

H. DEGENER.
TYPE SETTING AND LINE CASTING MACHINE.
APPLICATION FILED SEPT. 12, 1910.

1,055,300.

Patented Mar. 4, 1913.

Fig. 1.

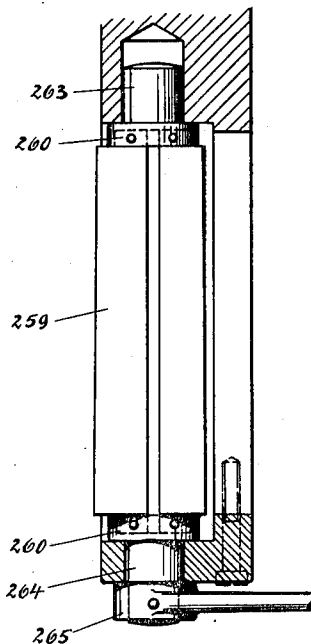


Fig. 3.

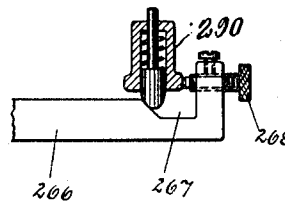
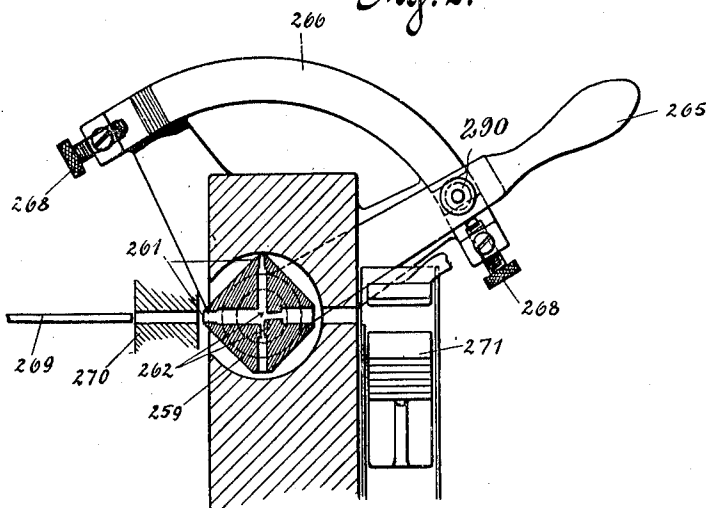


Fig. 2.



Witnesses:
Prima Press
Wm. E. Ebb

Inventor:
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UNITED STATES PATENT OFFICE.

HEINRICH DEGENER, OF BERLIN, GERMANY, ASSIGNOR TO MERGENTHALER LINO-TYPE COMPANY, A CORPORATION OF NEW YORK.

TYPE-SETTING AND LINE-CASTING MACHINE.

1,055,300.

Specification of Letters Patent.

Patented Mar. 4, 1913.

Original application filed April 19, 1910, Serial No. 556,441. Divided and this application filed September 12, 1910. Serial No. 581,532.

To all whom it may concern:

Be it known that I, HEINRICH DEGENER, a resident of 26 Hollmannstrasse, Berlin, German Empire, manager, having invented certain new and useful Improvements in or Relating to Type-Setting and Line-Casting Machines, do hereby declare that the following is an exact specification of the same.

This invention relates to the trimming device in matrix setting and type line casting machines of the Mergenthaler system, in which matrices are set into lines, whereupon metal casting in the shape of lines are prepared from the said set matrix lines, and the castings in question are used direct for printing.

The accompanying drawing shows a construction of the adjustable line trimming device, namely Figure 1 in plan and Fig. 2 in cross-section through the same, while Fig. 3 shows the locking of the reversing lever.

The trimming device for the line can be easily and quickly adjusted to suit the various bodies of type. This can be effected by the different pairs of cutters or knives being combined into a polygonal roll, the number of sides of which depends on the number of the pairs of knives used, and mounted in such manner that one or another of the pairs of knives are brought into the operative position simply by turning.

The construction illustrated is merely an example for two pairs of knives, so that the roll in this case is made of a square cross-section. It consists of four knives of triangular cross-section. The two ends are turned to a round shape and held together by means of rings 260. Between the single parts are inserted at the end intermediate or distance pieces, so that slots are produced in the diagonal directions of the rectangular roll. The intermediate or distance pieces are arranged in such manner that the two slots produced are of different cross-sections, that is to say, can be used for lines of two different thicknesses of body. The front edge of the cutters or knives 261 which is situated at the corners of the square, is formed into a knife. In order to increase the action still more, and consequently in order to obtain a more smooth appearance of the lines by gradual cutting, the edge produced in the center, could also be formed

into a knife in such a manner that the first knife would take away a portion of the bur and only the second knife would cut the line to the exact thickness of the body. In the same way as with two pairs of knives, of course it is possible to combine three pairs of knives to a hexagon and so on, to the limit of practical possibility.

The two rings 260 are provided at the sides with trunnions or pins 263 and 264 by which the trimming device is secured in the machine frame. To the pin 264 is secured a hand lever 265, by rotating which, one or the other pair of knives are brought into the operative position. In order to enable the lever to be brought into an exact position, it is preferable to arrange in it, as shown in Fig. 3, a spring controlled piston 290 provided with two cam faces. The semi-circular ledge 266 forming a guide for the lever, is provided at the ends with recesses 267 which are also provided on one side with a cam surface corresponding to the piston, so that as soon as the lever is pushed far enough toward the end for the piston to spring into the recess, the hand lever will be pressed outward and come to rest against the stop screw 268.

Fig. 2 also shows how the driver 269 pushes the line through the casting mold 270 and the trimming knives into the galley 271.

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

1. In a typographical machine, the combination of a plurality of pairs of trimming knives with means whereby any selected pair may be brought into operative position at will.

2. In a typographical machine, the combination of a plurality of pairs of trimming knives with movable supporting means therefor whereby any selected pair may be brought into operative position at will.

3. In a typographical machine, the combination of a plurality of pairs of trimming knives with pivotally mounted supporting means therefor whereby any selected pair may be brought into operative position at will.

4. In a linotype machine, the combination of a plurality of pairs of knives, between

which the slug passes while being trimmed, with movable means whereby any selected pair may be brought into operative position at will.

- 5 5. In a linotype machine, the combination of a plurality of sets of trimming knives, each set comprising two or more pairs thereof with which the slug comes into successive contact, with means whereby any selected

set may be brought into operative position 10 at will.

In witness whereof I have hereunder set my hand in presence of two witnesses.

HEINRICH DEGENER.

Witnesses:

HENRY HASPER,
WOLDEMAR HAUPT.