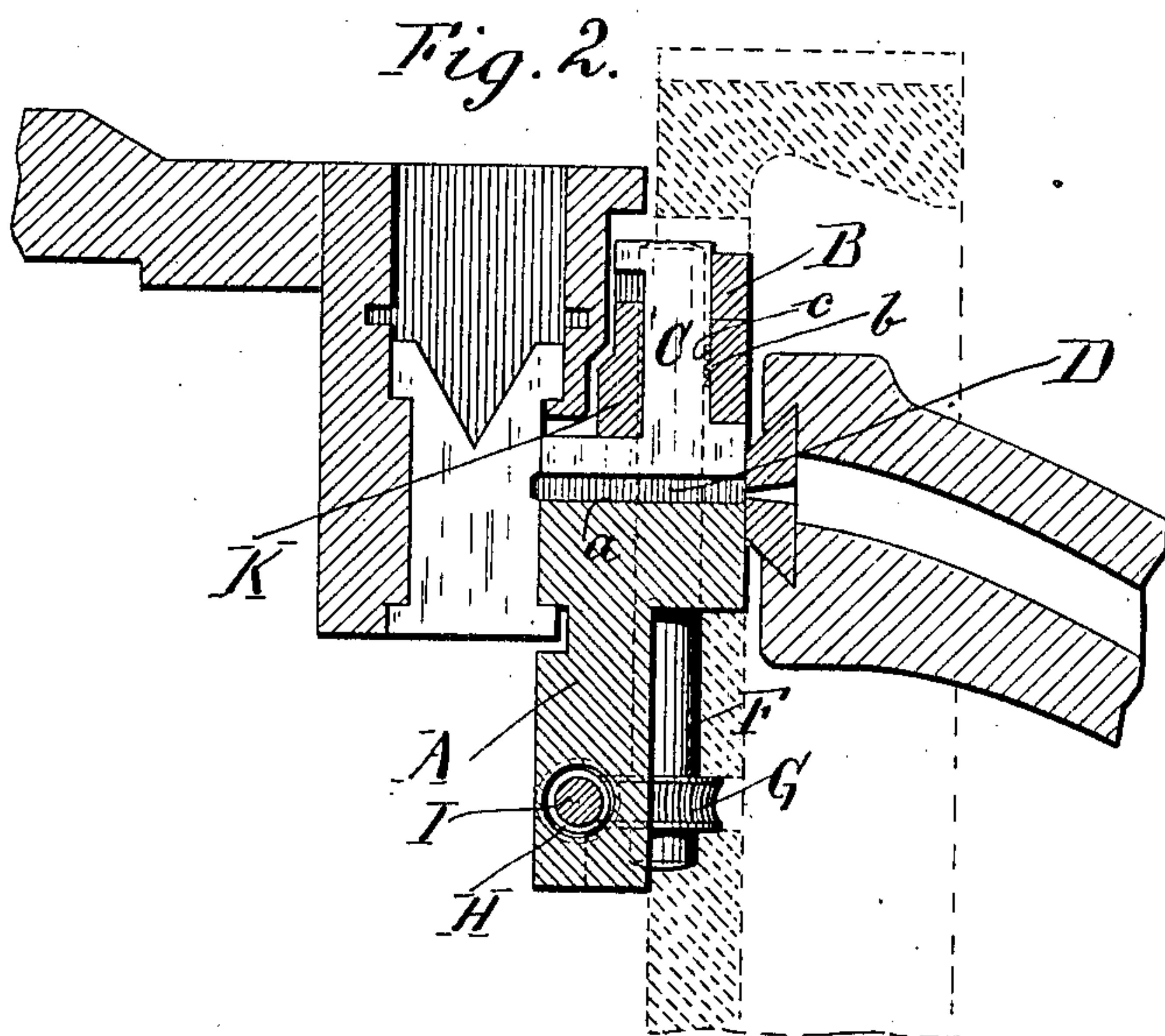
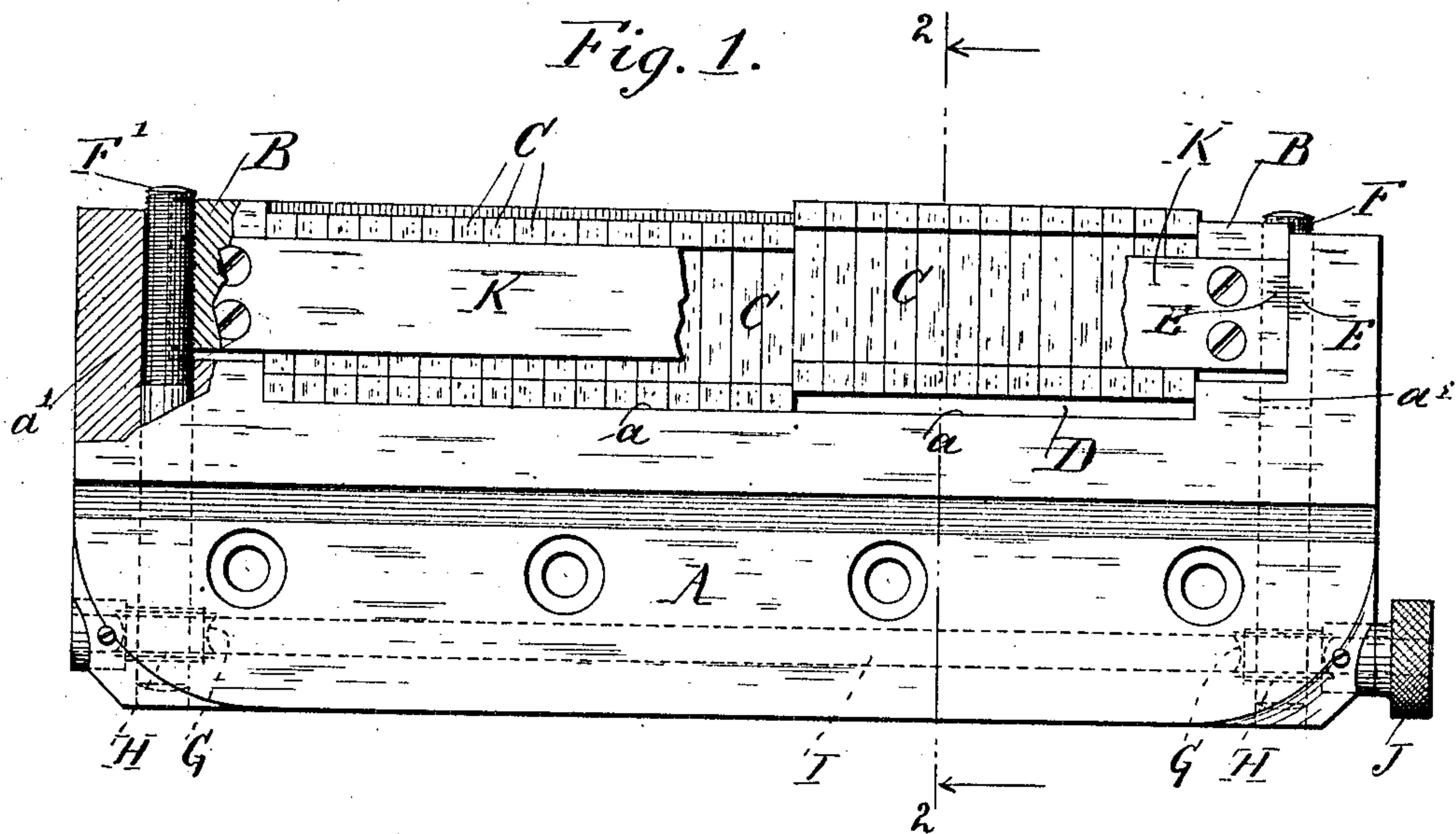


No. 843,241.

PATENTED FEB. 5, 1907.

B. VAN WIE.
 LINOTYPE MOLD.
 APPLICATION FILED OCT. 4, 1906.



Witnesses
 D. J. Palmer.
 L. E. Morrison.

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 By his Attorney P. T. Dodge

UNITED STATES PATENT OFFICE.

BYRON VAN WIE, OF NEW YORK, N. Y., ASSIGNOR TO MERGENTHALER
LINOTYPE COMPANY, A CORPORATION OF NEW YORK.

LINOTYPE-MOLD.

No. 843,241.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed October 4, 1906. Serial No. 337,388.

To all whom it may concern:

Be it known that I, BYRON VAN WIE, of New York city, county of New York, and State of New York, have invented a new and useful Improvement in Linotype-Molds, of which the following is a specification.

In linotype-machines and kindred machines it is customary to deliver molten type-metal from a melting-pot into the rear side of a slotted mold which is momentarily closed at the front by a composed line of matrices presented thereto, the result being the production of a slug or linotype bearing on one edge the type characters to print a line.

In the use of these machines it is necessary to change the length of the mold-slot according to the length or measure of the slugs required, and it is also necessary to vary the vertical depth of the slot in order to change the thickness of the slug according to the size of the type characters to be formed therein. Heretofore these results have generally been accomplished by constructing the mold in sections with liners or spacing-pieces which may be removed and replaced by others of different size to vary the dimensions of the slot.

The object of my invention is to provide a mold in which a slot may be varied in length or in depth at will instantly and without detaching or applying parts. To this end I construct a composite slotted mold containing a series of movable parallel plates lying at right angles to the slot, so that any desired number of them may be moved inward to fill the end of the slot and reduce its length, and also containing means for changing the distance between the remaining slides and the opposite wall of the mold to vary the width of the slot or the thickness of the slug produced therein.

In the drawings, Figure 1 is a front elevation of a mold constructed in accordance with my invention. Fig. 2 is a cross-section of the same in operative relation to the melting-pot at the rear and the line of matrices and their supporting devices at the front.

Referring to the drawings, A represents the body portion of the mold, having a flat upper surface *a* to form the lower side of the mold-slot and having also two upright ends *a'*.

B represents the cap or upper portion of

the mold, overlying the body A and guided vertically at its ends in the arms *a'*.

C C represent a series of upright parallel plates or liners seated face to face in compact order. These plates are mounted to slide vertically in the cap B, so that their lower ends may be seated against the upper surface of the body A or lifted therefrom a distance equal to the thickness of the required slug. The lower ends of the plates C are ordinarily flat and parallel with the upper surface of the body A, so that when lifted therefrom they will form the upper surface of the mold slot or cell D. When a slug of maximum length is required, the plates C are all raised, so as to present a slot or mold-cell extending from one of the arms *a'* to the other between the upper surface of the body and the lower ends of the plates.

The plates C are of uniform thickness, equal ordinarily to a pica em or en. By sliding downward the required number of plates until their lower ends rest snugly on the upper surface of the body A the length of the slot may be reduced the required extent, the end of the shortened slot being formed by the side of the innermost depressed plate. As the lower ends of the elevated plates C form the upper side of the mold-slot, it is necessary that they shall be held in exact alinement horizontally, and this may be accomplished by any suitable alining and locking devices.

In the drawings I have shown each plate with a series of notches *c* to receive a horizontal rib *b* on the inside of the cap B. The distance between each notch and the next is preferably a printer's "point," which is the standard unit of measure. When the vertical depth of the slot is to be varied, the cap B is moved upward or downward, carrying with it the slides interlocked therewith.

The ends of the cap B and the adjacent arms of the body are graduated, as shown at E E, as a guide for the adjustment of the parts. The vertical movement of the cap may be effected by any suitable mechanism—for instance, by the screws F, seated in the body and fixed against end motion and arranged to engage the ends of the cap. These screws may be provided at their ends with worm-wheels G to engage corresponding worms H on the end of a shaft I, which is

seated in the body and provided with a knurled wheel J, by which it may be rotated. The effect of rotating this wheel is to move the cap B and the attached slides upward or
5 downward.

After the active slides C—those forming the upper side of the mold-slot—are adjusted to the proper height the remaining slides are pushed downward until they rest upon the
10 top of the body A. In order to permit this action, the slides must first be disengaged from the rib d, against which they are held by the bar or plate K, screwed or otherwise secured at its ends to the cap B. By loosening
15 this bar the slides are released, so that they may be raised or lowered in relation to the cap B. After they are in the desired position the bar is again tightened to hold them.

The essence of my invention lies in the employment of the cap and body, so connected that the distance between them may be varied, in combination with a series of sliding plates or liners C, each adapted to form, according to its adjustment, a portion of the
20 upper side of the mold-slot or one end of the same, and it is manifest that the details may be widely varied, provided these characteristics are retained.

It will be observed that my construction
30 admits of any slide in the series being depressed against the body without regard to the position of the others. Thus the mold-slot may, if desired, be divided into a number of lengths adapted to cast a series of
35 short slugs or logotypes.

Having described my invention, what I claim is—

1. In a slotted linotype-mold, the combination of a body portion, a series of independently-movable slides, any number of
40 which may be set against the body to limit the length of the slot while the remaining slides form one wall of the slot, and means forming a permanent portion of the mold for changing the operative position of the
45 last-named slides to vary the width of the slot and the thickness of the slug produced therein.

2. In a linotype-mold, a body portion, a
50 cap portion, independently-movable slides mounted in the latter and each adapted to

form the end of the mold-slot, or a portion of its side, according to its adjustment, and means permanently mounted in the mold for changing the distance between the cap
55 and body.

3. In a linotype-mold, the combination of the body A, the cap B, the independently-movable slides mounted in the cap, and screws for changing the distance between the
60 cap and the body.

4. In a linotype-mold, the combination of a body, the cap, means permanently included in the mold for changing the distance between the cap and body, the independently-
65 movable slides and means for locking each slide in different positions.

5. In a slotted linotype-mold, the combination of a body portion forming one wall of the slot, a series of independently-movable
70 slides adapted to form the opposite wall and one end of the slot, and permanently-connected devices for settling those slides which form the wall of the slot at different distances from the body according to the thickness of
75 the slug required.

6. In a slotted linotype-mold, the combination of a body, a cap, a series of parallel slides C mounted in the latter, and a locking
80 device carried by the cap and adapted to hold each slide in different operative relations to the cap.

7. In a linotype-mold, the combination of a body, a cap, mechanism for moving the cap to and from the body, a series of slides
85 mounted in the cap, and means for locking the slides in different positions in the cap.

8. In a linotype-mold, the combination of the body, the cap provided with a rib, the series of independently-movable slides ar-
90 ranged to interlock therewith, and means for securing the slides in engagement with the rib; whereby the slides may be secured individually with their ends at any required
95 distance from the body.

In testimony whereof I hereunto set my hand, this 27th day of July, 1906, in the presence of two attesting witnesses.

BYRON VAN WIE.

Witnesses:

F. M. EGGLESTON,
WALTER MOBLARD.