

L. K. JOHNSON & A. A. LOW.
TYPE SETTING APPLIANCE.

No. 586,287.

Patented July 13, 1897.

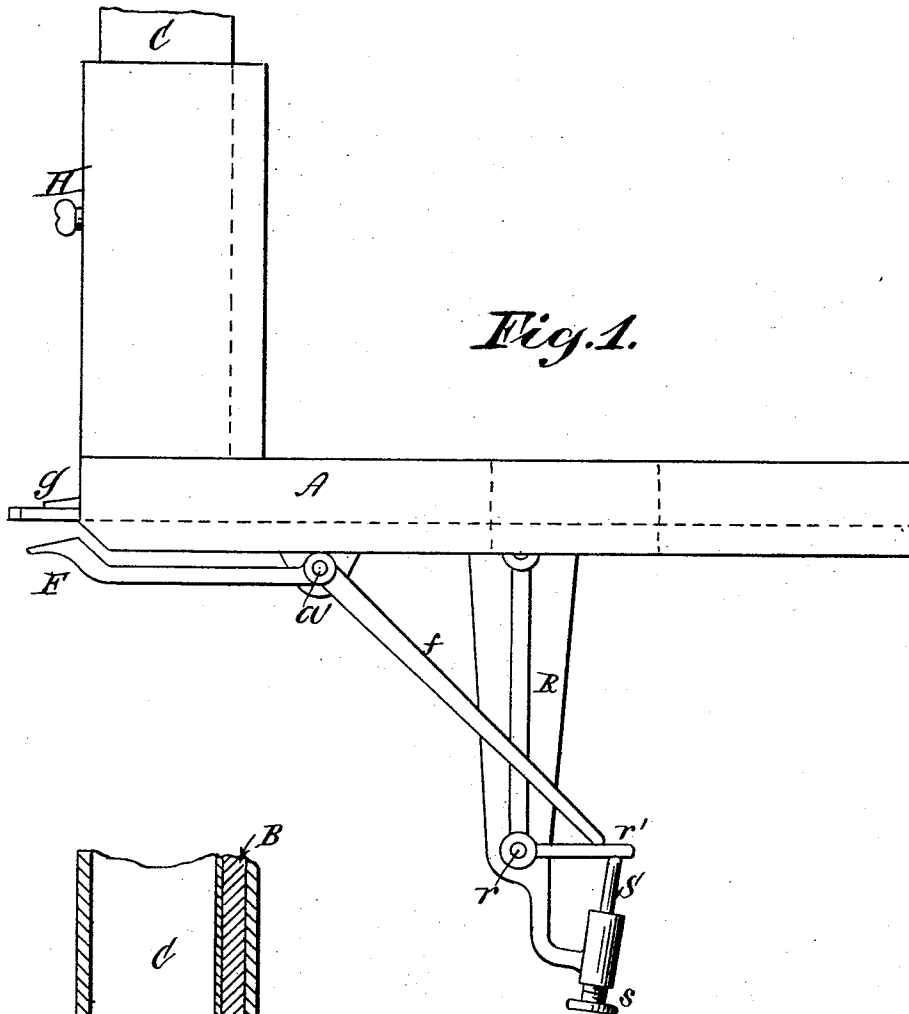


Fig. 1.

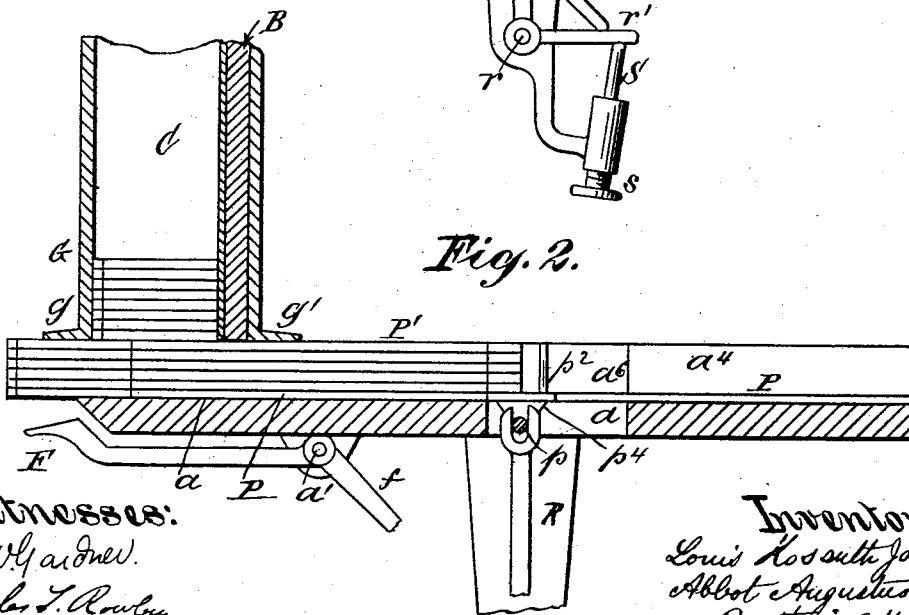


Fig. 2.

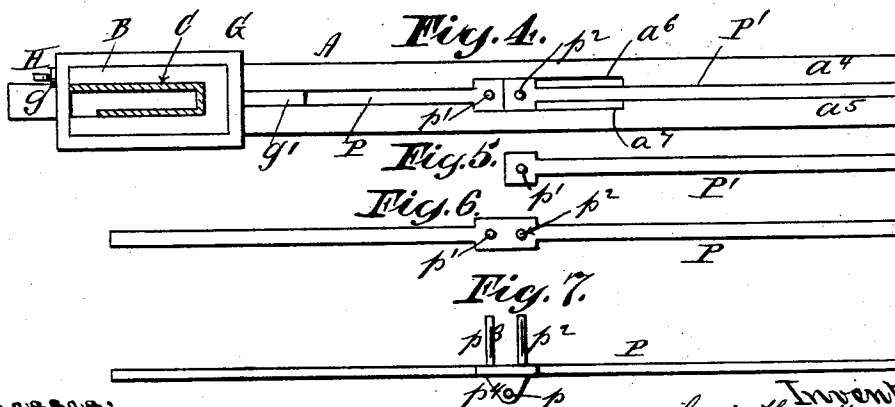
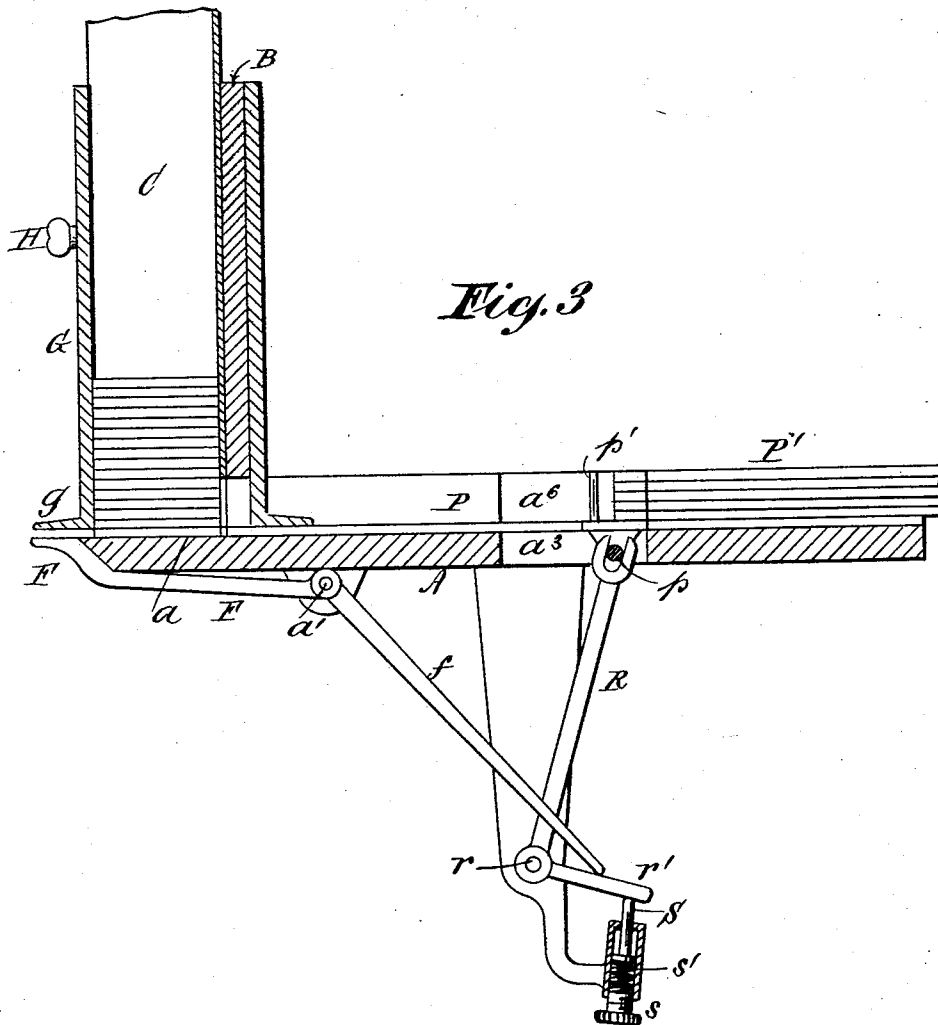
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UNITED STATES PATENT OFFICE.

LOUIS KOSSUTH JOHNSON AND ABBOT AUGUSTUS LOW, OF BROOKLYN,
NEW YORK, ASSIGNORS TO THE ALDEN TYPE MACHINE COMPANY, OF
NEW YORK, N. Y.

TYPE-SETTING APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 586,287, dated July 13, 1897.

Application filed May 9, 1896. Serial No. 590,808. (No model.)

To all whom it may concern:

Be it known that we, LOUIS KOSSUTH JOHNSON and ABBOT AUGUSTUS LOW, citizens of the United States, residing in the city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Type-Setting Appliances, of which the following is a specification sufficient to enable others skilled in the art to which the invention appertains to make and use the same.

Our invention relates to the setting of words or combinations of types by hand, the words or combinations being arranged in type-containing channels, from the lower ends of which they are forwarded by reciprocating type-pushers.

A leading feature of our present invention consists in the means devised for adapting the type-forwarder to words or combinations of different lengths. This we accomplish in a simple and effective manner by a plurality of single type-pushers fitting one over the other, as will be more fully set forth.

Another feature of our present invention consists in dispensing with the ordinary mechanism for reciprocating the type-pusher and in accomplishing the desired result by means of a finger-lever acting upon a rock-lever which controls the pusher.

The invention also includes certain other special features of construction hereinafter set forth.

In the accompanying drawings, Figure 1 is a side elevation of a structure embodying our invention. Fig. 2 is a sectional elevation showing the employment of all the pusher-blades; Fig. 3, a sectional elevation showing the device about to forward a single type; Fig. 4, a plan of the device; Fig. 5, a top view of one of the supplementary pushers; Fig. 6, a top view of the primary pusher; Fig. 7, a side elevation of the same.

In the drawings, A represents the framework, of any suitable construction, sufficient only for the requirements of a single type-channel, &c., being shown, it being understood that in practice the parts are duplicated and grouped to form a single case.

a is the type-floor, upon which the lower end

c of the channel rests, said channel being supported by the walls of the holder B, which in this case is open in front.

A four-sided type-guard G fits over the holder B and the front of the type-containing channel C, and is formed in front with the type-foot g and at the rear with the pusher-blade retainer g'. The front plate of the guard G is formed with a vertical slot and is supported adjustably upon the holder B by means of a set-screw H.

The type-floor a extends backward a sufficient distance to afford support for the primary type-pusher P, which is connected with the rock-lever R by means of the stud p. The rock-lever R is pivoted to a stationary part of the framework, as at r, its lateral short arm r' extending backward substantially at right angles.

A spring-plunger S rests against the under side of the short arm r' of the rock-lever R and tends constantly to throw the primary pusher P forward. The rock-lever R is thrown back, and with it the primary pusher, by the inner end f of the finger-lever F, pivoted at a' underneath the table a. This occurs during the operation of grasping and removing a type or types already forwarded, the thumb of the compositor pressing the forward end of the lever F upward. When the finger-lever F is released, the spring-plunger S returns the parts to their normal position, at the same time forwarding the type or types that have fallen in front of the pusher.

In order to regulate the tension of the plunger S accurately with relation to the work to be done, an adjusting-screw s is provided, by which the spring s' may be compressed more or less, as desired.

The guard G is adjusted upon the holder B to correspond to the number of types to be forwarded, and the primary pusher P is supplemented by the addition of one or more of the secondary pusher-blades P', as may be required. These secondary pusher-blades P' consist of simple strips of metal perforated at one end, as at p', to fit over either of the pins p² or p³ upon the primary pusher P. Thus the pusher may be adapted to forward one or any other number of types by simply

shifting these supplementary pushers from one pin to the other.

The floor a is slotted at a^3 to accommodate the downwardly-projecting lugs p^4 of the primary pusher, which support the wrist-pin p , and to give the bifurcated upper end of the rock-lever R free play. The side walls $a^4 a^5$, which inclose and confine the pusher-blades, are also recessed, as at $a^6 a^7$, to accommodate the wider portion of the primary pusher and its blades and to admit of the reciprocal movement thereof.

Our present device is both cheap and effective in construction. All power mechanism is dispensed with, and the act of grasping and removing a type or types effects and insures the advancement of those next succeeding. All complication in the adaptation of the pusher to variations in the number of types to be forwarded is avoided by the use of the comparatively thin supplementary blades, which may be stamped out of sheet metal of suitable thickness.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In a type-setting case substantially such as described, the combination with a type-channel, channel-holder, and type-supporting floor, of a type-forwarder provided with one or more supplementary type-blades which may be set for use in connection with the primary type-blade, substantially in the manner and for the purpose described.

2. The combination with the type-channel, channel-holder, and type-supporting floor, of a primary pusher provided with a series of supplementary type-blades carried thereon which may be adjusted into a forward position for use, or held in a retired position when not desired for immediate use, substantially in the manner and for the purpose described.

3. The combination with a type-containing channel, channel-holder, a type-supporting platform of the primary pusher P , formed with the pins p^2, p^3 , and the secondary pusher-blades P' , formed with the perforations p' ,

substantially as described, together with means for reciprocating the said primary pusher P , for the purpose and substantially in the manner described.

4. The combination of a type-containing channel, a channel-holder, a type-supporting floor, a finger-lever actuated by the thumb during the withdrawal of a type or types, a rock-lever actuated by said finger-lever in one direction and by a spring-plunger or equivalent means in the opposite direction, and a type-forwarder connected with the said rock-lever, for the purpose and substantially in the manner described.

5. The combination with the type-channel, channel-holder, type-floor, finger-lever, rock-lever and type-pusher, of means for automatically returning the parts to their normal position after the release of the finger-lever, substantially in the manner and for the purpose described.

6. The combination of the type-channel, channel-holder, and type-floor, with a type-forwarder adjustable with relation to the type to be forwarded, and a type-guard adjustable on its channel-holder and formed with a type-foot in front and a pusher-retainer in the rear, substantially in the manner and for the purpose described.

7. The combination with a type-containing channel, channel-holder, type-floor, and type-forwarder, of the finger-lever F, f , the rock-lever R , and the spring-plunger S , the whole constructed and operating substantially in the manner and for the purpose described.

8. The combination of a type-channel, channel-holder, type-floor, type-forwarder, finger-lever, rock-lever, and spring-plunger S , with means for adjusting the tension of the spring of the latter, substantially in the manner and for the purpose described.

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