

No. 653,151.

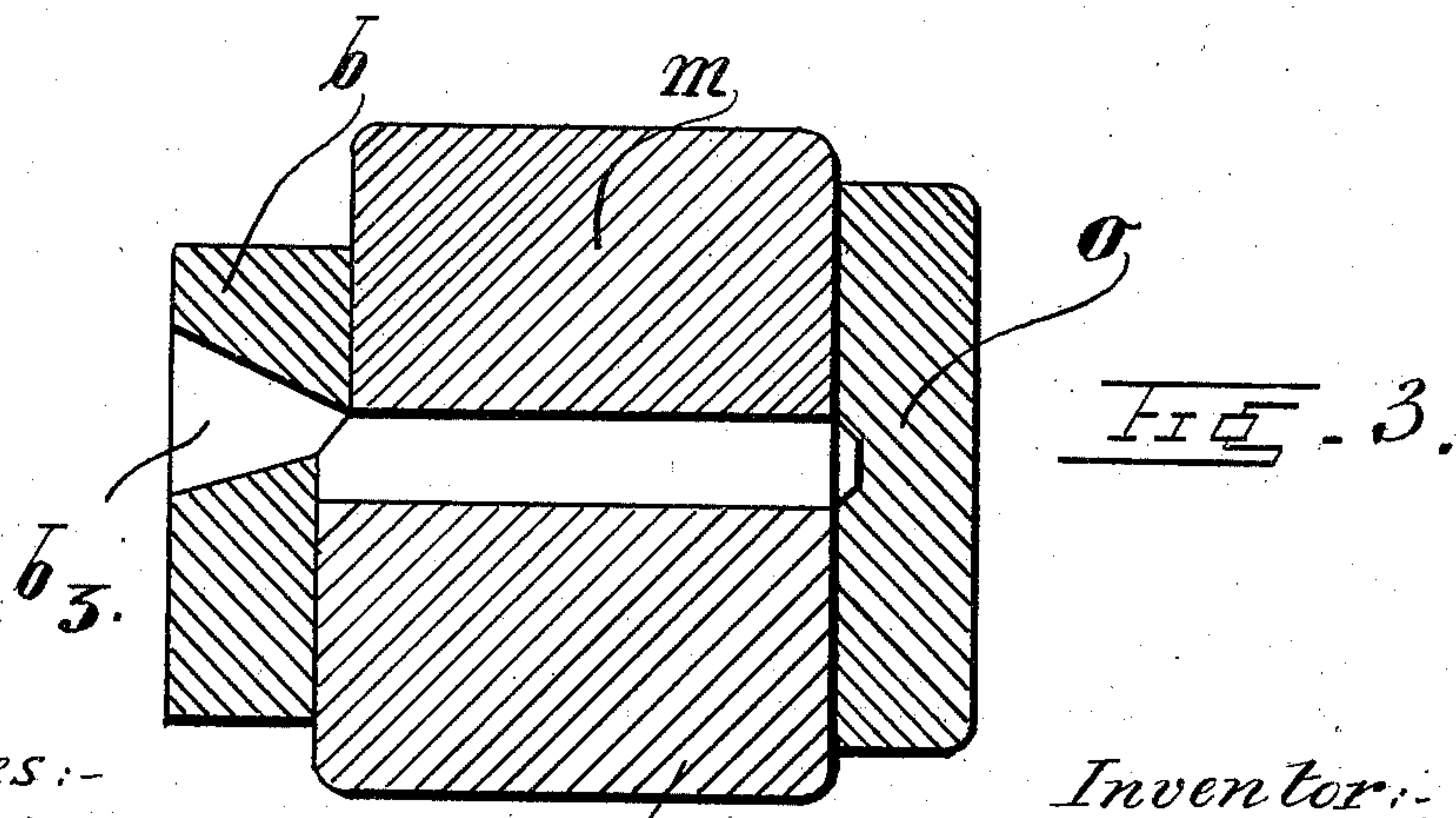
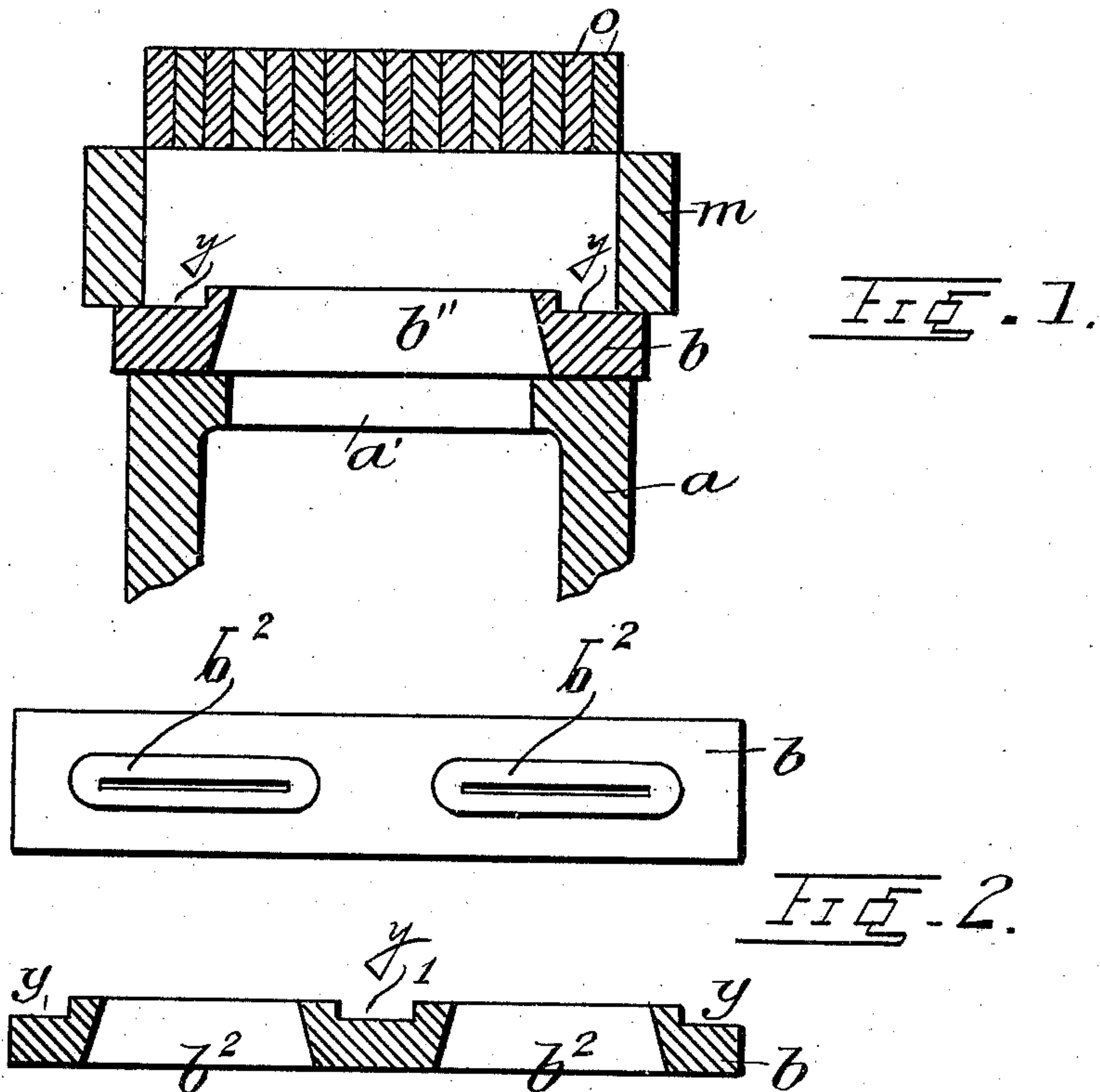
Patented July 3, 1900.

F. H. PIERPONT.
LINE CASTING MACHINE.

(Application filed Dec. 23, 1897.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:-
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2 Sheets—Sheet 2.

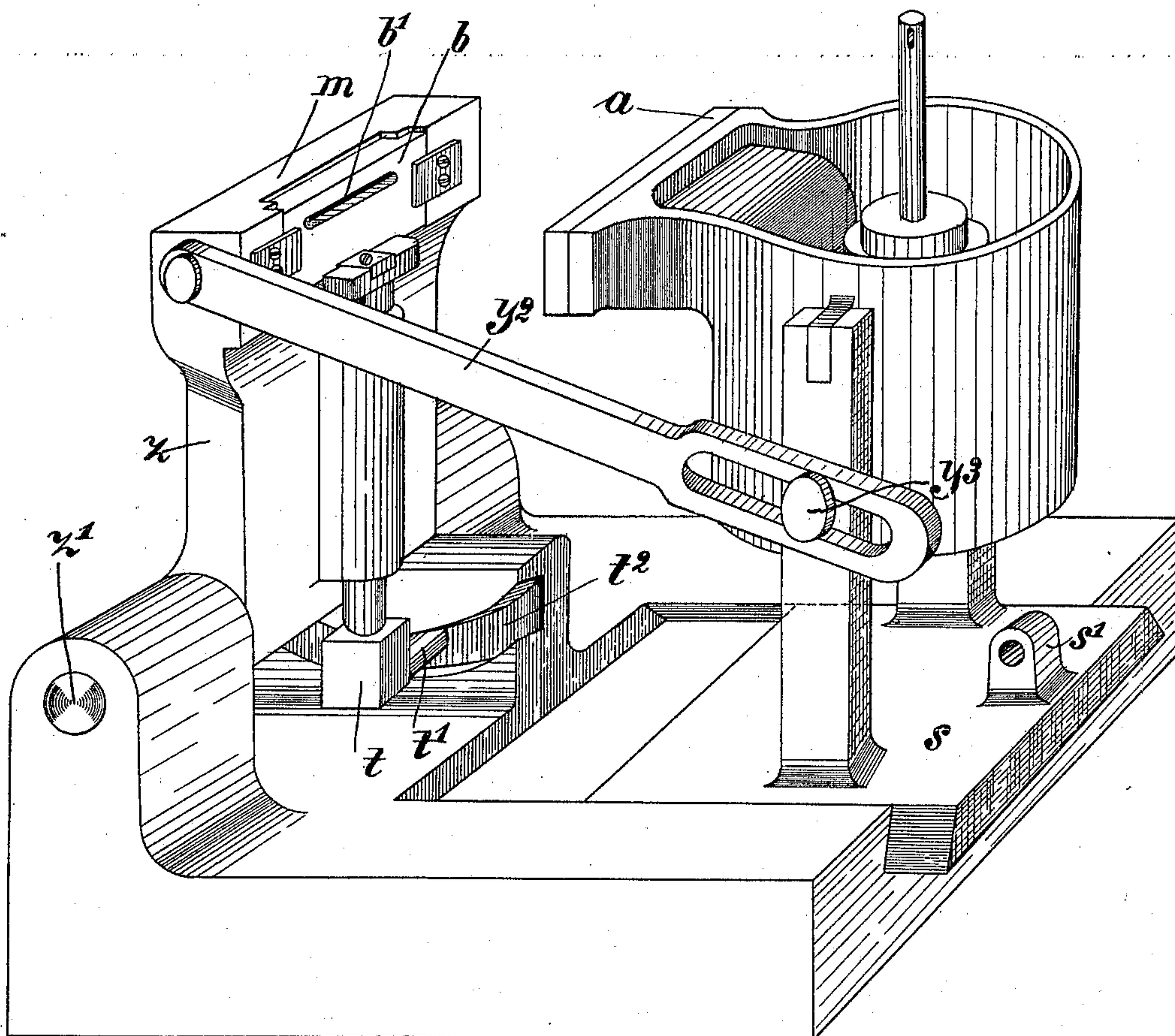


Fig. 4.

Witnesses:

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UNITED STATES PATENT OFFICE.

FRANK H. PIERPONT, OF BERLIN, GERMANY, ASSIGNOR TO THE TYPOGRAPH
GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, OF SAME PLACE.

LINE-CASTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 653,151, dated July 3, 1900.

Application filed December 23, 1897. Serial No. 663,150. (No model.)

To all whom it may concern:

Be it known that I, FRANK H. PIERPONT, a citizen of the United States of America, residing in Berlin, Empire of Germany, have
5 invented certain new and useful Improvements in Line-Casting Machines, of which the following is a full, clear, and exact description.

The present invention relates to line-casting machines; and it consists of a slide located at the mold-inlet and adapted to be pushed up or down after the mold has been filled with molten metal and to cut off the bur at a point below the proper type height.

15 In order to render the present specification more easily intelligible, reference is had to the accompanying drawings, in which similar letters of reference denote similar parts throughout the several views.

20 Figure 1 is a horizontal section through the mold, slide, and a part of the pot-nozzle; Fig. 2, a section and elevation of one form of slide; Fig. 3, a vertical section through a modified form of slide, and Fig. 4 a perspective view
25 showing one form of device for operating the melting-pot and slide.

Referring first to Fig. 4, the melting-pot is mounted in the well-known manner on a slide *s*, which may be reciprocated by any suitable means from a lug *s'* or the like. The nozzle
30 *a* of the pot closes onto the slide *b* of the mold when the pot is advanced, and as the pot recedes after the casting has been made—i. e., the mold filled by the action of the plunger of the pot—the mold-supporting plate *z* is tipped
35 on its pivot *z'* by the action of the connecting-bar *y*², which is pivoted to the said plate *z* and connected by a pin-and-slot connection *y*³ to the pot-supporting standard. The slide
40 *b* is suitably guided on the plate *z* by means of its stem *t*, which is provided with a laterally-extending pin *t'*, adapted to move in a stationary cam-groove *t*², and when the mold-supporting plate is tipped the said groove is
45 so shaped as to move the slide *b* on the face of the mold, as hereinafter more particularly set forth.

The present invention consists, essentially, in the particular formation of the slide, which

is adapted to break off the bur of the line 50 cast in a plane below that of the proper type height.

As will be seen from Fig. 1, the mold *m* is closed at the back by the row of letters *o*, and the plate *b* is provided with an outwardly-
55 flared inlet-opening *b'* for the molten metal. The nozzle *a* of the pot is provided with one or more outlet opening or openings *a'*, through which the metal passes into the mold in the well-known manner. The plate *b* is formed
60 with recesses *y*, and between these recesses the opening *b'* is situated. Thus it will be evident that when the mold has been filled with molten metal and the plate is moved to break
65 off the bur this bur will be broken off between the two full cast ledges formed at *y y*, and thus the rough broken edge will be located below the standard type height, as represented by the ledges *y*.

In Fig. 2 two openings *b*² are provided, and 70 a further recess *y'* is provided between the same, so as to form three elevated ledges on the slug.

In Fig. 3 the bur is broken off at the corner *b*³, so that a somewhat narrower ledge of 75 the proper height will extend all along the back of the slug.

From the above description it will be clear that the formation of the slide-plate according to the present invention obviates the necessity hitherto existing of smoothing off 80 the back of the slug after the bur has been broken off. It further prevents the formation of spongy backs, which was hitherto due to the back stroke of the pot-plunger previous
85 to moving the pot-nozzle back or away from the mold.

I claim as my invention—

1. In a linotype-machine having a movable slide inserted between the mold and the pot-
90 nozzle, the combination with said slide of means for removing the bur from the back of the slug when the slide is moved, at a point below the full height of the slug as represented by solid full cast ledges at the back of 95 the slug substantially as described.

2. In a linotype-machine of the class specified, the combination of a movable slide hav-

ing projections at suitable points of the length of the type-line to be cast, said projections extending partially into the mold and having metal-inlet openings within their length, substantially as described.

5 3. In a linotype-mold, the hereinbefore-described combination of a four-sided mold, a four-sided mold for its sprue and means for making the latter nearly register with the

former and for afterward breaking the sprue to away from the linotype.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK H. PIERPONT.

Witnesses:

WOLDEMAR HAUPT,
C. ALBRECHT.