

(No Model.)

O. MERGENTHALER.
LINOTYPE MACHINE.

No. 539,993.

Patented May 28, 1895.

Fig. 1.

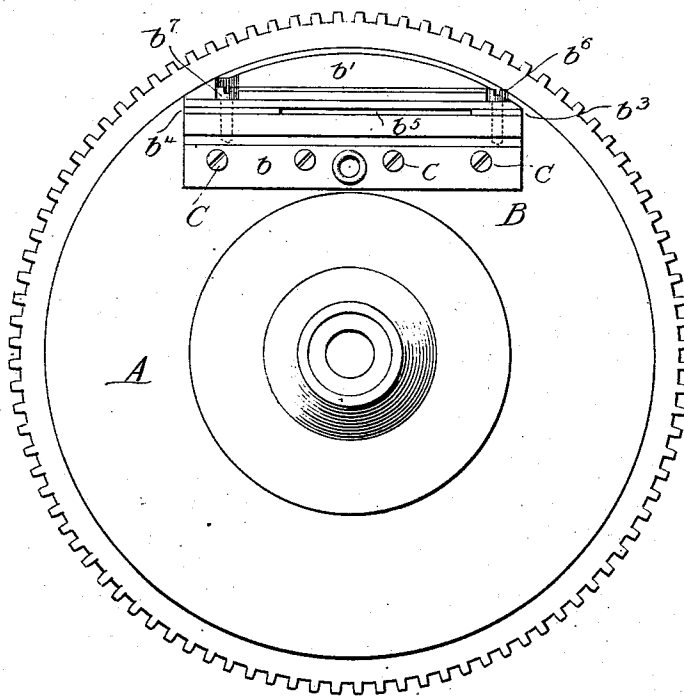


Fig. 4.

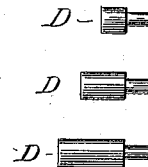


Fig. 5.
on line 5 5

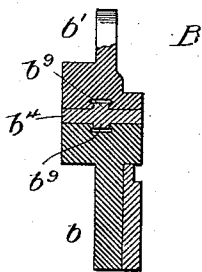


Fig. 2.

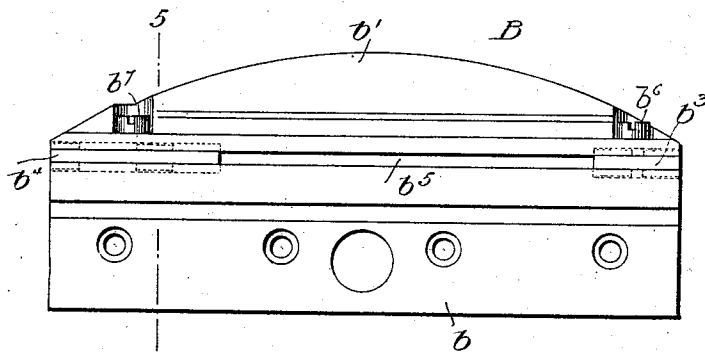
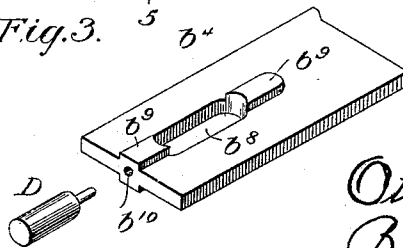


Fig. 3.



Witnesses:

J. S. Elmore.
J. M. Copenhaver.

Inventor:

Ottmar Mergenthaler
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Atty

UNITED STATES PATENT OFFICE.

OTTMAR MERGENTHALER, OF BALTIMORE, MARYLAND, ASSIGNOR TO THE
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LINOTYPE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 539,993, dated May 28, 1895.

Application filed March 27, 1895. Serial No. 543,377. (No model.)

To all whom it may concern:

Be it known that I, OTTMAR MERGENTHALER, of Baltimore, State of Maryland, have invented a new and useful Improvement in Linotype-Machines, of which the following is a specification.

My invention has reference to what are known as linotype machines in which the type metal slugs or bars are cast, each having on the edge, the type characters to print a line, and casting in a mold against a line of matrices temporarily assembled or composed against the front of the mold. In the special form herein shown, the invention is intended more particularly for application to the Mergenthaler machine such as represented in Letters Patent of the United States, No. 436,532, dated September 16, 1890.

The object of the invention is to admit of the mold proper being varied in length to produce lines corresponding to the width of different columns or pages.

In the drawings, Figure 1 is a front view of one of my improved molds inserted in the carrying wheel or disk, as in the Mergenthaler machine. Fig. 2 is the front elevation of the mold. Fig. 3 is a perspective view of the adjustable liner forming the end of the mold-cell. Fig. 4 is a view showing the means of adjusting the molds to different lengths. Fig. 5 is a cross-section on the line 5 5 of Fig. 2.

In the drawings, A represents the mold disk or wheel; B, the mold proper, removably secured in a mortise in the disk, as usual, by screws C.

The mold consists of a lower body plate b , a cap plate b' and two intermediate space plates or liners b^3 and b^4 , seated between the ends of the other parts for the double purpose of keeping them spaced accurately apart to the required distance and of forming the two ends of the intermediate mold cell or slot b^5 . This cell extends as usual through the mold from front to rear and is simply a slot, the internal dimensions of which correspond exactly with the body of the linotype or printing slug to be formed therein. The several

parts are united by screws b^6 and b^7 passing through the cap plate and the liners into the body plate. The liner b^3 is preferably fixed immovably in position. The liner b^4 however, is arranged to slide endwise to a limited extent and to this end it is provided as shown in Fig. 3 with a longitudinal slot b^8 for the passage of the screw and with longitudinal ribs or lips b^9 seated in corresponding grooves in the cap and body plates to prevent it from shifting laterally. By sliding this liner endwise, the length of the slot or mold cell may be varied to a considerable extent. By tightening the screw b^7 , the liner may be pinched tightly so as to remain in position under ordinary circumstances, but as extreme accuracy in the length of the slug is desired, I propose to use in connection with the liner, adjustable or interchangeable supports to determine this position. In the most simple form these will consist of a series of pins D such as shown in Fig. 4 having at one end a neck or tenon to fit into a hole b^{10} in the end of the liner. A liner is pushed inward to the desired position and the pin inserted in and behind it as shown in Fig. 2, after which the mold is inserted into the disk so that the pin will bear at its outer end against the wall of the mortise or slot into which the mold is inserted. As the pin forms an unyielding support between the end of the liner and the wall of the mold disk, it is obviously impossible for the liner to be forced back out of position.

It will be manifest that any other devices of an equivalent character known to the mechanic can be used for giving support to the liner, the essence of the invention residing in a liner movable endwise and combined with means for securing it in different positions.

Having thus described my invention, what I claim is—

1. An improvement in linotypes, a slotted mold having one end of its slot formed by a longitudinally adjustable liner.

2. In a linotype machine, the mold consisting of the body and cap plates, the interme-

diate liners one of which is movable endwise and the connecting screws substantially as described.

- 5 3. In a linotype machine the slotted mold provided with a sliding liner to vary the length of the slot and with a removable support to maintain the liner in position, said elements combined substantially as described.

In testimony whereof I hereunto set my hand, this 19th day of March, 1895, in the presence of two attesting witnesses.

OTT. MERGENTHALER.

Witnesses:

FREDERICK A. ISHAM,
ISAIAH VOSBURGH.