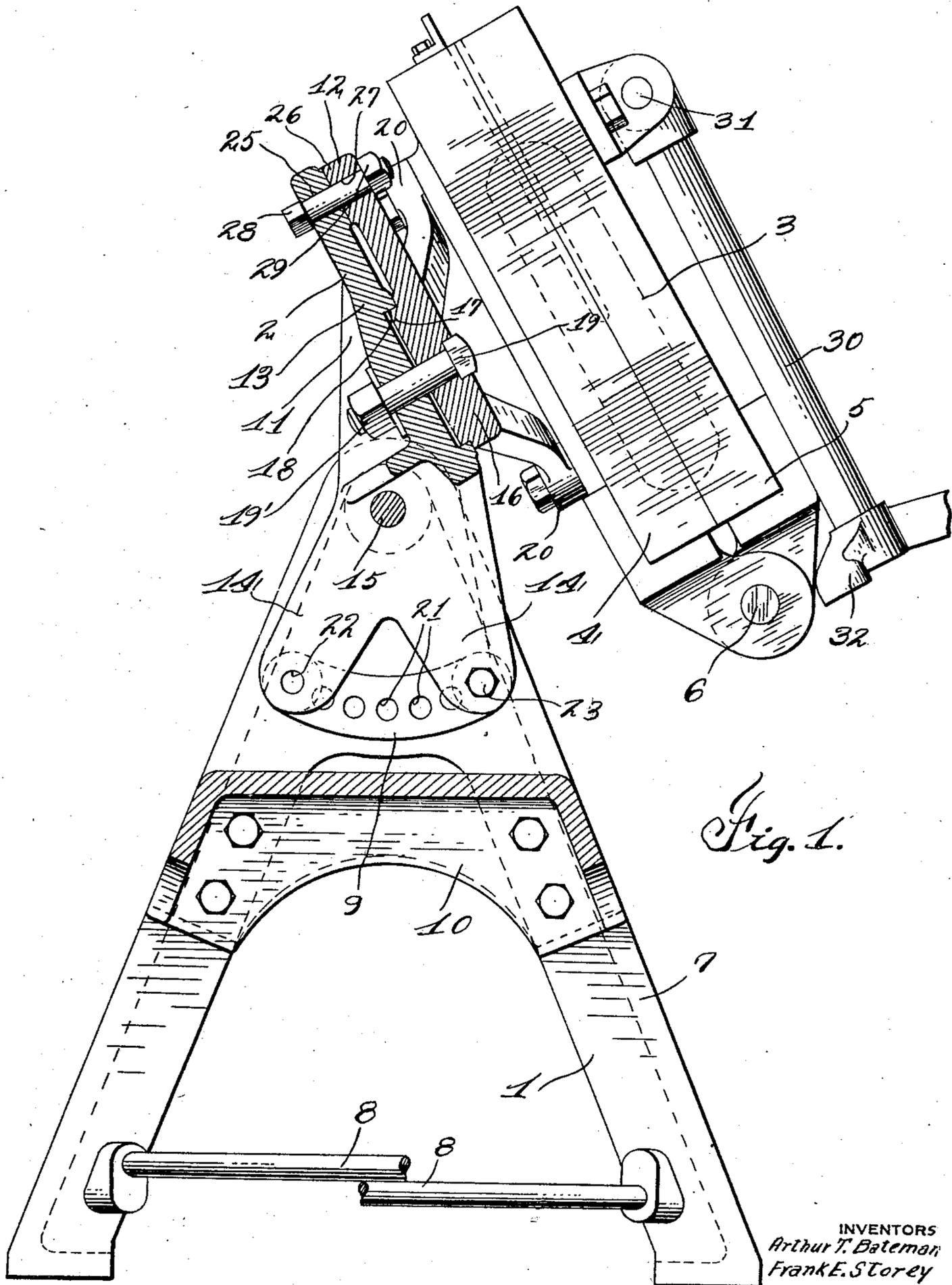


Fig. 1.

INVENTORS
Arthur T. Bateman
Frank E. Storey

BY

Whittmore & Whittmore
Belknap

ATTORNEYS

Oct. 7, 1930.

A. T. BATEMAN ET AL

1,777,289

MOLD STAND

Filed Feb. 25, 1929

2 Sheets-Sheet 2

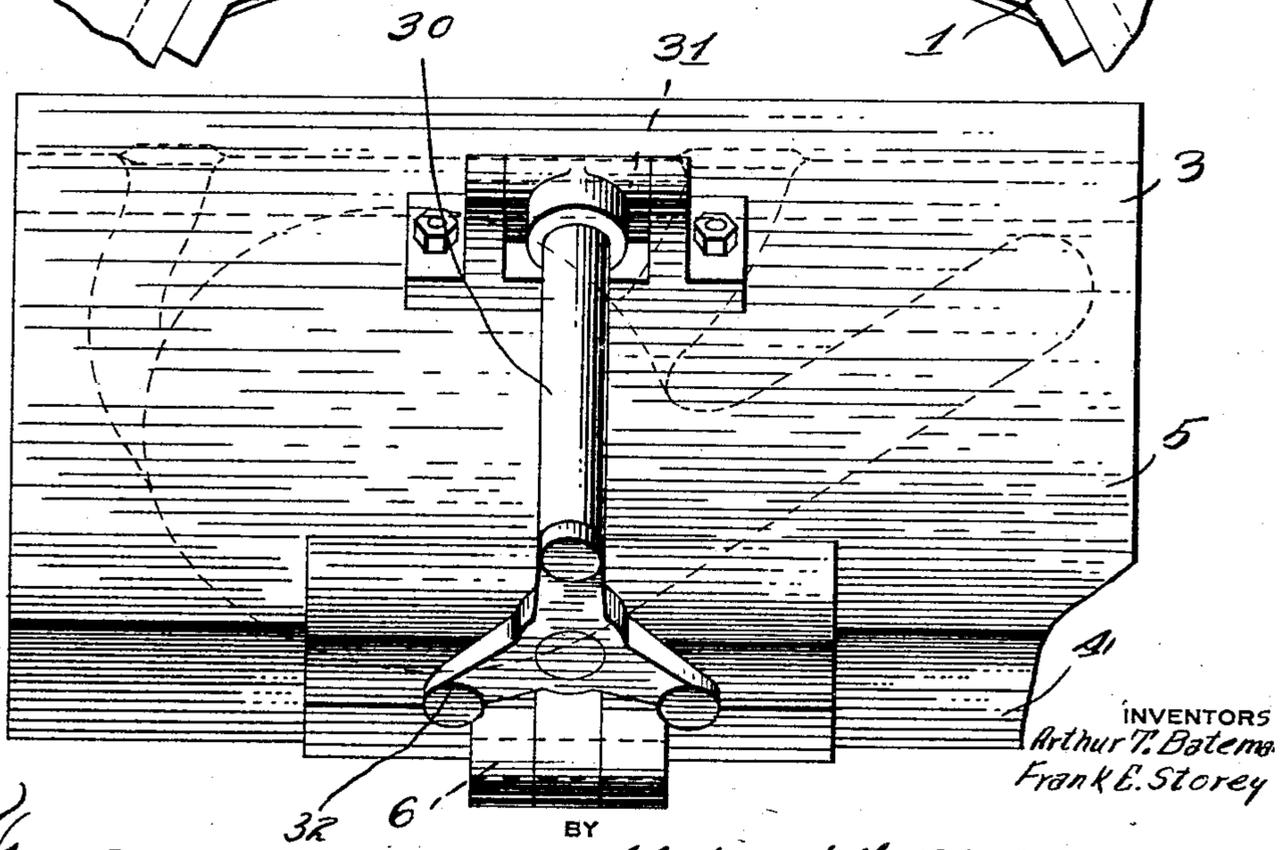
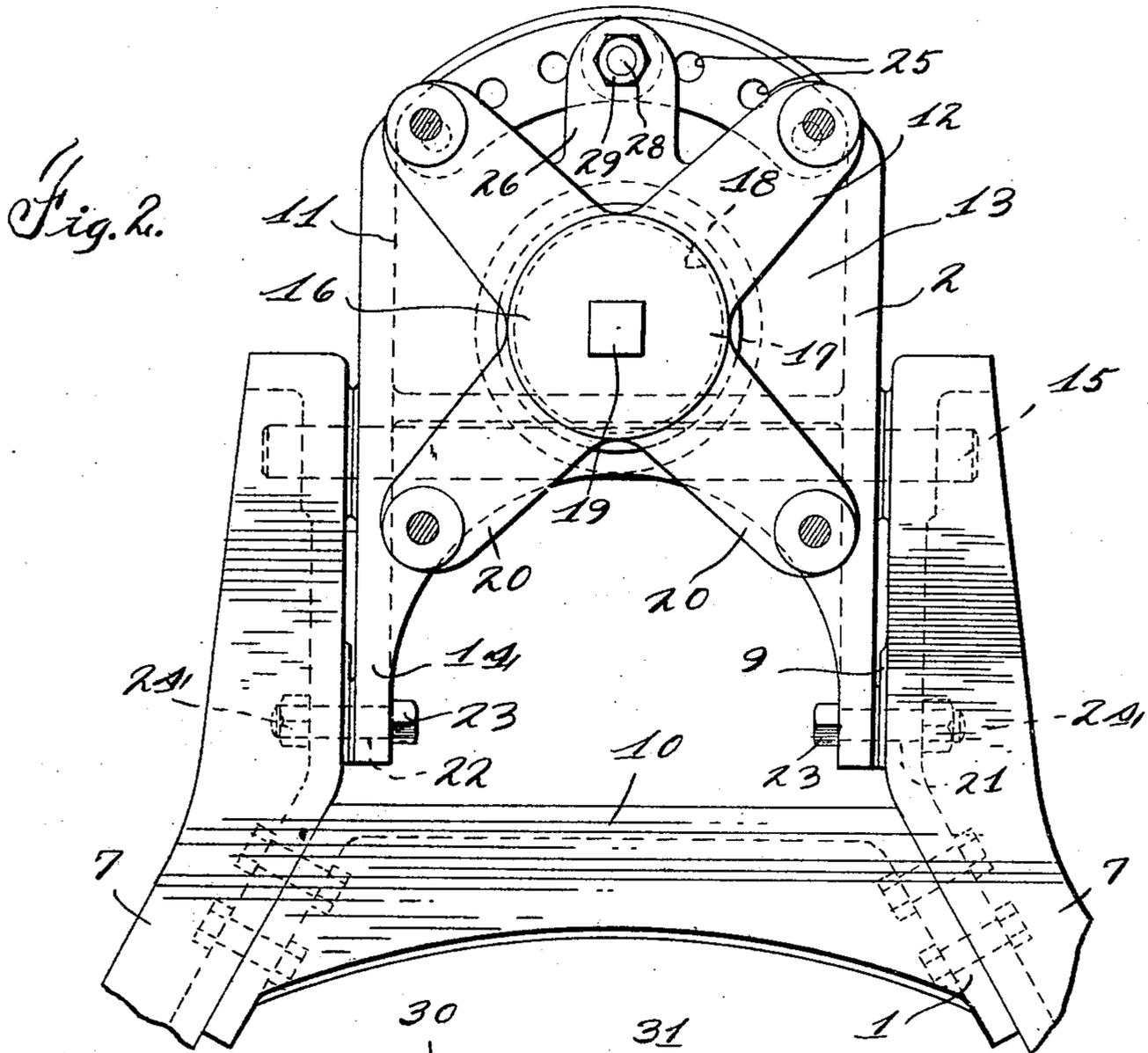


Fig. 3.

INVENTORS
Arthur T. Bateman
Frank E. Storey

BY

Whittemore Hulbert Whittemore Belknap

ATTORNEYS

UNITED STATES PATENT OFFICE

ARTHUR T. BATEMAN AND FRANK E. STOREY, OF DETROIT, MICHIGAN, ASSIGNORS TO
BOHN ALUMINUM & BRASS CORPORATION, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN

MOLD STAND

Application filed February 25, 1929. Serial No. 342,554.

The invention relates to stands for supporting molds and has for one of its objects the mounting of a mold in a position such that the mold cavity will be properly filled during the casting operation. Another object is to so construct the stand that the mounting is readily accessible and may be readily adjusted. With these as well as other objects in view, the invention resides in the novel features of construction and combinations and arrangements of parts as more fully hereinafter set forth.

In the drawings:—

Figure 1 is a sectional end elevation of a mold stand embodying our invention;

Figure 2 is a front view thereof with the mold removed.

Figure 3 is a perspective view of the mold.

The mold stand has the base 1 and the mounting 2 upon the base for the mold 3, which as shown is of the book type having the cooperating permanent or metal sections 4 and 5, which together form the mold cavity and which are hinged to each other at their lower edges by the pivot 6. The base 1 has the upright V-shaped frame members 7 at its ends, the diagonally opposite legs of which are tied together near their lower ends by the rods 8. These frame members have at their upper ends the integral segmental portions 9 which extend parallel to each other in a vertical direction. 10 is a shelf extending between the frame members adjacent to but below the segmental portions 9 and rigidly secured to the frame members for assisting in holding the same in fixed relation to each other.

The mounting 2 comprises the mounting members 11 and 12, the former having the body 13 and the parallel pairs of arms 14, which extend inside and adjacent to the segmental portions 9. The mounting member 11 is pivotally mounted upon the base by means of the pin 15 which extends transversely through the upper parts of the seg-

mental portions 9 and the pairs of arm 14. The mounting member 12 has the body 16 which is formed with the annular hub 17 extending into the annular recess 18 in the body 13. The mounting member 12 is pivotally connected to the mounting member 11 as by means of the bolt 19 extending transversely through the bodies 13 and 16 concentric with the hub 17 and the nut 19' threaded upon the bolt. This bolt further extends transversely of the pin 15. The mounting member 12 has the integral forwardly offset arms 20 to which the mold section 4 is rigidly secured.

With the construction as thus far described, it will be seen that the mounting member 12 is angularly movable through a path transverse to that of the mounting member 11 so that the mold 3 is universally mounted upon the base 1 of the stand, thereby providing for universally adjusting the permanent mold to secure a position where its cavity may be properly filled through its gate or gates during the casting operation. For securing the mounting members in their various positions of angular adjustment, we have provided means upon the base for holding the mounting member 11 and means upon the mounting member 11 for holding the mounting member 12. In detail, the segmental portions 9 are formed with the arcuate series of holes 21 concentric with the pin 15 and each of the arms 14 is formed with the hole 22 adapted to register with the holes 21 upon swinging of the mounting member 11 about its pivot 15. Suitable means such as the bolt 23 and nut 24 may be passed through aligned holes to secure the mounting member 11 in its position of rotative adjustment relative to the base 1. The body 13 of the mounting member 11 has the arcuate series of holes 25 at its upper end concentric with the pivot 19 and the mounting member 12 has the arm 26 which is provided at its upper end with the hole 27 adapted to

register with the holes 25 upon angular movement of the mounting member 12 relative to the mounting member 11. The mounting member 11 may be secured in its various positions of rotative adjustment relative to the mounting member 12 by means of the bolt 28 extending through aligned holes and the nut 29 threaded upon the bolt.

The mold section 5 is adapted to be swung away and downwardly from the mold section 4 to open the mold and for the purpose of supporting this mold section 5 when in open position we have provided the leg 30 which is pivotally connected at its upper end by the pin 31 to the mold section and preferably has the foot 32 for engaging the floor.

From the above description it will be seen that we have provided a mold stand having a universal mounting for the mold adjustable to support the mold in position to produce good castings.

What we claim as our invention is:

1. In a stand for supporting a mold, the combination of a base, a mounting for the mold having a member pivotally mounted upon said base to move angularly through a path, and a second member pivotally mounted upon said first mentioned member to move angularly through a path transverse to the first mentioned path, said second mounting member having a laterally extending arm and a plurality of forwardly offset arms for carrying the mold and means cooperating with said laterally extending arm in holding said last mentioned mounting member in its various positions of angular movement.

2. In a stand for supporting a mold, the combination of a base, a mounting member pivotally mounted upon said base and having a body and an arm, said base having a segmental portion for cooperating with said arm to hold said mounting member in its various positions of angular movement about its pivot, a second mounting member having a body pivotally mounted upon said first mentioned body to move angularly through a path substantially parallel to the pivot of said first mentioned mounting member, said second mounting member having arms for carrying the mold and an arm adapted to cooperate with said first mentioned mounting member to hold said second mentioned mounting member in its various positions of angular movement relative to said first mentioned mounting member.

3. In a stand for supporting a mold having pivotally connected sections, the combination of a base, a universal mounting for the mold upon said base and to which one of the mold sections is fixedly secured, and a leg pivotally connected to the swinging mold section for supporting the same when swung to open position.

4. In a stand for supporting a mold, the combination of a base, a mounting member

pivoted upon said base and having a body portion, a second member pivoted upon said first-mentioned member and movable in a path transverse to the path of movement of said first-mentioned member, one of said members being provided with an annular recess and the other with an annular hub portion seating in said recess concentric with the pivot for the second-mentioned member, said second-mentioned member carrying the mold and having an arm cooperating with said first mentioned member for holding said second mentioned member in various positions of angular movement.

5. In a stand for supporting a mold, the combination of a base, a mounting member pivoted upon said base and having a body portion, a second member pivoted upon said first-mentioned member and movable in a path transverse to the path of movement of said first-mentioned member, one of said members being provided with an annular recess and the other with an annular hub portion seating in said recess concentric with the pivot for the second-mentioned member, said second member having a plurality of forwardly offset arms to which the mold is secured and a laterally extending arm cooperating with said first mentioned member for holding said second mentioned member in various positions of angular movement.

6. In a stand for supporting a mold, the combination of a base, a mounting member pivoted upon said base, a second mounting member pivoted upon said first mentioned mounting member and movable in a path transverse to the movement of the said first named member, said second mentioned mounting member carrying the mold and having an arm cooperating with said first mentioned member for holding said second mentioned member in various positions of angular movement.

7. In a stand for supporting a mold, the combination of a base, a mounting member pivoted upon the base and having an arcuate series of apertures, a second mounting member pivoted upon said first-named member and movable in a path substantially transverse to the movement thereof, said second mounting member having an arm provided with an aperture adapted to selectively register with the apertures in said first-named member, and securing means extending through the aperture in said arm and the registering aperture of said series whereby to hold said second-named member in various positions of adjustment.

8. In a mold stand, the combination of a base, a mold comprising a pair of sections, one of said sections being fixedly secured to said base and the other of said sections being swingable with respect thereto, and a leg pivotally connected to the swinging mold sec-

tion for supporting the same when swung to open position.

5 9. In a mold stand, the combination of a base, a mold comprising pivotally connected sections, one of said sections being fixedly secured to said base, and a leg pivotally connected to the swinging mold section for supporting the same when swung to open position.

10 In testimony whereof we affix our signatures.

ARTHUR T. BATEMAN.
FRANK E. STOREY.

15

20

25

30

35

40

45

50

55

60

65