

No. 607,758.

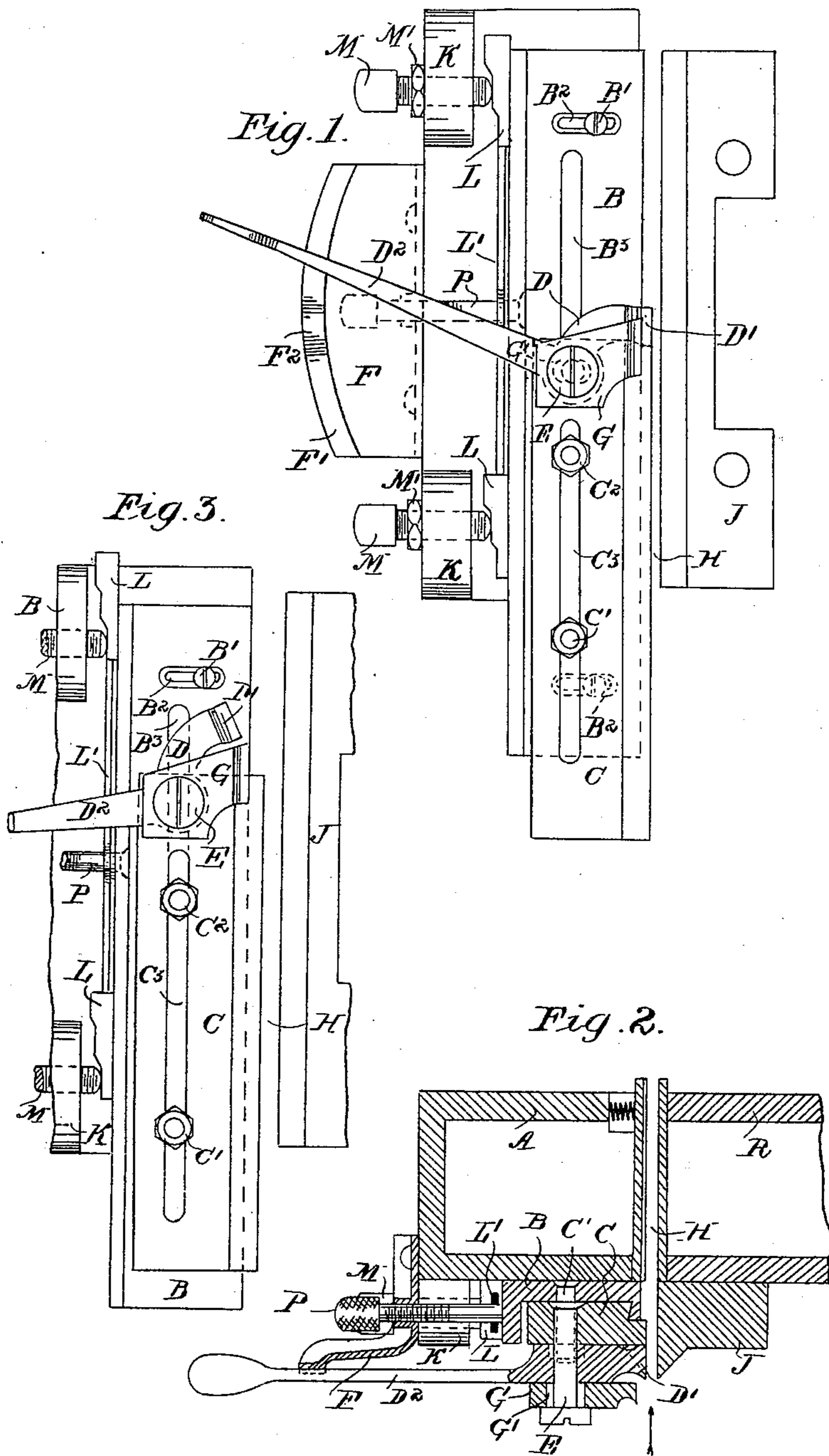
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G. W. MASCORD.

SLUG CUTTING MECHANISM FOR LINOTYPE MACHINES.

(Application filed Sept. 3, 1897.)

(No Model.)



Witness:
H. Becker.
R. Voss.

Inventor.
George William Mascord
by G. Dittman
Attorney.

UNITED STATES PATENT OFFICE.

GEORGE WILLIAM MASCORD, OF GLENFERRIE, VICTORIA.

SLUG-CUTTING MECHANISM FOR LINOTYPE-MACHINES.

SPECIFICATION forming part of Letters Patent No. 607,758, dated July 19, 1898.

Application filed September 3, 1897. Serial No. 650,531. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WILLIAM MASCORD, a subject of the Queen of Great Britain, and a resident of Falmouth street, Glenferrie, in the Colony of Victoria, have invented certain new and useful Improved Slug-Cutting Mechanism for Linotype-Machines, of which the following is a specification.

This invention has been devised to provide an improved slug-cutting mechanism for linotype-machines which is adjustable at will, so that initial letters of a larger face than the main depth of body of the linotype-slug may be obtained.

The mechanism consists of a pivoted lever which may have its cutting-arm moved radially, so as to allow of the passage of a two-line or larger letter on the slug and which may be returned into position with its cutting-face in line with the main cutting edge when required for planing lines containing no initials of a deeper body than the slug being produced.

The invention further consists in rendering the slug-cutter adjustable longitudinally, so that varying width of lines or measure may be obtained, and also adjustable laterally for employment with the various sizes of type—i. e., depth of slug.

In order to make my invention clear, I will now refer to the accompanying sheet of drawings, in which—

Figure 1 shows an elevation of the mechanism; Fig. 2, a cross-section of same; and Fig. 3 a similar view to Fig. 1, but showing the altered position of the movable parts.

A represents a metal casting, upon the side of which a shoe B is secured by means of countersunk screws B', which enter recessed slots B², formed in such shoe. The said screws B' pass through the slot and are screwed into the casting A. Two or more of these slots and bolts may be employed.

Upon the shoe B a slug-cutter C is mounted and adjustably secured thereto by bolts C' and nuts C². The bolts pass through a longitudinal slot C³ in the cutter and a similar slot B³ in the shoe B, the said bolts being set with countersunk heads within the shoe B. At the end of the slug-cutter C and preferably in a rabbet in same a slug-cutting lever D is set, such lever being pivoted by a bolt E

to said cutter. The short arm of the lever D terminates in a cutting edge D', which is arranged to lie in line with the cutting-face of C and to be moved out of position (see Fig. 3) when required. The long arm D² of this lever is arranged to be operated in any suitable manner, either by hand or by mechanism operating automatically with the machine.

In Fig. 1 I show a curved plate F, which is secured to the casting A, Fig. 2, and is provided with a surface F' in line with the inside face of the arm D² and having a raised portion F², over which the arm D² will ride and by which it may rest in either of its two positions—that is, with the cutting-arm D' open, as shown in Fig. 3, or closed, as shown in Fig. 1. Upon the pivot-pin E and on the face of the lever D a cutter-plate G is set, this plate being provided for the purpose of trimming the lower or overhanging portion of slug carrying the capital letter or letters entering the passage H. The plate G is made movable by means of slot G', so that it may be adjusted to suit varying sizes of type-capitals.

J shows the existing fixed planing-knife, which corresponds with the cutter or knife C and is secured to casting R, corresponding to A.

K K show lugs upon the casting A.

L L are stepped plates or liners, which are preferably secured together by rod L', these pieces being inserted between the lugs K and the shoe B to secure a true, equal, and rapid adjustment of the knife C parallel to the knife J after the first setting of the adjusting-screws M, which are then retained in position by the lock-nuts M'. A screw-bolt P is provided for moving the shoe B and its cutters away from the knife J. This screw passes through the plate F and through the rod L'.

The operation of the mechanism is as follows: The slug-cutters C and G being first adjusted for the size of type and width of line to be trimmed, the screws B' and the nuts C² being locked, the linotype-machine may then be operated to bring the matrix into position for the casting of the slug. Where a line starts with a two-line letter, the lever will be first operated to rest in its open position, Fig. 3, and held in position by the

raised portion F², so as to allow the slug carrying such letter to pass along the passage H in the direction of arrow, (being first trimmed by the trimming or planing knife G.) The slug carrying the next line of letters will have a blank space to lie beneath the two-line letter of the previous line, and to obtain a clean cutting of this slug, so that it will lie close up against the succeeding one, it is necessary before such slug is cast to operate the lever D to bring it into the position shown on Fig. 1, the handle being held on the opposite side of the raised portion F². For the third and any succeeding number of lines when no two-line letter forms the initial to a line the lever will be retained in this position; but before operating the machine to obtain a line starting with an initial capital the lever D would be again brought into the position shown on Fig. 3.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. In a slug-cutting mechanism, the combination with a fixed part, of a slotted shoe adjustably retained on said fixed part, a main slug-cutter, having a longitudinal slot, adjustably secured to said shoe by countersunk bolts passing through said slot, a slug-cutting lever mounted on a pivot in the end of said cutter, an auxiliary cutter-plate mounted

near the outer extremity of said pivot and movable in a slot, a fixed planing-knife parallel and contiguous to said cutters, and suitable means for securing a true and rapid adjustment of said main cutter parallel to said fixed trimming-knife, substantially as described.

2. In a slug-cutting mechanism, the combination with a fixed part, of a slotted shoe adjustably retained on said fixed part, a main slug-cutter, having a longitudinal slot, adjustably secured to said shoe by countersunk bolts, passing through said slots, a slug-cutting lever mounted on a pivot in the end of said cutter, an auxiliary cutter-plate mounted near the outer extremity of said pivot and movable in a slot, a fixed planing-knife parallel and contiguous to said cutters, a curved plate secured to said fixed part and having a projection adapted to securely retain said lever in either of its positions, and suitable stepped plates or liners mounted on said shoe adapted to secure a true and rapid adjustment of said main cutter parallel to the fixed cutter, substantially as specified.

Signed at Melbourne, in the Colony of Victoria, this 2d day of July, 1897.

GEORGE WILLIAM MASCORD.

Witnesses:

A. O. SACHSE,
A. HARKER.