J. S. DUNCAN.

PRINTING MACHINE.

APPLICATION FILED SEPT. 18, 1911.

1,125,499. Patented Jan. 19, 1915.

Fig. 1

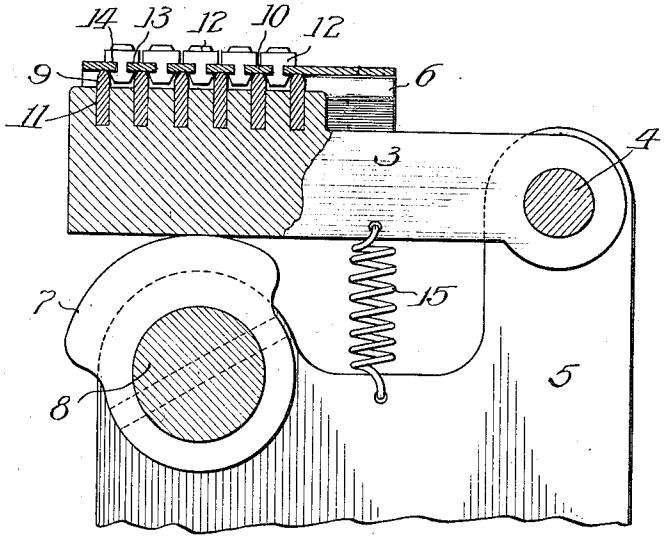
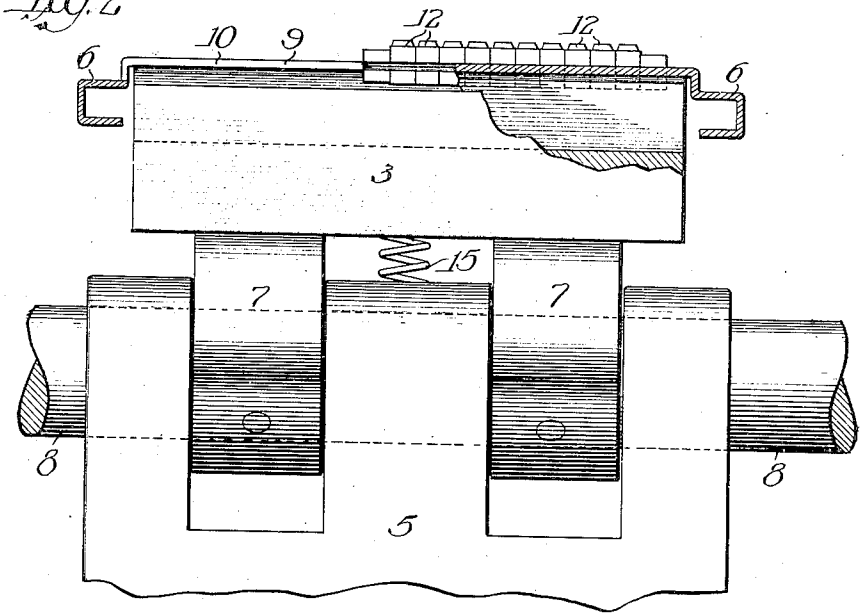


Fig. 2



Witnesses:

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UNITED STATES PATENT OFFICE.

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PRINTING-MACHINE.

1,125,499. Specification of Letters Patent. Patented Jan. 19, 1915.

Application filed September 18, 1911. Serial No. 649,789.

To all whom it may concern:

Be it known that I, JOSEPH S. DUNCAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Printing-Machines, of which the following is a specification.

This invention relates to printing machines and is designed more particularly, but not exclusively, for machines for printing addresses and the like from printing devices of the character set forth in my companion application filed concurrently herewith. These printing devices are adapted to be stored in accordance with a card index system and they are run through a printing machine, one at a time, impressions taken therefrom and then returned to the storage receptacle in regular order, according to the improved methods of handling such devices.

It is the object of the present invention to sustain the form of metal type in printing devices of this class in a proper manner during the printing operation so that the faces will be substantially supported in a single plane in order to obtain a clear, even and distinct impression therefrom.

In the accompanying drawings, illustrating my invention, I have shown only so much of the machine as is necessary to fully understand the invention and referring thereto Figure 1 is a side elevation, partly in section, showing the bed in operative relation with the printing device for the printing operation, and Fig. 2 is a front elevation, partly in section and partly broken away.

For the purpose of illustration, I have chosen one form in which my invention may be embodied and which comprises an oscillating bed member 3 pivoted at 4 on the frame of the machine and arranged to be forced upward into engagement with the printing device 6 by a cam 7 which is mounted on a shaft 8 journaled in bearings in the frame 5 and operated by any suitable means. The bed member 3 is provided with a plurality of parallel ribs 9 on its upper face which are arranged to engage the type guides 10 of the printing device. These ribs which constitute the sectional bed may be formed in any suitable manner on the bed member and, for example, they may be inserted in parallel grooves 11 formed in the bed member as shown in Fig. 1. The type 12 are arranged in slots 13 of the frame of the printing device 6 and are provided with grooves 14 to receive the type guides 10, as shown. The type are wider above than below the grooves therein so that adjacent lines of type in the type frame will nearly contact with each other above or at the front of the type frame while the lines of type are separated below or at the back of the type frame sufficiently to permit the sectional bed to readily move into and out of engagement with the under side of the type guides. When the sectional bed is engaged with the type guides, as shown, in Fig. 1, it forms a firm and substantial support for the printing device and the type guides will sustain the metal type in position with the faces of the type in a single plane to print a clear, and distinct impression.

It will be understood that this invention may be embodied in machines of the class hereinbefore referred to for printing addresses and the like but as the other parts of the machine form no part of the present invention, it is unnecessary to illustrate or describe them herein. The bed member may return by gravity to lowered position or a spring 15 connected to the bed member may be employed for insuring its downward movement.

I claim:

In an addressing machine, the combination of a movable bed provided on its upper face with a plurality of parallel supporting ribs projecting upwardly above the face of the bed, a printing device comprising a plate equipped with a plurality of rows of type adapted to be positioned above said bed, a shaft arranged parallel with said ribs and remotely disposed with respect thereto upon which the bed is pivotally mounted, a rotatable shaft disposed beneath said bed, and a cam mounted on said last-mentioned shaft and adapted to intermittently engage and raise the bed to project the supporting ribs into engagement with the printing device between the lines of type thereon and form a rigid support for said printing device during the printing operation.

JOSEPH S. DUNCAN.

Witnesses:
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