

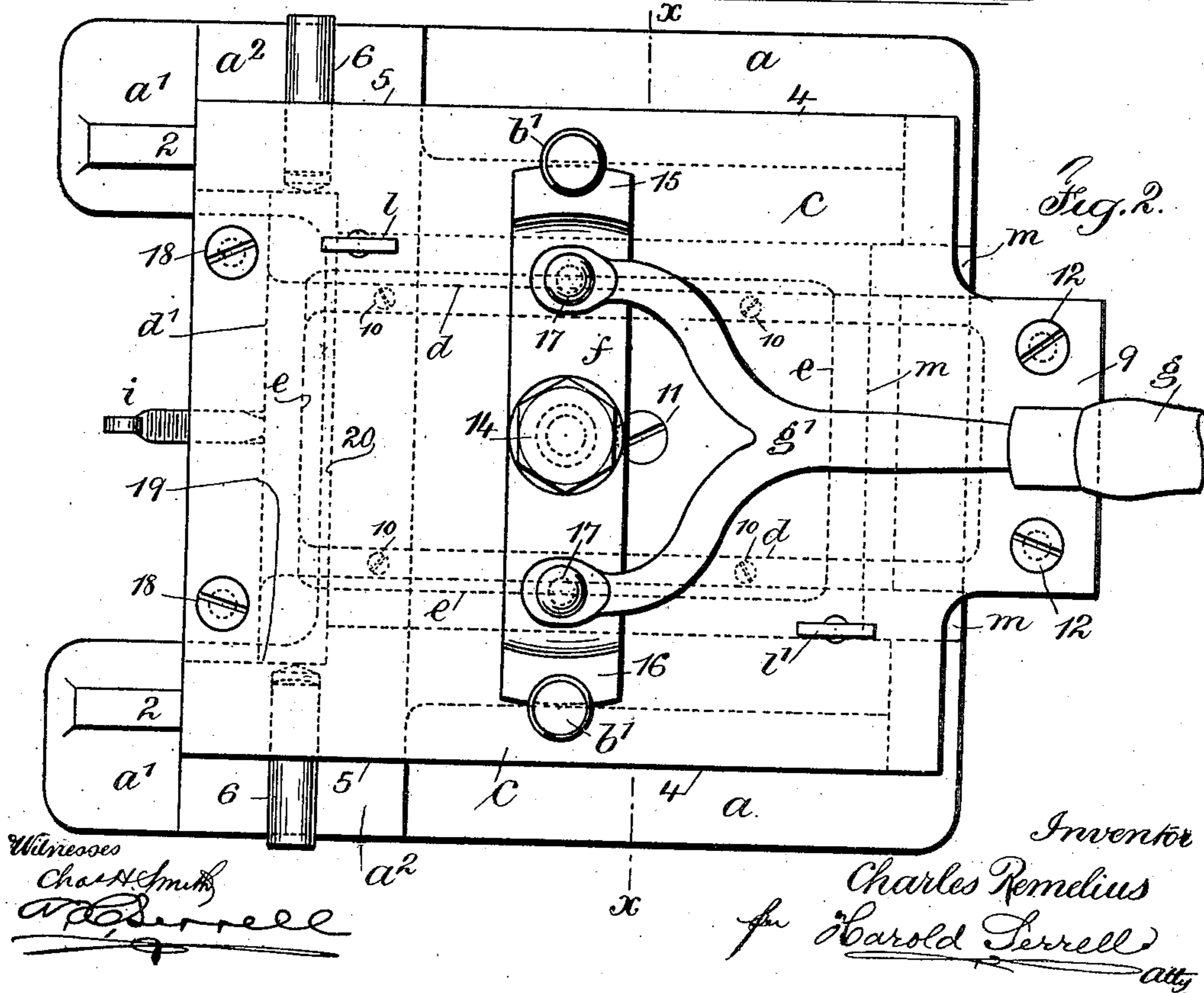
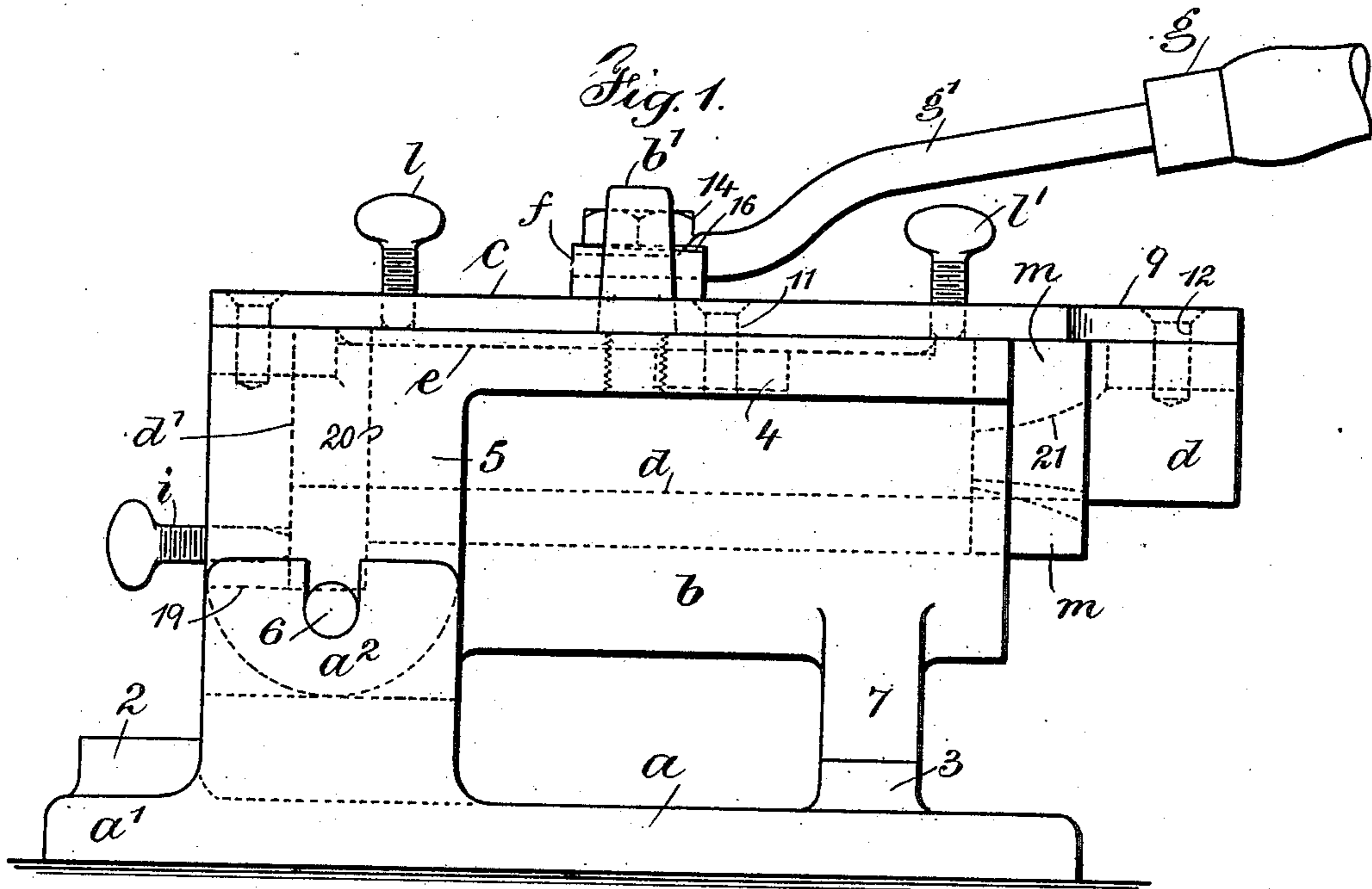
No. 827,466.

PATENTED JULY 31, 1906.

C. REMELIUS.  
MOLD FOR BABBITTING BEARINGS.

APPLICATION FILED SEPT. 23, 1905.

3 SHEETS—SHEET 1.



Witnesses  
Charles Remelius  
Harold Terrell

Inventor  
Charles Remelius  
for Harold Terrell atty

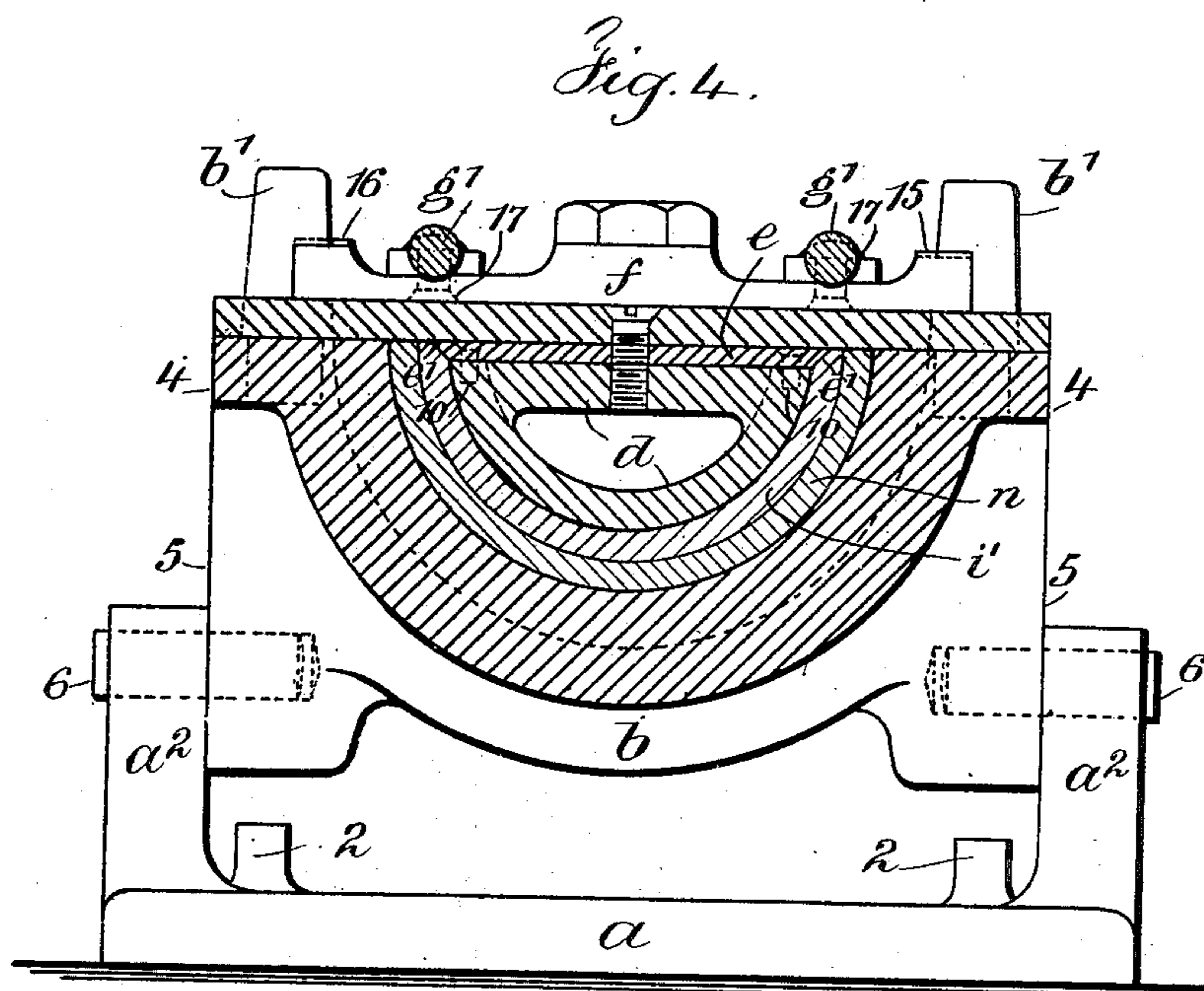
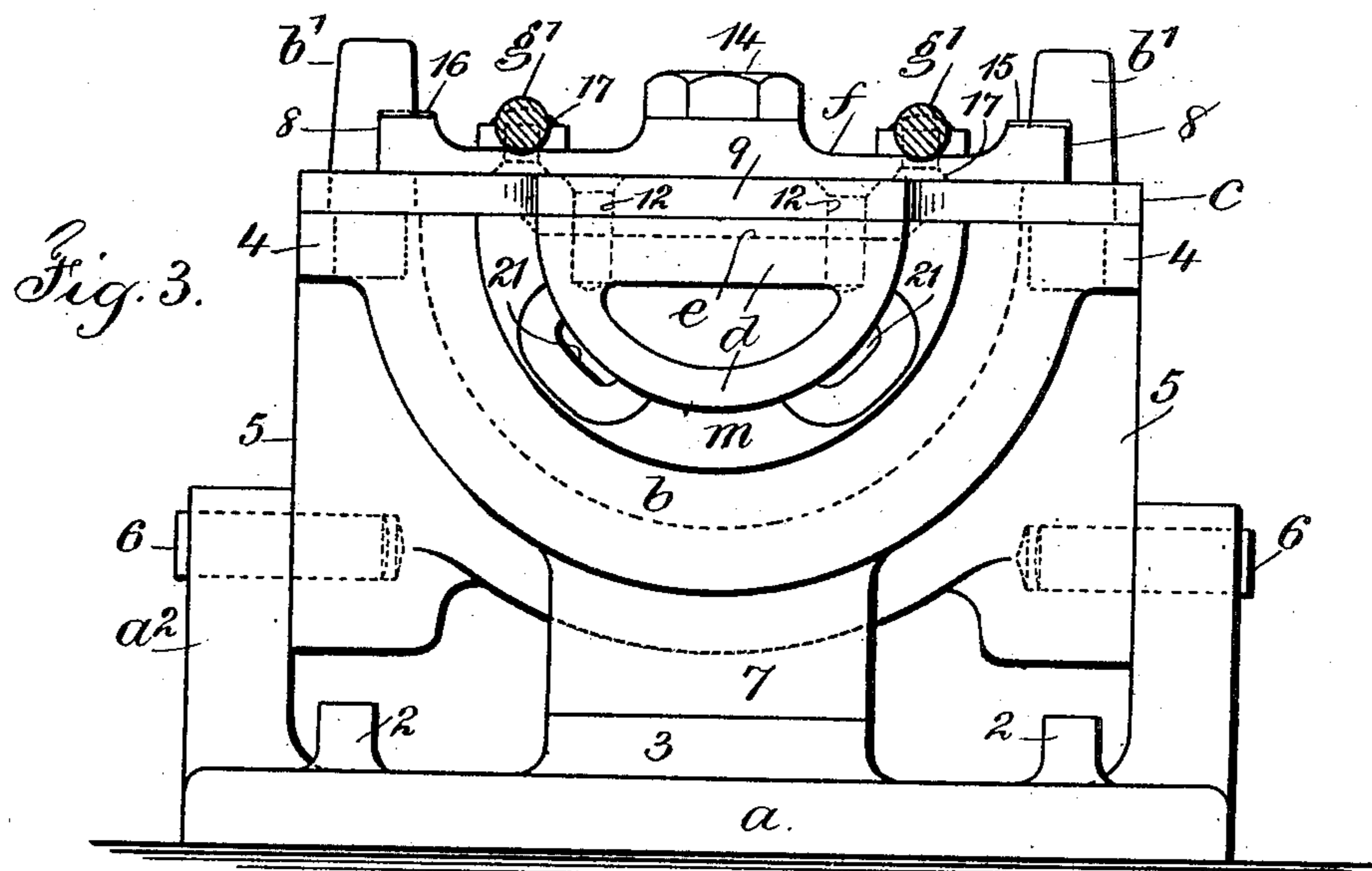
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3 SHEETS—SHEET 2.



Witnesses

Chas. H. Smith  
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att'y

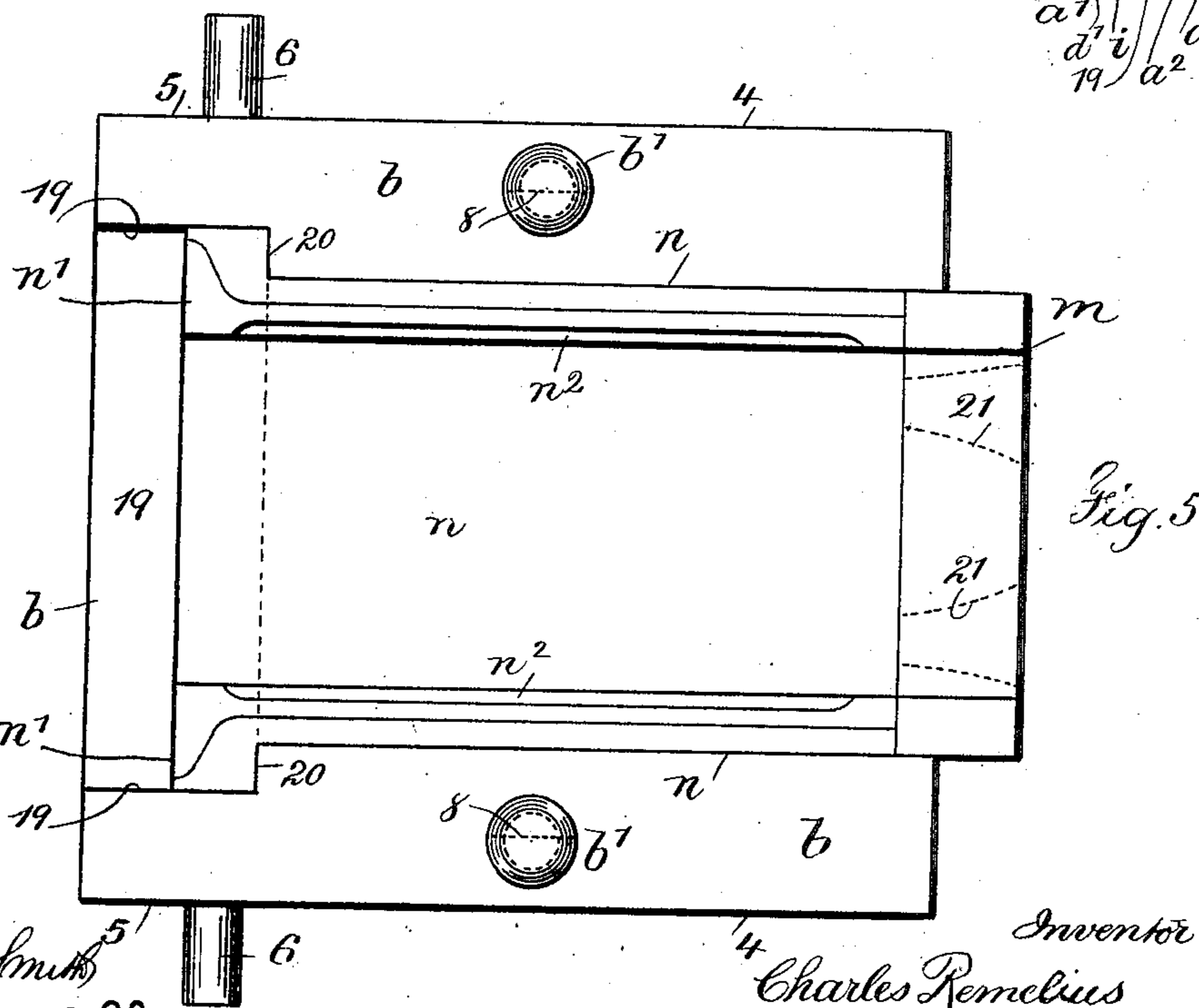
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3 SHEETS—SHEET 3.



Witnesses  
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# UNITED STATES PATENT OFFICE.

CHARLES REMELIUS, OF NEWARK, NEW JERSEY, ASSIGNOR TO THE COLUMBIA MACHINE WORKS AND MALLEABLE IRON COMPANY, OF BROOKLYN, NEW YORK, A CORPORATION OF NEW YORK.

## MOLD FOR BABBITTING BEARINGS.

No. 827,466.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed September 23, 1905. Serial No. 279,779.

*To all whom it may concern:*

Be it known that I, CHARLES REMELIUS, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented an Improvement in Molds for Babbitting Bearings, of which the following is a specification.

My invention relates to a mold for babbitting bearings; and the object thereof is the provision of an apparatus in which journal-bearings particularly may be babbitted or rebabbitted, as the same from wear or other causes becomes necessary.

In carrying out my invention I employ a base provided with suitable raised bearings and stop-rests thereon, a body member of general semicylindrical structure provided with trunnions adapted to be received in the bearings of said base, a cover-plate, a core and end plate secured thereto, means for removably securing the cover-plate and core to the body member, means for adjusting the longitudinal position of the journal-bearing to be babbitted, means for adjusting the seated position of the journal-bearing to be babbitted, and means for directing the path of the molten metal while being poured into the mold, all of which features will be hereinafter more particularly described.

In the drawings, Figure 1 is a side elevation of my improved apparatus. Fig. 2 is a plan of the same. Fig. 3 is an end elevation and partial section. Fig. 4 is a sectional elevation on line  $x x$  of Fig. 2. Fig. 5 is a plan of the body member of the mold with the journal-bearing and pouring device in position. Fig. 6 is a side elevation of the apparatus, on a reduced scale, showing the same in a vertical position; and Fig. 7 is a central longitudinal section and elevation on the same scale as Fig. 6, also showing the parts in a vertical position.

In the drawings,  $a$  designates a base generally rectangular in outline and provided on the opposite sides at one end with extensions  $a'$ , on which are provided stop-rests 2 and adjacent to the inner edge of which are suitable raised bearings  $a^2$  and at the opposite end of the base  $a$  and preferably centrally disposed is a stop-rest 3.  $b$  designates the body member of a mold which is preferably of semicylindrical structure pro-

vided at each edge with an outwardly-extending flange 4 and at one end with an enlarged portion providing the straight walls 5, adapted to fit between the said raised bearings  $a^2$  of the base, and in oppositely-disposed positions in the said walls 5 suitable trunnions 6 are employed adapted to be received in suitable grooves provided therefor in the bearings  $a^2$ . In this wall 5 at one end of the body member is a semicircular recess 19, and the journal to be babbitted is received in the body member with the flange 65 of the journal in said semicircular recess resting against the shoulder 20, against which the flange of the bearing to be babbitted is brought to bear in the process of babbitting or rebabbitting the same, as clearly indicated in Figs. 5 and 7.

At the opposite end of the body member  $b$  a lug 7 is provided in such a position as to contact with the stop-rest 3 of the base when the body member of the mold is in a horizontal position, as indicated in Figs. 1 to 4, inclusive. The faces of the flanges 4 of the body member  $b$  are provided in a central position with stud-pins  $b'$ , in each of which there is a groove 8.

$c$  designates a cover-plate generally conforming in outline with the body member  $b$  of the mold, with the exception that said cover-plate is appreciably longer than the body member of the mold, and it is provided at one end with an extended portion, (indicated at 9,) and this cover-plate is provided in the requisite positions with suitable apertures to receive the said stud-pins  $b'$ , fixed in the body member of the mold.

$d$  is a hollow core semicylindrical in cross-section and of a length extending longitudinally through the body member. The core has formed integral therewith a semicircular flange  $d'$ , fitting the semicircular recess 19 beyond the flange of the journal placed in the body member. This core is formed with a substantially central bridge-piece, and the opposite edges are recessed to receive a plate  $e$ , secured to the core by screws 10. The opposite projecting edges of this plate  $e$  are beveled upon the under surface. The upper flat surface of the core comes against the under surface of the cover-plate  $c$  with the plate  $e$  intervening, and screws 11 and 12 pass through the plate  $c$  into the core to connect

the parts firmly together. The projecting edges of the plate *c* form the grooves in the edges of the babbitting of the journal. I also employ a cross-bar *f*, pivotally connected to the central portion of the cover-plate *c* by means of a pivot-bolt 14, and the opposite ends of the cross-bar *f* are preferably rounded and beveled in opposite directions, as indicated at 15 16, thereby forming wedge ends which are adapted to enter the grooves 8 in the stud-pins *b'*.

*g* is a handle secured to a suitable shank *g'*, whose bifurcated ends are secured to the cross-bar *f* on opposite sides of the pivot-bolt 14 by means of rivets 17 or otherwise. The pivot-bolt 14 connects the cross-bar *f* to the cover-plate *c*, and it will be manifest from this structure that by turning the cross-bar *f*, through the intervention of the handle *g* and shank *g'*, the cover-plate *c* may be locked upon the body portion *b* of the mold by means of the wedge ends of the cross-bar entering the grooves in the said stud-pins which project through the cover-plate when the parts are in place.

*i* designates a screw passing centrally through the end plate *d'* in such a position as to enable its inner extremity to contact with the flange *n'* of the bearing *n* when the same is in position within the body member, and on opposite sides and also at opposite ends of the cover-plate *c* I employ screws *l l'*, respectively, passing through the said cover-plate in such positions that their inner extremities will respectively engage opposite sides of the bearing *n* when the same is within the mold.

It will be manifest that by means of the screw *i* the longitudinal position of the bearing within the mold may be fixed and also that by means of the screws *l l'* the seated position of the bearing within the mold may be fixed. I also employ a curved pouring-plate *m*, provided with suitable tapering slots 21 and adapted to fit snugly in the mold around the core *d* and between the same and inner surface of the body member, and this pouring-plate is movable to accommodate the length of the journal to be babbitted.

As will be readily apparent, I have designed the hereinbefore-described apparatus to assume a horizontal position, as indicated in Figs. 1 to 4, inclusive, in order that the various parts may be more readily separated and assembled and in order that the bearing to be babbitted or rebabitted may be readily brought to position within the mold, and when so placed the mold is to be swung from a horizontal to a vertical position, as illustrated in Figs. 6 and 7, in which the end plate *d'* rests against the stops 2 and the parts are in the most advantageous position for the pouring of the molten metal into the mold to form a babbit lining, (indicated at *i'*, Figs. 4 and 7.)

I claim as my invention—

1. In a babbitting-mold, a base, a body member, a cover-plate therefor, a core and end plate formed therewith secured to said cover-plate and adapted to be received in the body member and in a recess in the end of the said body member, means for removably securing the said cover-plate to the body member, means for fixing the longitudinal position of the bearing to be babbitted, and means for fixing the seated position of the bearing to be babbitted.

2. In a babbitting-mold, a base, a body member, a cover-plate therefor, a core and end plate formed therewith secured to said cover-plate and adapted to be received in the body member and in a recess in the end of the said body member, means for removably securing the said cover-plate to the body member, means for fixing the longitudinal position of the bearing to be babbitted, means for fixing the seated position of the bearing to be babbitted, and a pouring-plate having tapering slots therein adapted to be received around the said core and between the same and the concave inner surface of the said body portion and secured to the cover-plate.

3. In a babbitting-mold, a base, a body member, a cover-plate therefor, a core and end plate formed therewith secured to said cover-plate and adapted to be received in the body member and in a recess in the end of the said body member, means for removably securing the said cover-plate to the body member, means for fixing the longitudinal position of the bearing to be babbitted, means for fixing the seated position of the bearing to be babbitted, a pouring-plate having tapering slots therein adapted to be received around the said core and between the same and the concave inner surface of the said body portion and secured to the cover-plate, and means for swinging the said body member from a horizontal to a vertical position and vice versa.

4. In a babbitting-mold, a base, stop-rests and bearings thereon, a body member, trunnions thereon adapted to be received in the said bearings, a lug on the said body member and upon which the same rests when in a horizontal position, a cover-plate, a core, means for securing the cover-plate to the body member, adjusting means for fixing the longitudinal position of the bearing to be babbitted, and other adjusting means for fixing the seated position of the bearing to be babbitted.

5. In a babbitting-mold, a base, a body member so mounted on said base as to be swung from a horizontal to a vertical position and vice versa a cover-plate for the body member, a core and end plate formed therewith secured to the said cover-plate, and the end plate adapted to be received in and to fit into a recess in the end of the said body

member, means for securing the cover-plate and parts associated therewith to the body member, means for fixing the longitudinal position of the bearing to be babbitted, and means for fixing the seated position of the bearing to be babbitted.

6. In a babbitting-mold, a base, a body member so mounted on said base as to be swung from a horizontal to a vertical position and vice versa, a cover-plate for the body member, a core and end plate formed therewith, secured to the said cover-plate and the end plate adapted to be received in and to fit into a recess in the end of the said body member, means for securing the cover-plate and parts associated therewith to the body member, a screw passing through the said end plate for fixing the longitudinal position of the bearing to be babbitted, and screws passing through the said cover-plate for fixing the seated position of the bearing to be babbitted.

7. In a babbitting-mold, a base, a body

member so mounted in said base as to be swung from a horizontal to a vertical position and vice versa, stud-pins secured in said body member, a cover-plate for the said body member provided with apertures adapted to be passed over the said stud-pins, a cross-bar pivotally connected to said cover-plate and provided with opposite wedge-shaped ends adapted to pass into grooves in the said stud-pins to secure the said cover-plate to the body member, means for turning the said cross-bar to so secure the cover-plate to the body member, adjusting means for fixing the longitudinal position of the bearing to be babbitted, and other adjusting means for fixing the seated position of the bearing to be babbitted.

Signed by me this 13th day of September, 1905.

C. REMELIUS.

Witnesses:

GEO. T. PINCKNEY,  
BERTHA M. ALLEN.