

(No Model.)

J. W. PHELPS.
LINOTYPE MACHINE.

No. 554,791.

Patented Feb. 18, 1896.

Fig. 1.

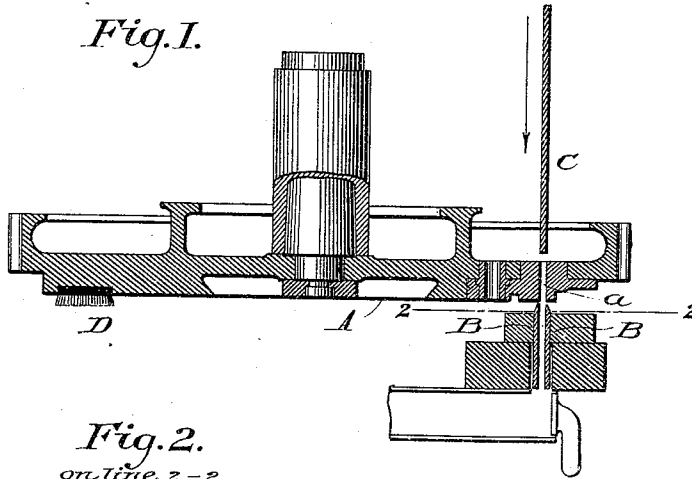
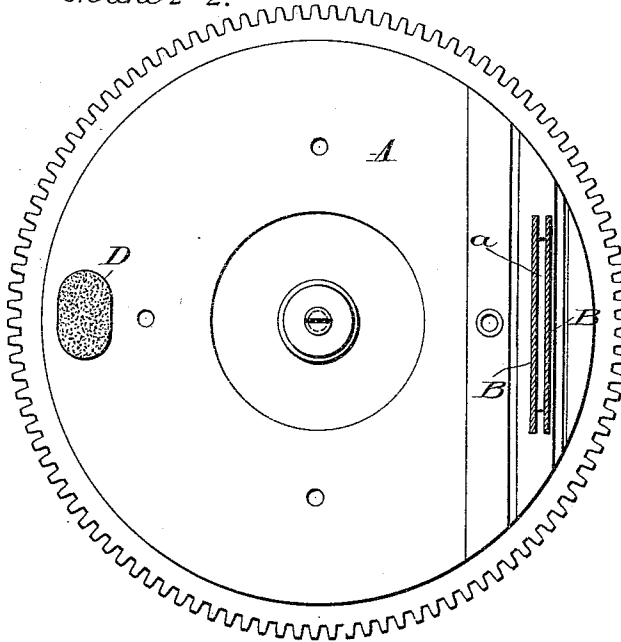


Fig. 2.
on line 2-2.



Witnesses
Raymond H. Bames.
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UNITED STATES PATENT OFFICE,

JAMES W. PHELPS, OF TROY, NEW YORK, ASSIGNOR TO THE MERGENTHALER LINOTYPE COMPANY, OF NEW JERSEY.

LINOTYPE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 554,791, dated February 18, 1896.

Application filed January 23, 1893. Serial No. 459,326. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. PHELPS, of Troy, county of Rensselaer and State of New York, have invented a new and useful Improvement in Linotype-Machines, of which the following is a specification.

In the Mergenthaler linotype and other machines of its class, line-bars or linotypes cast from type-metal in a mold are driven forward by an ejector-blade out of the mold and between trimming knives or blades by which, if imperfect, the linotypes are dressed to the exact thickness desired. In practice it is found that there is a tendency of the metal shavings to cling to the edges or surfaces of the knives in such manner that they will adhere to and injure the type-face of the succeeding linotypes.

My invention is intended to overcome this difficulty; and it consists in a mechanically-driven wiper alternating in its action with the ejector and arranged to sweep over the trimming-knife to remove the adherent shavings therefrom.

I have represented my device in the preferred form in which I have practically used it on the well-known Mergenthaler linotype-machine.

In the drawings I have represented only those parts which are immediately associated with the operation of my invention. All the remaining parts of the machine may be of any suitable construction—for example, the construction represented in the Mergenthaler patent, dated September 16, 1890, No. 436,532.

Figure 1 is a horizontal section through the mold trimming-disk, trimming-knives, and adjacent parts; and Fig. 2 a face view of the mold-disk with trimming-knives in section on the line 2 2 in Fig. 1.

Referring to the drawings, A represents the mold-disk arranged to receive the intermittent rotation and carrying in one side the mold proper, *a*, which extends therethrough from the front to the rear face, so that the molten metal introduced from the rear may be cast into the form of a linotype or bar against the matrices at the front.

B represents the two trimming-knives fixed

in front of the mold, and C is the ejector-blade, which advances from the rear in order to drive the linotype out of the mold and between the knives into a galley or other receiver. The foregoing parts are all of ordinary construction and operated in the usual manner.

D represents the brush forming the subject of the present invention attached to the face of the disk in such position that as the disk is revolved the brush will be carried over or graze the edges of the trimming-knives in order to sweep the adhering shavings therefrom. This brush or wiper may be made of any suitable material. I prefer to employ a brush composed of fine wires or bristles fixed in a backing of rubber, leather or other elastic material. It is to be understood, however, that the brush may be varied in form, material, and location upon the disk at will, provided only it is adapted to sweep over the knives. I have attached the brush to the disk as being the simplest and cheapest manner of operating the same automatically; but it is to be understood that it can be attached to any other suitable part of the machine, as I believe myself to be the first to combine the linotype-machine, the mold and ejector, a trimming-knife to act on the slug delivered from the mold and a mechanically-actuated wiper alternating in its action with the ejector and arranged to sweep over the knife.

Having thus described my invention, what I claim is—

1. In a linotype-machine the combination of two knives, an ejector for forcing the linotype between them, and a mechanically-driven wiper alternating in its action with the ejector and arranged to sweep over the knives to remove the adherent shavings therefrom.

2. In linotype-machines the combination of trimming-knives, the rotary mold-disk and a brush or wiper attached to the latter.

In testimony whereof I hereunto set my hand this 17th day of January, 1893, in the presence of two attesting witnesses.

JAMES W. PHELPS.

Witnesses:

THOMAS F. DOHERTY,
WILLIAM J. LUDDEN.