

No. 641,297.

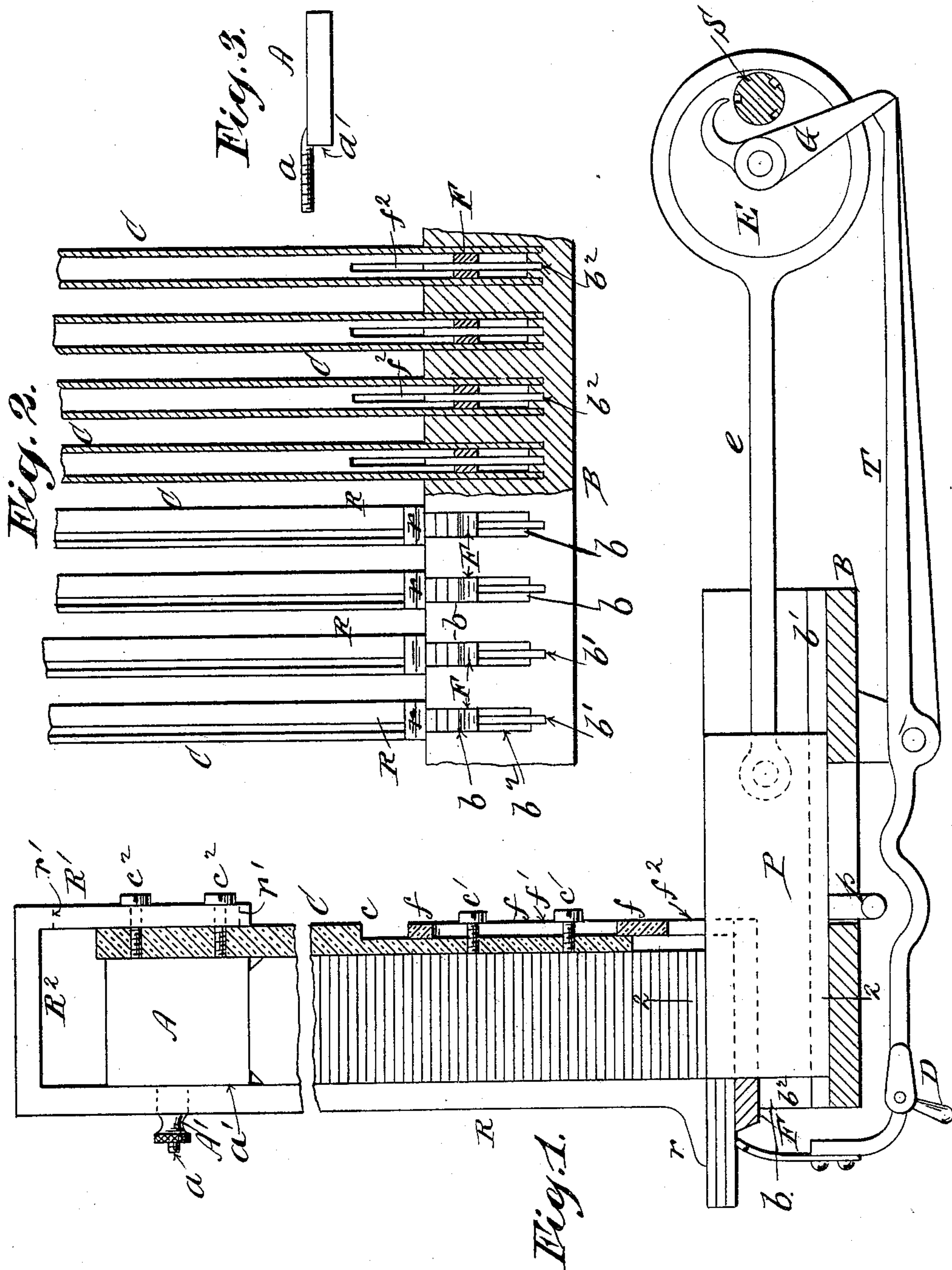
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L. K. JOHNSON & A. A. LOW.

TYPE SETTING APPARATUS.

(Application filed Nov. 3, 1896.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

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

TYPE-SETTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 641,297, dated January 16, 1900.

Application filed November 3, 1896. Serial No. 610,905. (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 New York, (Brooklyn,) in the county of Kings and State of New York, have invented certain new and useful Improvements in Type-Setting Apparatus, 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 improvements relate to the class of compositors' type-cases heretofore devised by us in which the types are forwarded from the lower ends of the type-containing channels into position for removal by hand, the act of removing a type or combination of types setting in motion the forwarding mechanism, so that the device is rendered practically automatic.

A leading feature of our present invention consists in dispensing with the channel-holders heretofore used by us and in sustaining the channels directly in the supporting bed or table, thus cheapening and simplifying the construction of the case. In this connection our invention includes the feature of a vertically-adjustable type-floor in each channel in connection with a blade-pusher having a fixed path, whereby we are enabled to utilize the lower ends of the channels within the sockets in the base or table for the purpose of attaining the scope of adjustment desirable in adapting the device to different word combinations.

Another feature of our present invention consists in extending the front guard over the top of the channel and in supporting it adjustably upon the spine of the latter, so that, in conjunction with the adjustable type-floor, the channel may be completely closed on all sides for storage or transportation.

Our invention also includes certain other minor features in the construction and arrangement of parts hereinafter described.

In the accompanying drawings, Figure 1 is a longitudinal sectional elevation of a portion of our improved type-case, showing the position of the operative parts while at rest; Fig. 2, an elevation, partly in section, taken

at right angles to Fig. 1. Fig. 3 is a top view of the locking-slug.

The supporting bed or table B is formed with a series of equidistant sockets *b*, which receive the lower ends of the type-containing channels C. Extending from these channel-sockets *b* are the pusher-blade grooves *b'* in the rear and the type-floor grooves *b''* in front.

The type-pusher P when in its normal position is at the end of its forward stroke, as shown in Fig. 1, so that its front edge reinforces and sustains the forward types and prevents injury to the faces of the next succeeding, as is apt to occur by reason of back pressure when the pusher is normally in the retracted position with the faces of the next succeeding types immediately in the rear of the types in position for removal.

The mechanism for actuating each pusher-blade P is substantially the same in construction and operation as that set forth in our concurrent application, Serial No. 609,652, filed October 22, 1896, consisting of the eccentric E, eccentric-rod *e*, gravity-pawl G, shouldered power-shaft S, and trigger-lever T, the main difference being that the clutch mechanism is reversed and that the depressing-arm *p* on the under side of the pusher P acts upon the front arm of the trigger-lever T. The latter is also provided with a locking device D, which may be adjusted to bear against the under side of the table B when it is desired to prevent the continuous action of the forwarding mechanism during the absence of forwarded types, as while changing or adjusting the channels, &c.

The lower end of each type-containing channel is provided with a type-floor F, which is adjustable longitudinally therein by any suitable means. As shown in the drawings, the type-floor F is formed with an upright member *f*, having the longitudinal slot *f'*, and is secured adjustably upon the spine *c* of the channel by the set-screw *c'*. The type-floor F, as well as the spine of the channel and the upright *f*, are slotted to admit the blade-pusher P, which latter may be of maximum size, so that by adjusting the type-floor F with relation thereto any desired number of types may be forwarded.

The type-floor F projects forward through the slot b^2 to support the heels of the types in the position to which they are forwarded under the presser-foot r on the front guard R.

5 The front guard R is supported upon the spine of the channel by set-screws $c^2 c^2$, passing through a slot r' in the rear extension R', which is united to the front bar R by the transverse member R², which latter is used
10 to close the upper end of the channel when the guard is adjusted to the lowest position.

In order to avoid slotting the front guard R longitudinally, as in our last application, Serial No. 609,652, to admit of the projection
15 of the stud a of the locking-slug A, we in the present case make the said front guard R of less width than the channel, so as to leave a space on one side thereof, and form the stud a on one side of the locking-slug. In this
20 case the set-screw A' clamps the edge of the front guard R against the front edge a' of the slug A.

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

25 1. In a type-setting apparatus substantially such as described, the combination of a series of type-containing channels formed with individual type-supporting shoulders, a table formed with a series of sockets for the recep-
30 tion of the lower ends of the channels, and a series of individual-type-forwarding devices arranged substantially in the manner and for the purpose described.

2. In a type-setting apparatus substantially

such as described, the combination with a 35 type-pusher of maximum height, and with mechanism for reciprocating it, of a type-channel formed with a type-supporting floor adjustable with relation to the pusher, substantially in the manner and for the purpose 40 described.

3. In type-setting apparatus substantially such as described, the combination with a channel-support and type-forwarding mechanism, of a channel formed with a guard ad- 45 justable upon its spine and extending across the top of the channel substantially in the manner and for the purpose described.

4. In type-setting apparatus substantially such as described, the combination of the 50 guard-rail R, of less width than the channel C, the locking-slug A, formed with the screw-stud a , and the set-nut A', for securing the said slug to the guard-rail R, substantially in the manner and for the purpose described. 55

5. In type-setting apparatus substantially such as described, the combination of the pusher P, and means for reciprocating the same, with the channel C, formed with the adjustable type-floor F, having the slots f^2 , 60 for the accommodation of the pusher, substantially in the manner and for the purpose described.

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Witnesses:

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