

No. 639,245.

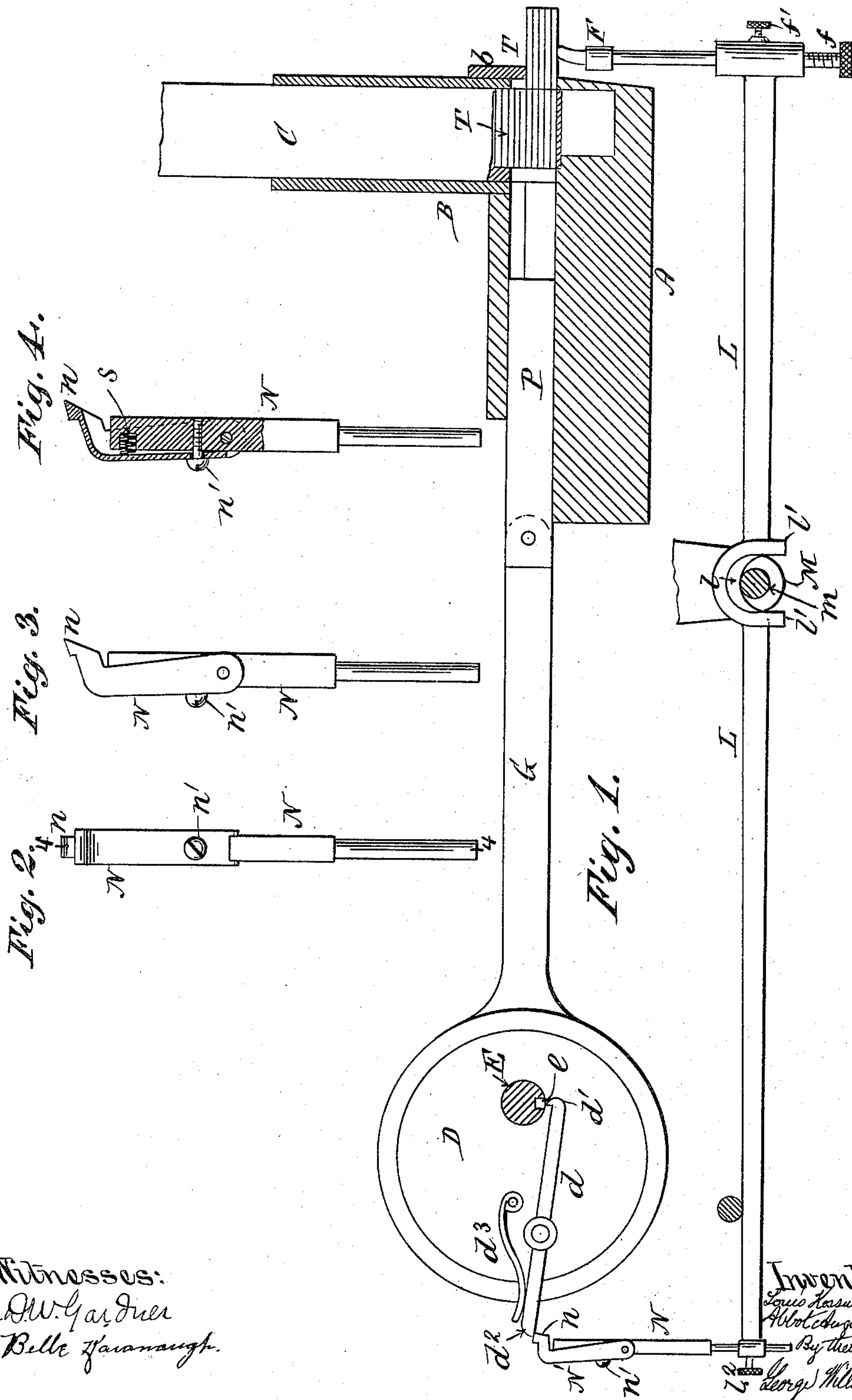
Patented Dec. 19, 1899.

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

(Application filed Apr. 29, 1899.)

(No Model.)

2 Sheets--Sheet 1.



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Fig. 7.

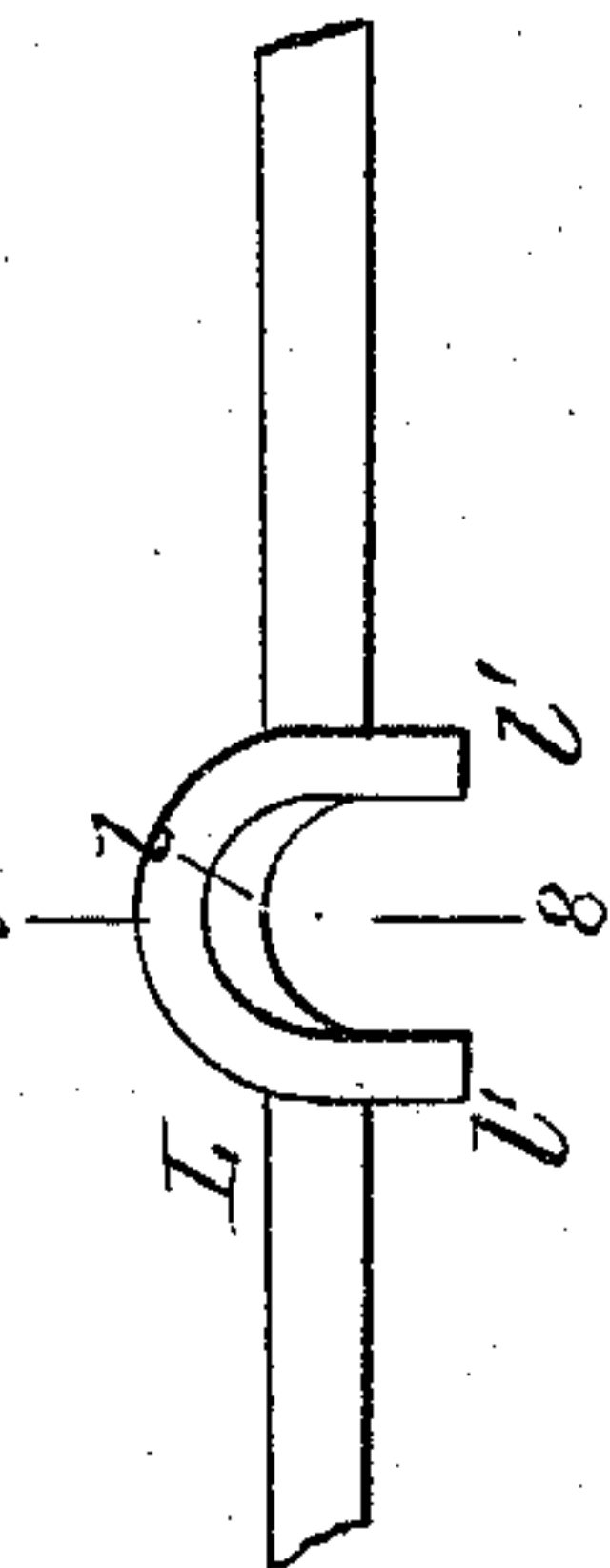


Fig. 8.

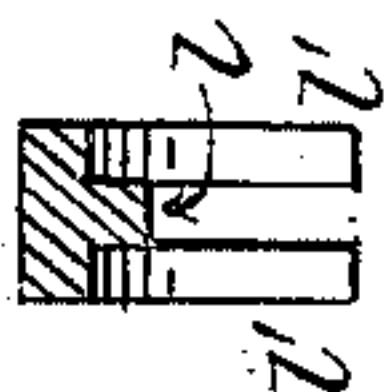
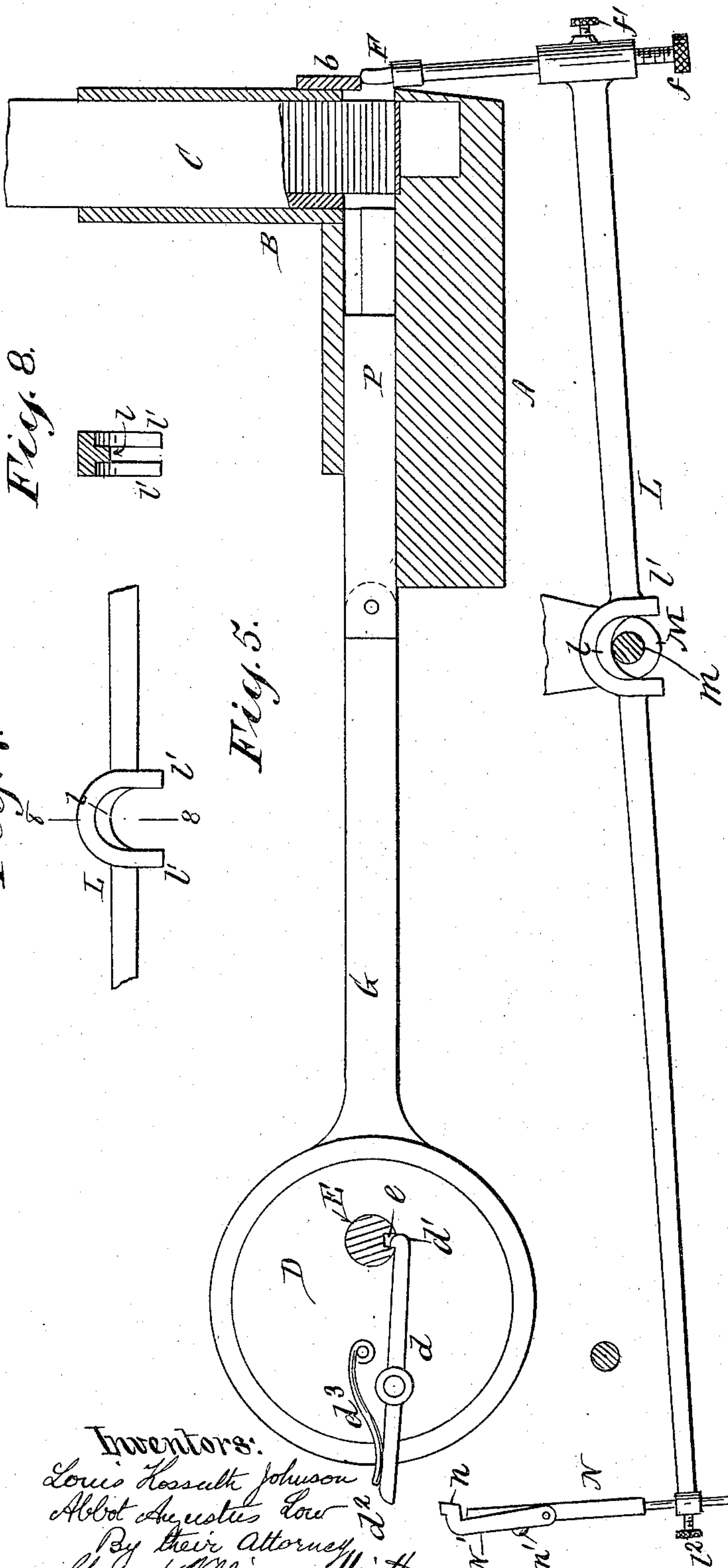


Fig. 5.



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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. 639,245, dated December 19, 1899.

Application filed April 29, 1899. Serial No. 715,067. (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, and residents of the city of New York, borough of 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 compositors' type-cases in which the type are forwarded automatically into position for removal by hand, the act of withdrawing types in the forwarded position setting in operation the type-forwarding mechanism.

In the particular form of apparatus to which our present invention is applicable the forwarded types lock the type-forwarding mechanism through the medium of a controlling-lever and latch.

One object of our present invention is to render the operation of the latch more delicate than heretofore and at the same time render the latch more accessible for adjustment. To this end we have reversed the arrangement of the clutch mechanism and extended the controlling-lever beyond the same, so as to expose the latch in convenient position for adjustment at the rear of the case.

The invention also includes the special means of adjustment afforded for regulating the contact-point of the latch with relation to the end of the pawl on the clutch mechanism.

Another feature of our present invention consists in a special construction of the cross-bar supporting the controlling-levers and of the levers also at a point of engagement with the bars, substantially as hereinafter set forth.

In the accompanying drawings, Figure 1 is a sectional elevation through a compositor's case of the class designated, showing the forwarding mechanism locked by the type last forwarded. Fig. 2 is an elevation of our improved latch. Fig. 3 is a similar view taken at right angles to Fig. 2. Fig. 4 is a sectional view thereof upon plane of line 4 4, Fig. 2. Fig. 5 is a similar view to Fig. 1, showing the parts just after the withdrawal of the types last forwarded. Fig. 6 is a detail view of a

portion of the cross-rod supporting the controlling-levers; Fig. 7, an elevation of a portion of one of the said controlling-levers, showing the provision made for engagement with the cross-bar; Fig. 8, a transverse section upon plane of line 8 8, Fig. 7.

A represents the table, upon which the channel-holders B are supported.

C is a type-containing channel in which the types are arranged in a column upon the flat in prescribed relation to each other.

T are the types.

b is the upper type-rest, between which and the type-finger F the forwarded types are held.

P is the type-pusher blade, reciprocated by the eccentric D through the medium of the eccentric-rod G when the end d' of the pawl d is in engagement with the shoulder e upon the constantly-rotating shaft E, the spring d^3 tending constantly to effect the engagement.

In the drawings only a single set of parts is shown, it being understood that they are duplicated for each type-channel provided for in the case as a whole.

The controlling-levers L are pivotally supported upon a stationary cross-bar M, formed with a groove m' for each lever. Each lever is formed with a saddle l , fitting over the rod M, and each saddle with a flange l' , which fits into a groove m and prevents lateral movement of the lever when in position. On the forward end of each controlling-lever L is mounted a finger-piece F, regulated in height by the adjusting-screw f and locked in position by the set-screw f' . The rear end of each controlling-lever L is extended backward beyond the power-shaft E and clutch mechanism and is provided with a latch-post held in position by a set-screw l^2 . Pivotally connected to the upper portion of this post is a latch M', having a nose or bearing n for engagement with the outer end of the pawl d when the parts are at rest. A spring s tends constantly to throw the latch backward and is contracted by a set-screw n' , by which the position of the nose n with relation to the path of the outer end of the pawl may be gaged with accuracy, so as to insure a delicate or hair-trigger action in the release of the type-forwarding mechanism, which is accomplished when the forwarded types are

withdrawn, thereby allowing the front end of the lever L (the rear arm of which is the heavier) to tilt upward, withdrawing the nose n of the latch N' from contact with the outer end d^2 of the pawl d and allowing the spring d^3 to force the inner end d' into engagement with the shoulder e upon the constantly-rotating shaft E, by which the eccentric is then rotated, causing the rod G to reciprocate the pusher-blade P. The advance of the types brings the lever L into position to again lock the type-forwarding mechanism, as heretofore fully set forth in describing this class of apparatus.

Delicacy and accuracy in the release of the type-forwarding mechanism are important practical advantages which we herein attain in a simple and effective manner, at the same time rendering the latches more accessible and their adjustment more convenient than heretofore. We also facilitate the placing or removal of the controlling-levers, since they may be lifted from or into position without loosening or disturbing any part of the apparatus.

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

1. In a compositor's type-case of the character designated, the combination with the type-forwarding mechanism of a controlling-

lever provided with a latch which is adjustable thereon with relation to the releasing mechanism, substantially in the manner and for the purpose described.

2. In a compositor's type-case of the character designated the combination with the type-forwarding mechanism of the controlling-lever L, post N, and adjustable latch N' , mounted thereon, substantially in the manner and for the purpose described.

3. In a compositor's type-case of the character designated the combination with the type-forwarding mechanism, of the controlling-lever L, post N, latch N' , spring s , and adjusting-screw n' , the whole arranged and operating substantially in the manner and for the purpose described.

4. In a compositor's type-case of the character designated, the combination with the type-forwarding mechanism, of the controlling-lever L formed with the saddle l , and flanges l' , and the cross-bar M, formed with the grooves m , for the purpose and substantially in the manner described.

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