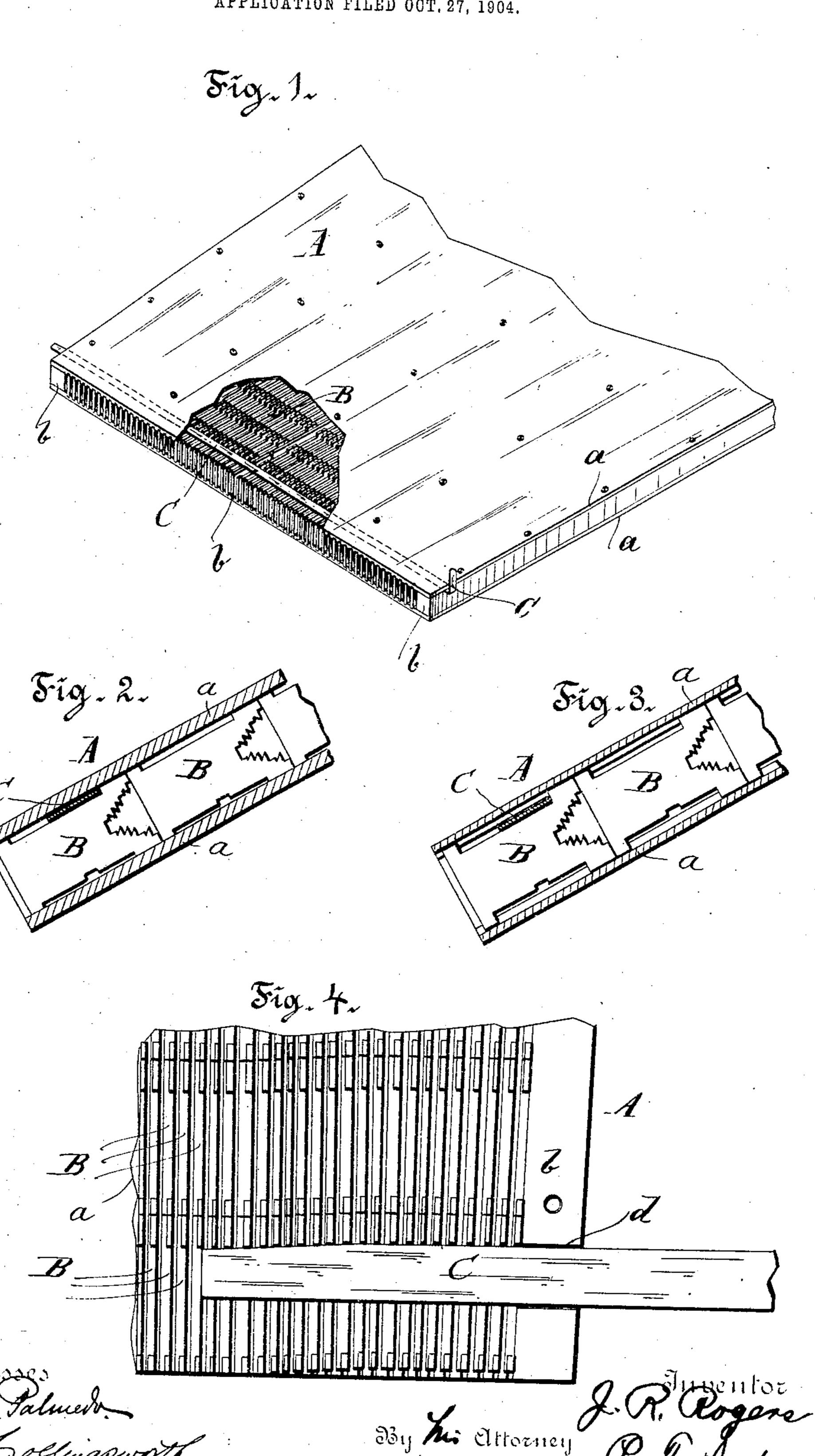
## J. R. ROGERS. LINOTYPE MACHINE. APPLICATION FILED OCT. 27, 1904.



## United States Patent Office.

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## LINOTYPE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 786,156, dated March 28, 1905.

Application filed October 27, 1904. Serial No. 230,230.

To all whom it may concern:

Be it known that I, John R. Rogers, of Brooklyn, county of Kings, and State of New York, have invented a new and useful Improve-5 ment in Linotype-Machines, of which the following is a specification.

My invention has reference more particularly to matrix-magazines such as are used in the commercial Mergenthaler linotype-ma-10 chine, and has in view the locking of the matrices securely within the magazine to prevent their accidental escape therefrom when the magazine is removed from the machine; also, if desired, to effect the retraction of the 15 end matrices slightly within the magazine, so that the magazine when removed from the machine may be readily handled and moved about without danger of injuring or fouling the matrices.

To this end the invention consists in constructing the magazine with a transverse groove or slot and in combining therewith a sliding bar which may be inserted at will in position to engage the ears or shoulders on 25 the edges of the matrices, this bar being, if desired, beveled or tapered at one end, so that when thrust into the magazine it will have the effect of moving the matrices backward therein.

Referring to the drawings, Figure 1 represents the lower end of an ordinary linotypemagazine provided with my improvement, the locking-bar being shown in position and a portion of the top being broken away to 35 expose the internal parts. Figs. 2 and 3 are longitudinal vertical sections through the end of the magazine, the former on a plane between two series of matrices and the latter on a plane with the guiding grooves or chan-40 nels. Fig. 4 is a top plan view of a portion of the forward end of the magazine with the top plate removed and the locking-bar partly inserted.

Referring to the drawings, A represents 45 the magazine, B B the contained matrices, and C the transverse locking-bar.

The magazine consists, as usual, of parallel top and bottom body-plates a a, separated by

plates a a are grooved longitudinally on their 5° inner or opposing faces to receive and guide the edges of the matrices B B, which are shown in the ordinary commercial form with projecting ears on their edges at the two ends.

In applying my improvement I form across the edges of the spacing-bars b grooves d near the lower ends of the magazine and adjacent to the top or bottom plate. I also provide a bar C of suitable length and size to admit of 60 its being inserted through the grooves d from one side of the magazine to the other. The bar thus inserted will lie against or in front of the upper ears on one edge of the matrices in the forward row, as shown in Figs. 2, 3, 65 and 4, and will effectually prevent them from sliding out of the magazine. I prefer to taper the bar on the inner or upper edge at the forward end, as shown in Fig. 4. When the bar of this form is inserted, its inclined 7° surface acting against the ears of the matrices will have the effect of carrying them backward slightly within the magazine, so that their inner ends are protected from injury if the magazine is seated on the floor or other 75 support.

The magazine shown in the drawings is without escapement devices to control the delivery of the matrices. My improvement is applicable also to magazines which have es- 80 capement devices mounted in their ends, escapements being foreign to the present invention.

The essence of the present invention lies in the use of a bar adapted to pass transversely 85 through the magazine and engage the edges as distinguished from the ends of the contained matrices to prevent their escape. The parts may be varied in form and arrangement at will, provided this mode of action is re- 90 tained.

I am aware that it has been proposed to pass a rod or bar through the lower end of a linotype-magazine beyond the matrices therein, as shown in Patent No. 548,432. This 95 construction forbids the use of a bar of sufficient size or rigidity to sustain the weight of and secured to spacing bars or plates b. The 1 the contained matrices unless the magazine is

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elongated to receive it, and it also forbids the instantaneous introduction of the rod in such manner as to carry the matrices back within the magazine. The locking-bar, such as here-5 in shown, may be applied in magazines of standard construction and to existing magazines without change in either form or dimensions. As applied to commercial machines they may be made of an inch in width 10 and of sufficient stiffness and rigidity to sustain the matrices when the magazine is detached from the machine, and they may be thrust through the magazine to their operative positions without adjusting the matrices 15 by hand and while the magazine is still upon the machine. A bar applied to the edge of the matrices has also the further advantage that it may be used in connection with all matrices without regard to the form of their 20 lower ends and without danger of mutilating them. All matrices now in commercial use have their lower ends provided with one or more notches. These notches vary in form,

size, and location. In some cases they termi-

lation by any bar or locking device lying

against them. This difficulty is avoided by

25 nate in thin edges, which are liable to muti-

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the present invention.

Having described my invention, what I claim is—

1. The longitudinally-channeled magazine, having a transverse opening in one side adjacent to the body-plate, substantially as shown; whereby it is adapted to receive a locking-bar to engage the edges of the matri- 35 ces.

2. In combination with the magazine comprising channeled body-plates, the removable transverse bar lying adjacent to the inner side of one of said plates.

3. In combination with the channeled magazine and the contained matrices with ears at their ends, the transverse sliding locking-bar seated between the ears.

4. In combination with the channeled maga- 45 zine, the transverse sliding bar, beveled at one end to engage the matrix-ears and draw them back within the magazine.

In testimony whereof I hereunto set my hand, this 25th day of October, 1904, in the 50 presence of two attesting witnesses.

JOHN R. ROGERS.

Witnesses:
David S. Kennedy,
John S. Paulsen.