

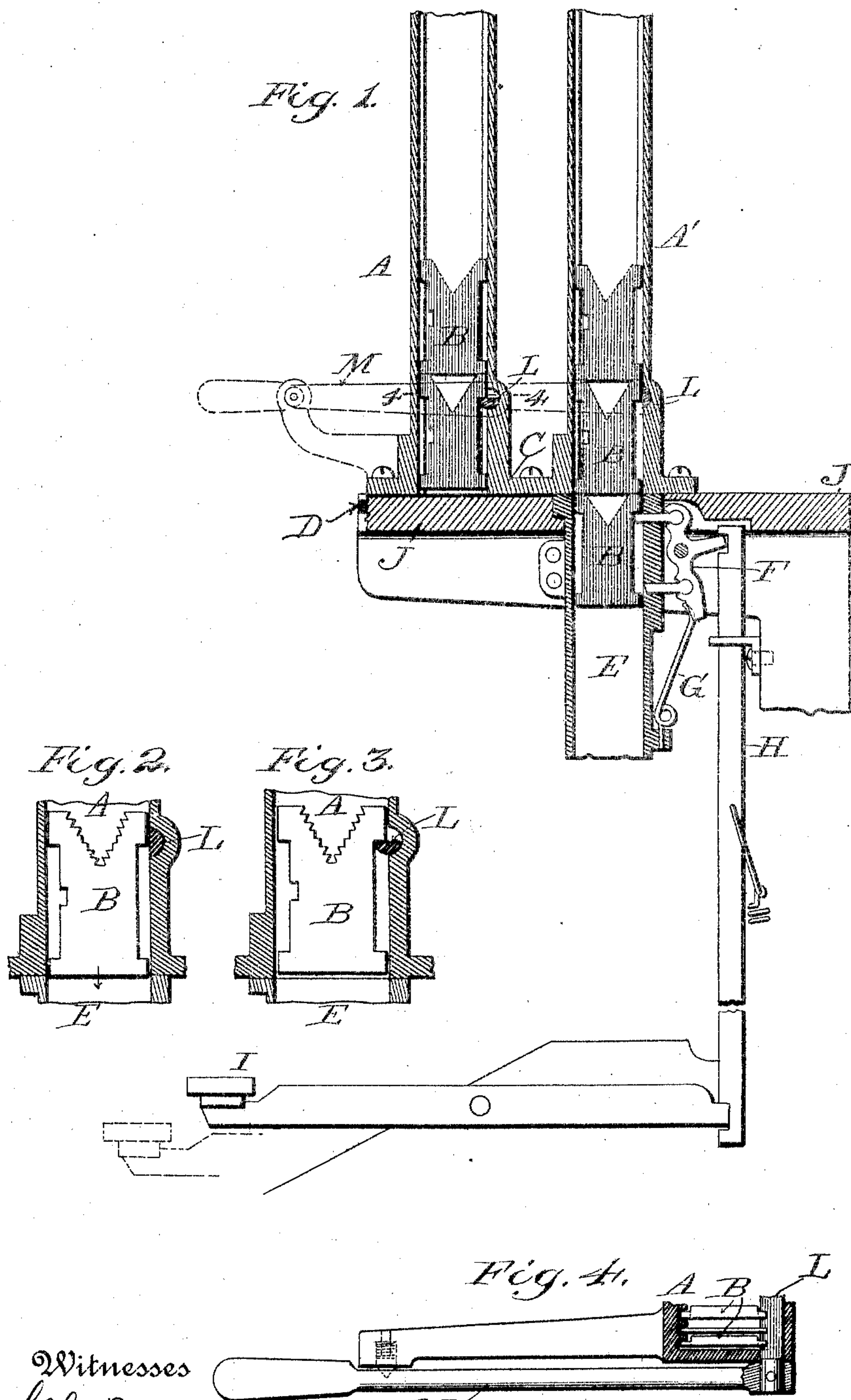
No. 776,779.

PATENTED DEC. 6, 1904.

P. T. DODGE.  
LINOTYPE MACHINE.

APPLICATION FILED MAY 28, 1904.

NO MODEL.



Witnesses  
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# UNITED STATES PATENT OFFICE.

PHILIP T. DODGE, OF BROOKLYN, NEW YORK, ASSIGNOR TO MERGENTHALER LINOTYPE COMPANY, A CORPORATION OF NEW YORK.

## LINOTYPE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 776,779, dated December 6, 1904.

Application filed May 28, 1904. Serial No. 210,244. (No model.)

*To all whom it may concern:*

Be it known that I, PHILIP T. DODGE, of Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in Linotype-Machines, of which the following is a specification.

My invention relates more particularly to linotype-machines in which two or more magazines are employed to carry two distinct fonts or sets of matrices, so that either set may be brought into action at will. It has in view a simple manner of arranging the magazines so that either one may be brought into operative relation to a single set of escapements or releasing devices, and also means for locking the matrices within the magazine which is not in action and also, if desired, retracting them slightly within the magazine that they may not be exposed at their ends.

With the exception of the parts herein shown and claimed the machine may be of any ordinary construction.

Figure 1 represents a vertical section from front to rear through two adjustable magazines and an escapement mechanism in accordance with my invention. Figs. 2 and 3 are cross-sections, on an enlarged scale, showing the escapement-locking device. Fig. 4 is a section on the line 4 4 looking toward the escapement-locking mechanism.

Referring to the drawings, A A' represent two upright magazines, each intended to contain a complete set or font of matrices. In the form shown these are of the ordinary Mergenthaler construction, each consisting of two parallel plates suitably spaced apart and grooved in their opposing faces to receive and guide the ears or edges of the matrices B. Each magazine will contain, as usual, a series of grooves, each devoted to one character or letter. The magazines are mounted in and sustained by a frame C, which may be of any suitable construction. This frame is mounted to slide horizontally forward and backward on rails or other supports D, forming part of the main frame. The only essential requirement is that the magazines shall receive suitable support and that they shall be capable of moving forward and backward

in order that one or the other may be brought over and in operative relation to the escapements or discharging devices.

E represents a fixed guide or conductor mounted in the main frame with its upper end in position to register with the lower end of either magazine, which may be brought into operative position above it for the purpose of receiving the released matrices and conducting them to the assembling mechanism below.

F represents one of the escapements mounted at the upper end of the guide E for the purpose of controlling the discharged matrices from the magazine above. The escapement may be of any suitable form or construction. In the form shown it is the same as in the Mergenthaler linotype-machine and consists of a centrally-pivoted lever having at opposite ends two dogs or pawls, which are alternately projected into the guide E for the purpose of alternately arresting and discharging the lowermost matrix in the column. The escapement is urged in one direction by a spring G and is moved in the opposite direction by a rod H, connecting with the finger-key I. Each action of the key reverses the position of the escapement and permits the discharge of a single matrix. It is understood that there is one of these escapements and the attendant connections for each series of matrices in the magazine—in other words, for each character represented in the magazine.

By sliding the frame C forward and backward in the main frame one magazine or another may be brought over the guide or conductor E in order to discharge its matrices thereto, the other magazine at the same time being carried out of the operative field and forward over a solid fixed plate J, which will prevent any accidental discharge of the matrices. For the purpose, however, of locking the matrices securely in the magazine which is not in use and, if desired, of slightly retracting or elevating the matrices, so that their lower ends will be free from contact with the plate J or from the other underlying parts, I propose to provide each magazine with a matrix locking and lifting device



L. In its most simple form (represented in the drawings) this locking device consists of a rocking bar or rod of semicircular section, extended horizontally across the magazine from one side to the other and seated in a suitable bearing therein. The inner side of this bar is exposed within the magazine in such manner that when it is turned to present its face vertically, as shown in Figs. 1 and 2, it will permit the free passage of the matrices, but when turned over to the position shown in Fig. 3, so as to present its face horizontally, it will act beneath the upper ears of the matrices to prevent their downward passage. By giving the bar a sufficient rotation its inner edge may be caused to act with lifting effect on the ears of the matrices, so as to slightly retract or lift the matrices and carry their inner ends fully within the magazine. The essence of this invention lies in a retaining or locking device located within the magazine and acting directly on the matrices therein, and it is manifest that it may be modified in form and arrangement at will, provided the mode of action is not materially changed.

Each locking device L may be provided with any suitable operating and fastening device—such, for instance, as an external handle or lever M arranged to interlock with the end or frame of the magazine to prevent accidental rotation of the bar L.

What I claim as my invention is—

1. In a linotype-machine, the combination of the following elements: plural magazines,

connected and mounted to move alternately to the operative position, a fixed escapement mechanism to cooperate with that magazine which is for the time in operative position, and a locking mechanism mounted within each magazine to retain the matrices therein.

2. In a typographic machine, a channeled magazine for matrices, in combination with a matrix-locking device permanently connected to the magazine and movable to engage and disengage the terminal matrices in all the channels.

3. In a typographic machine, a magazine adapted to carry matrices in rows or columns, in combination with an adjustable locking device contained within the magazine and adapted to lock the terminal matrices in all the rows.

4. In a linotype-magazine adapted to carry rows or columns of matrices, a rotary locking device mounted within the magazine, substantially as described, adapted to engage and hold the terminal matrices.

5. In a linotype-magazine, a transverse, internal, movable member, adapted to engage the terminal matrices and move them backward within the magazine.

In testimony whereof I hereunto set my hand, this 26th day of May, 1904, in the presence of two attesting witnesses.

PHILIP T. DODGE.

Witnesses:

JOHN F. GEORGE,  
M. A. DRIFFILL.