

(No Model.)

4 Sheets—Sheet 1.

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

No. 583,479.

Patented June 1, 1897.

Fig. 1.

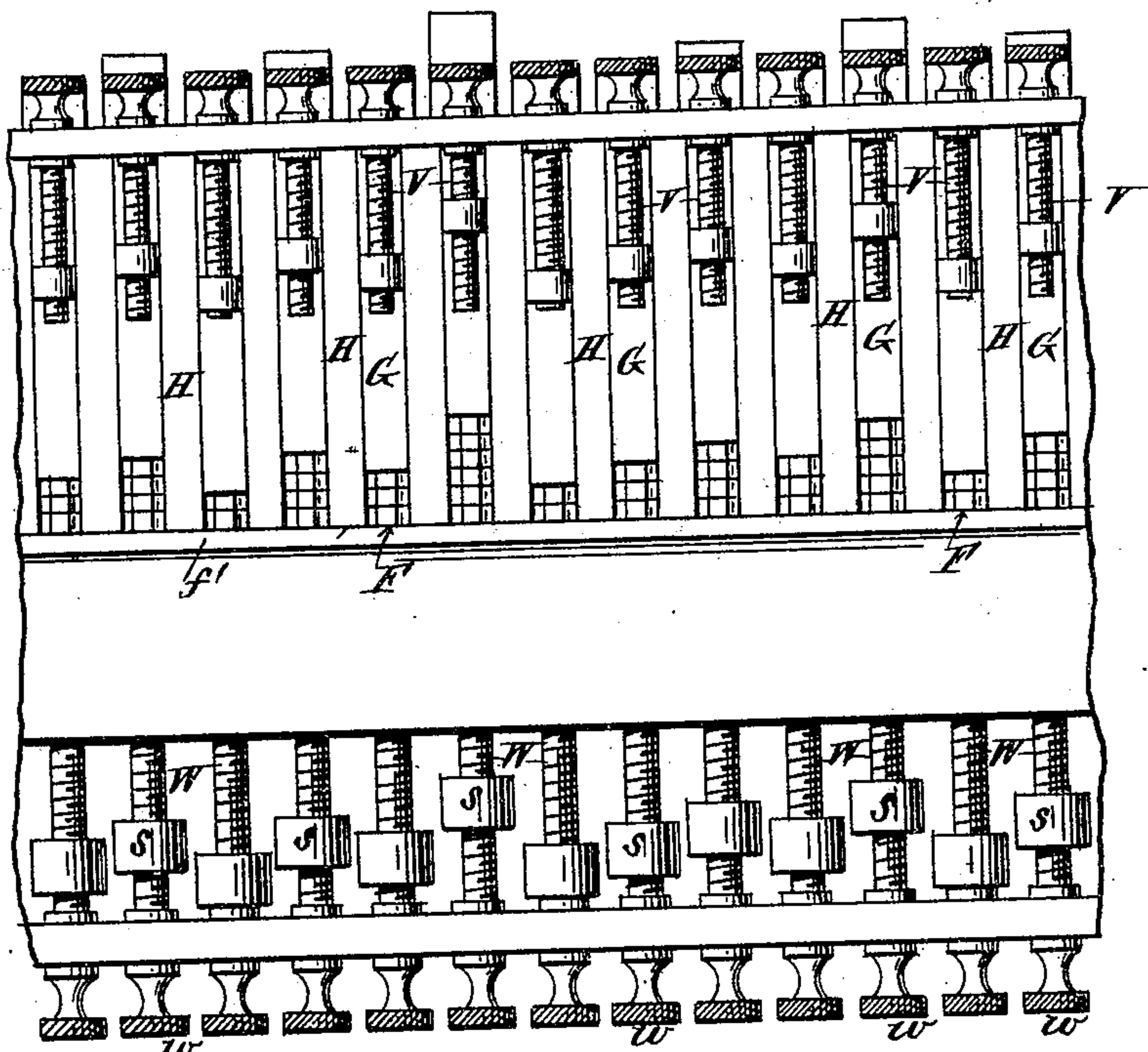
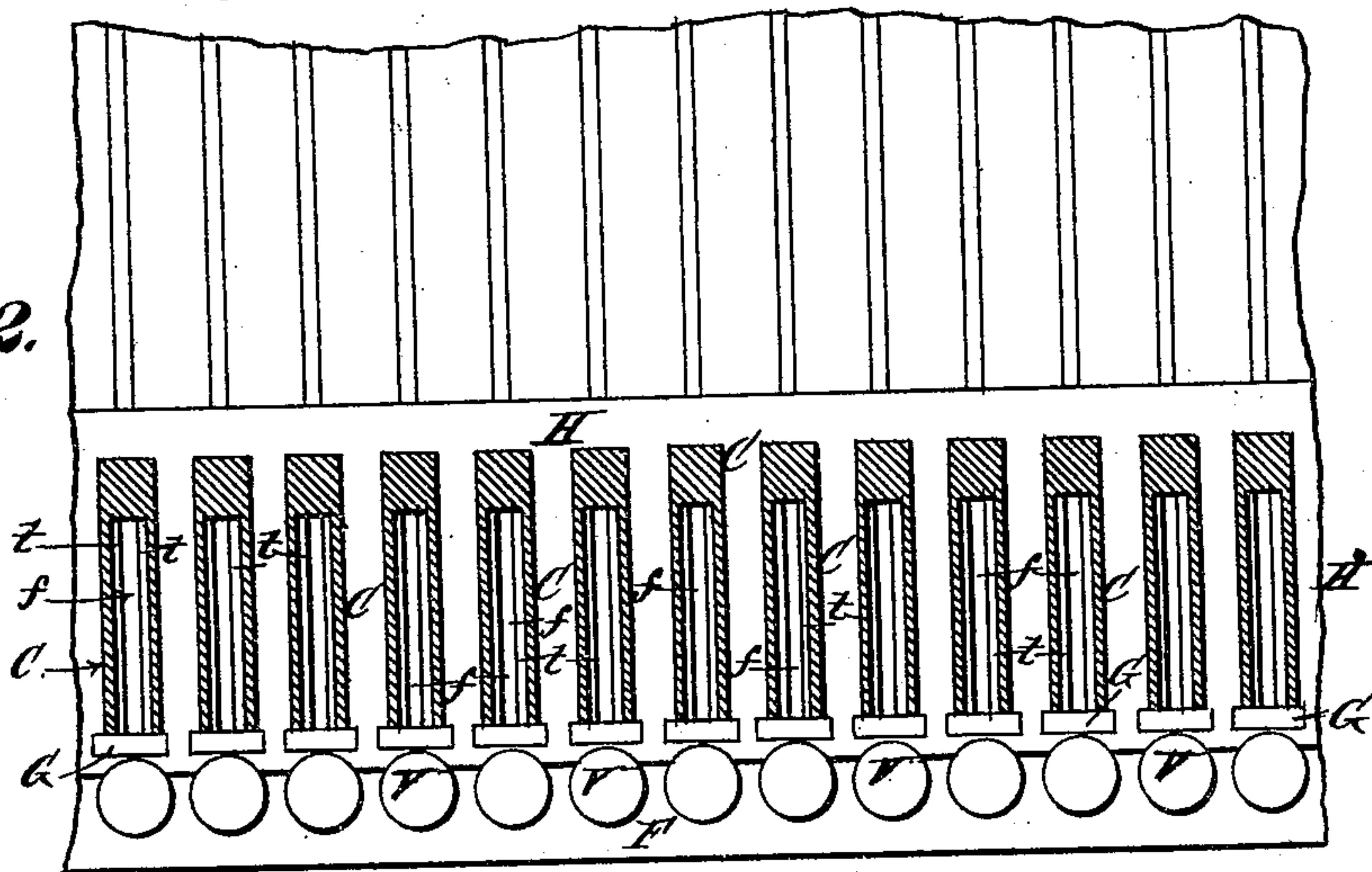


Fig. 2.



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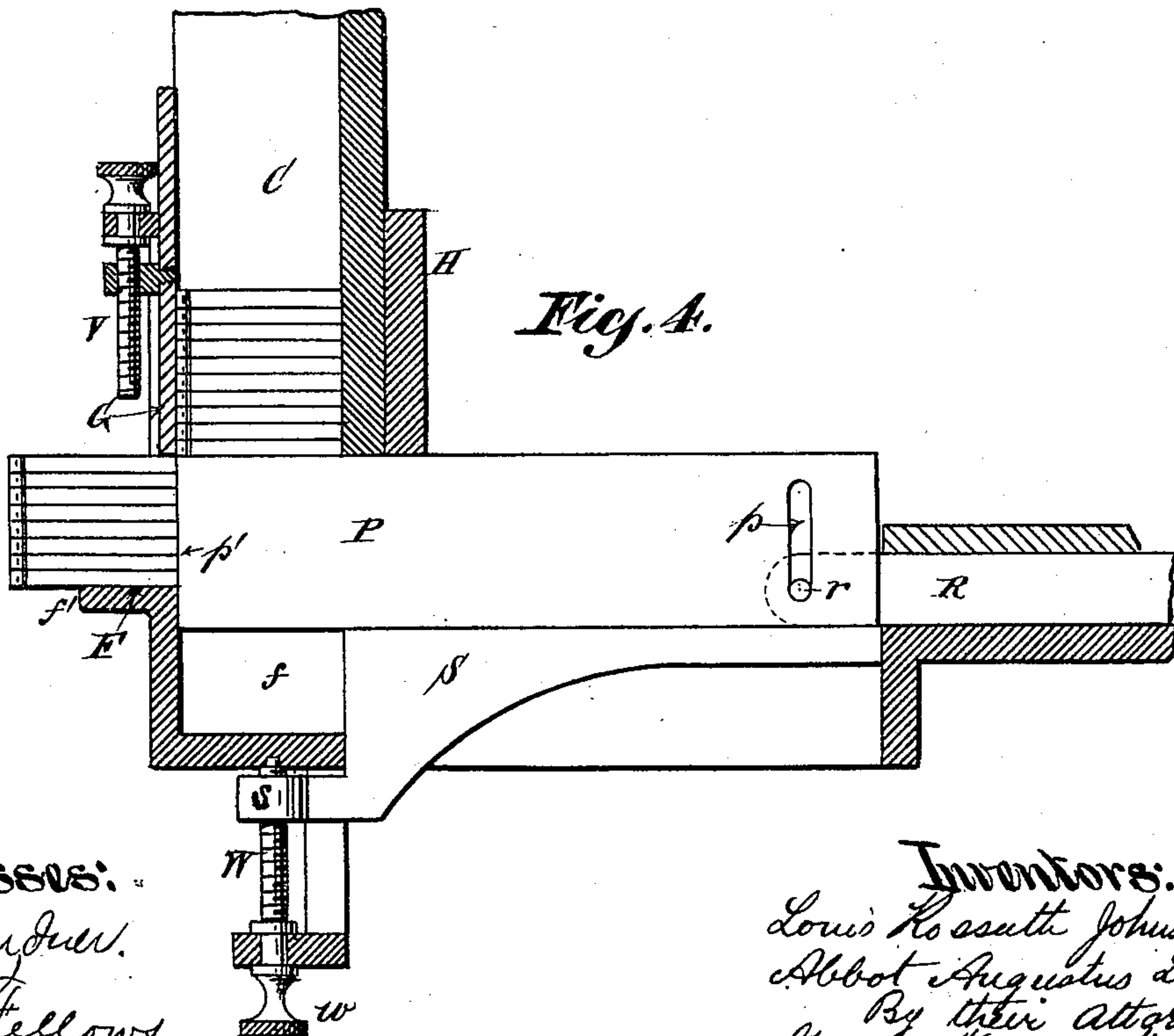
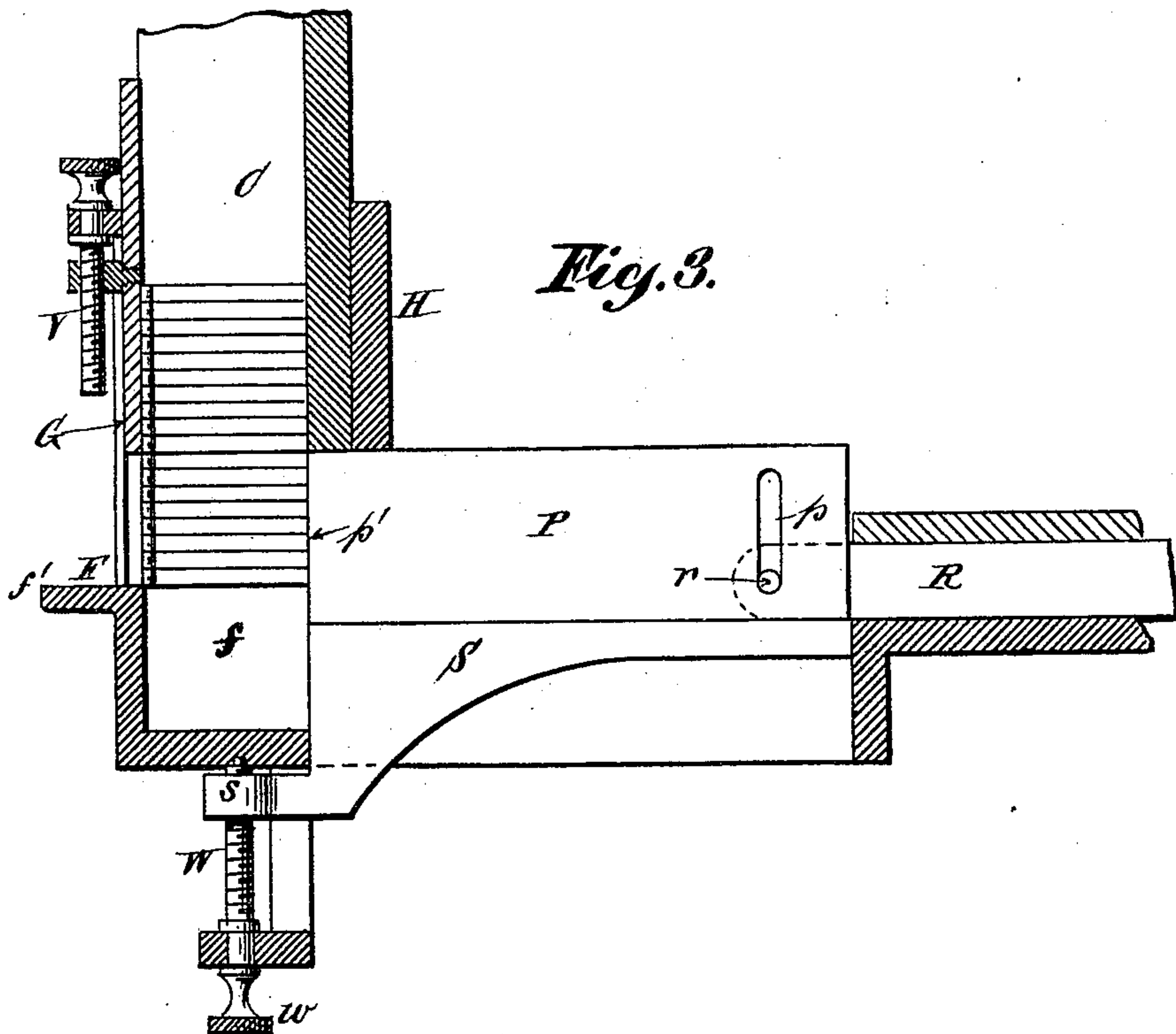
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4 Sheets—Sheet 2.

L. K. JOHNSON & A. A. LOW.
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(No Model.)

4 Sheets—Sheet 3.

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

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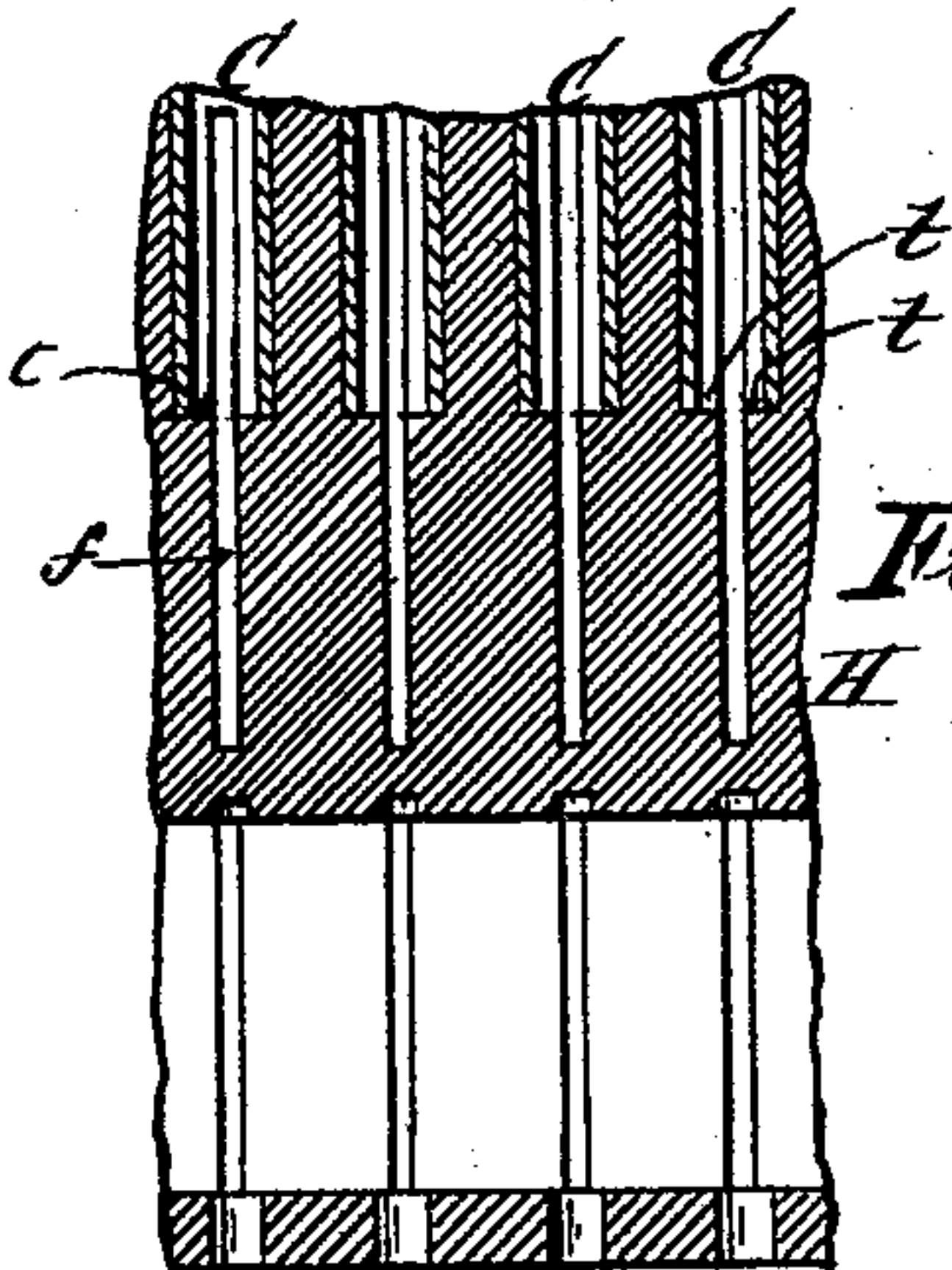
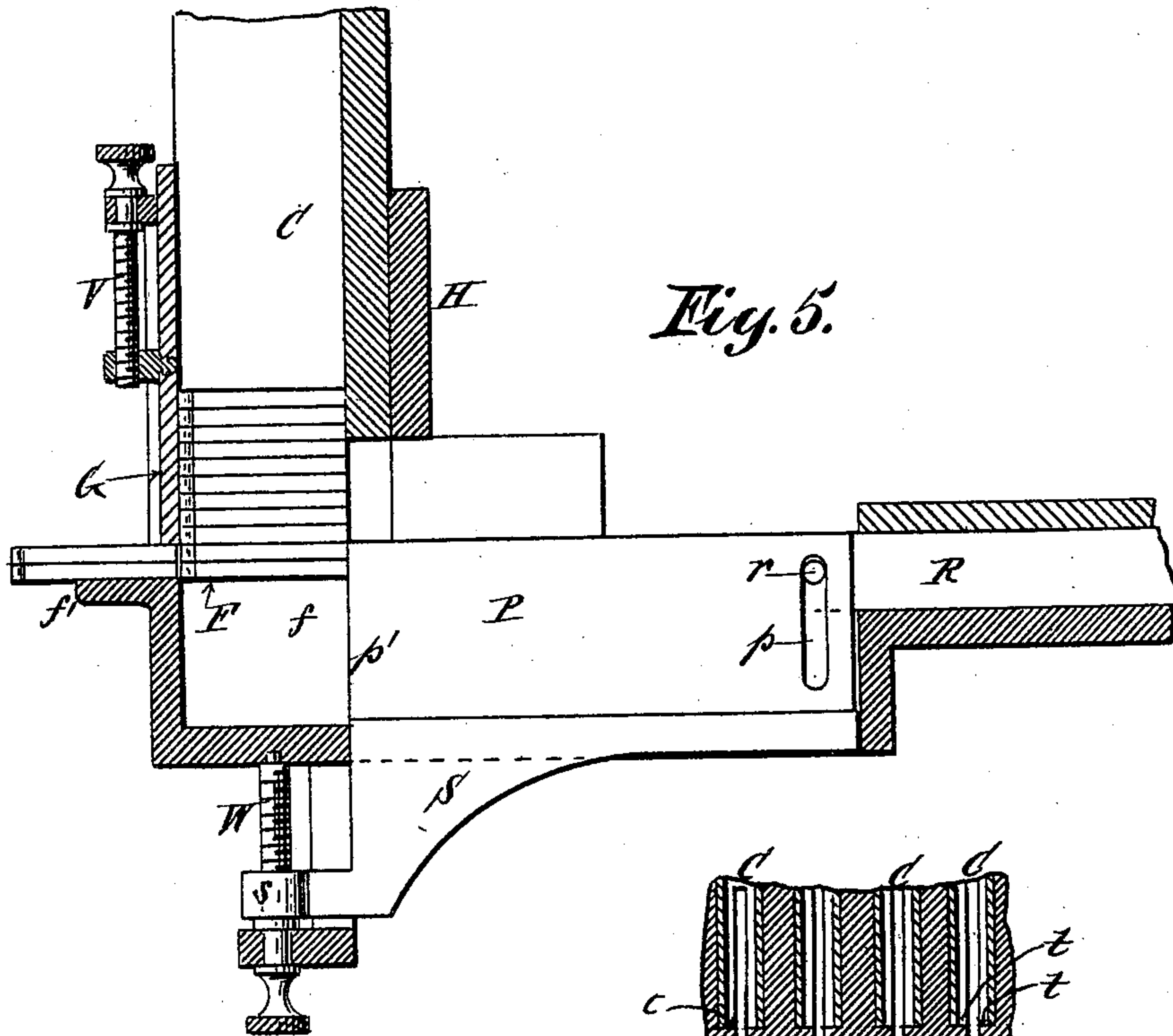
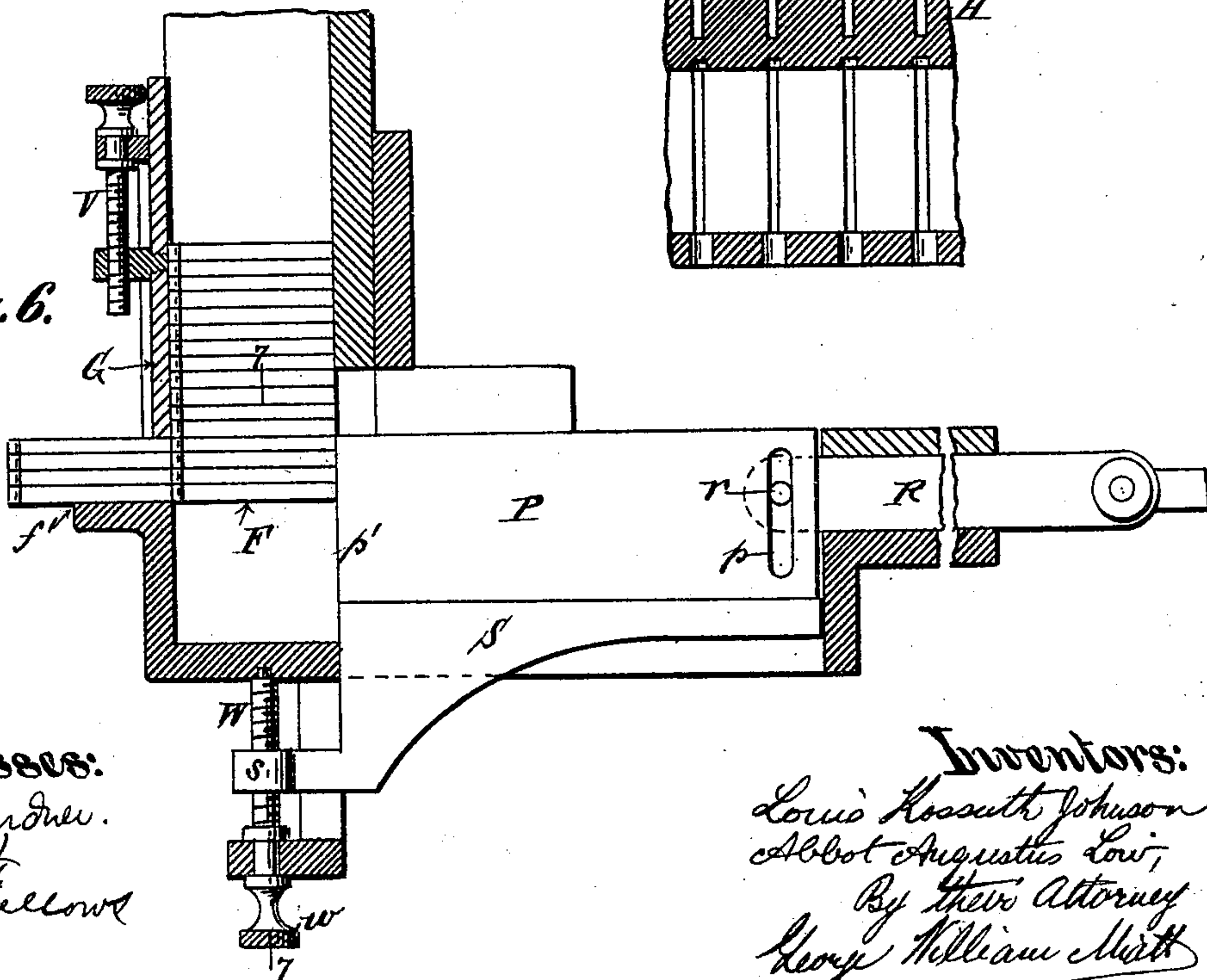


Fig. 6.



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4 Sheets—Sheet 4.

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

No. 583,479.

Patented June 1, 1897.

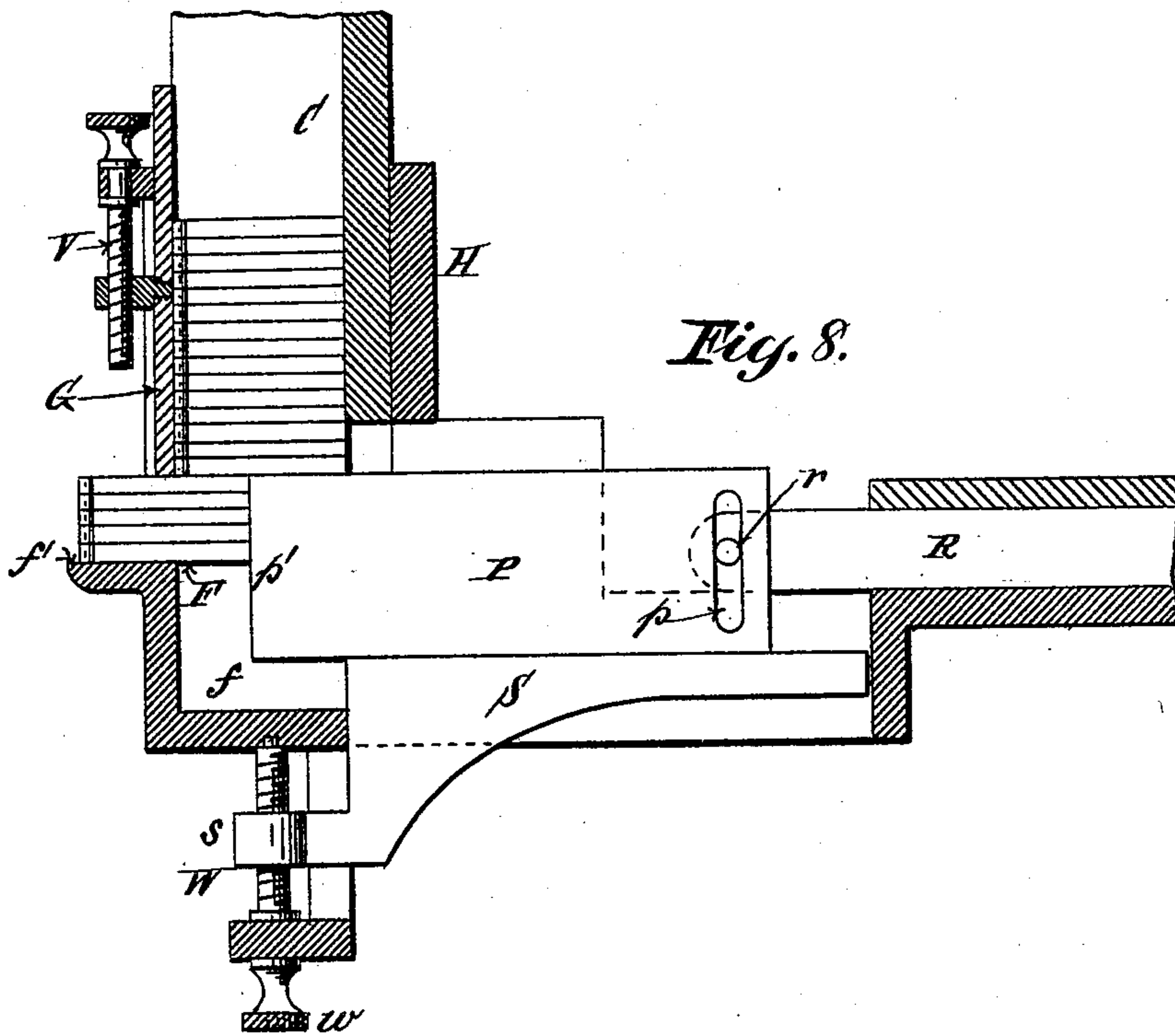


Fig. 8.

Fig. 9.

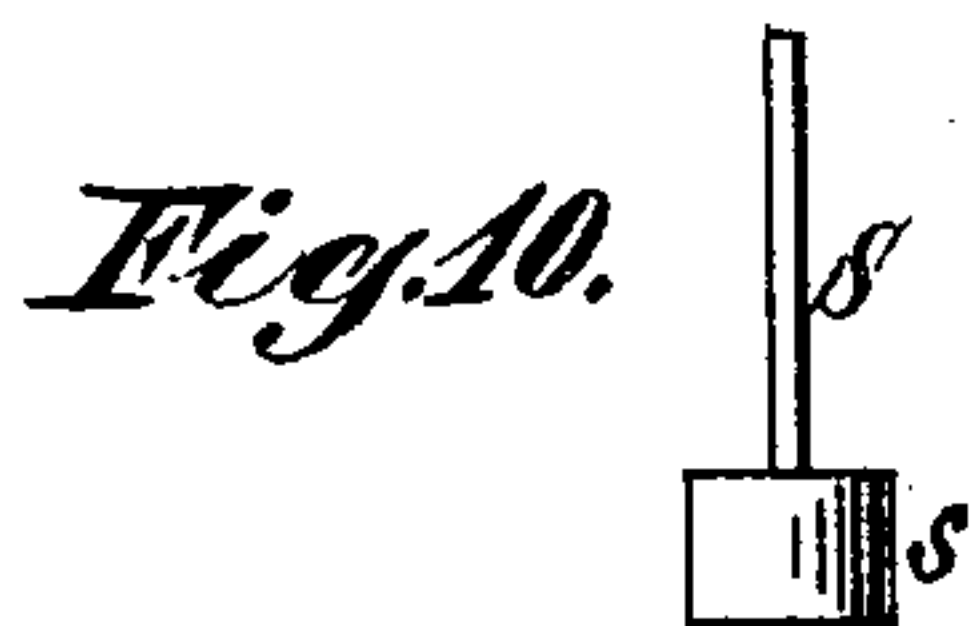


Fig. 10.

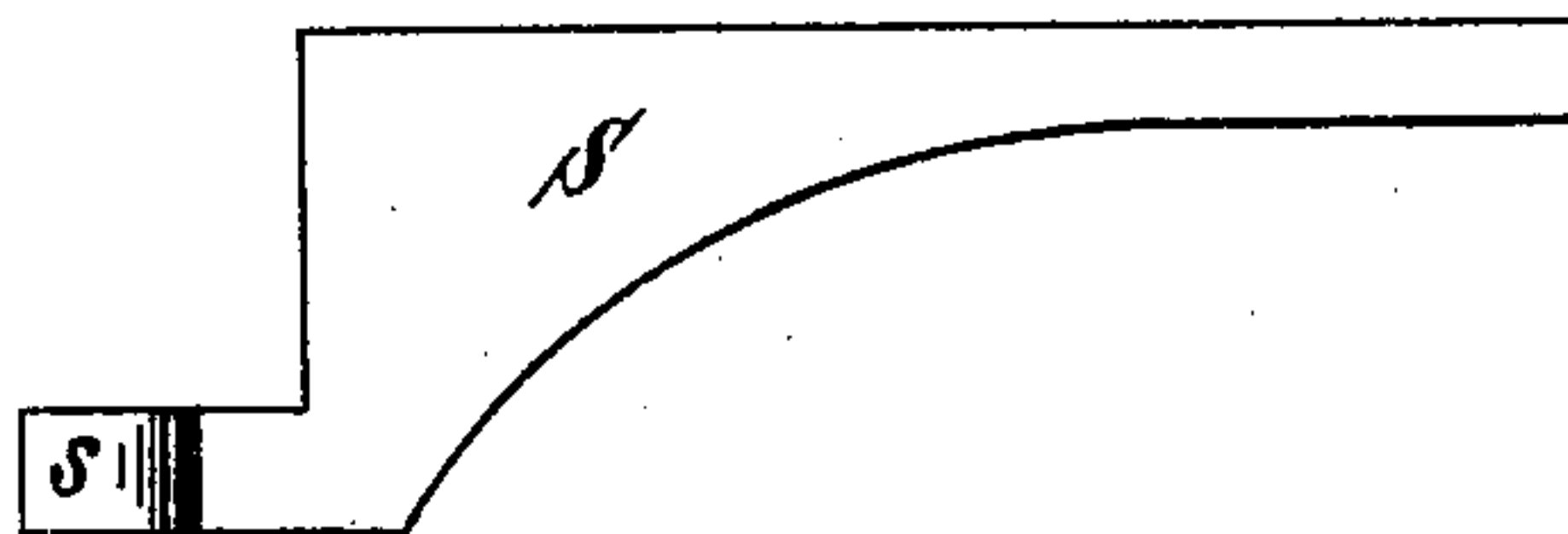


Fig. 11.



Fig. 12.



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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. 583,479, dated June 1, 1897.

Application filed March 30, 1896. Serial No. 585,406. (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 description sufficient to enable others skilled in the art to which the invention appertains to make and use the same.

Our invention relates to the class of type-setter cases in which we arrange the types for a word or other combination one above the other in type-containing channels, from the lower ends of which the words or combinations are forwarded into position for convenient removal by the hand of the compositor. In order to adapt such a type-case to the varying or various requirements of use, it is desirable that it be arranged so that the number of types simultaneously forwarded by a pusher may be varied in accordance with any word or combination that it may be desirable to arrange in a particular channel. Thus the relative arrangement of the various words or combinations in the case as a whole may be arranged to suit the choice or convenience of the compositor, or substitutions may be made when necessary. Our object is to accomplish all this quickly and conveniently by simple mechanism; and the invention consists, broadly, in the use of a plain thin pusher-blade of maximum height, in combination with means for raising and lowering said pusher with relation to the type support and channel, and, secondarily, in the special construction and arrangement of parts for effecting the adjustment of the upright pusher-blade, its connection with the reciprocating mechanism, and the combination, with the adjustable pusher, of a type-face plate adjustable with relation to said pusher-blade, substantially as hereinafter set forth.

In our last application for patent we provided for varying the number of types to be removed from a channel by making the type-support adjustable within the channel and with relation to a type-forwarding blade having a fixed horizontal path. In prior application, Serial No. 582,713, we accomplish a

similar result by means of a pivoted pusher-blade which adjusts itself automatically to the position of the upper type-guard, which regulates the number of types to be forwarded. While both of these methods are effective, we desire to accomplish the result sought by means of a vertically-adjustable pusher, which we accomplish in the present case by simply adjusting the floor or support on which a plain thin pusher-blade rests and travels, and this is the distinguishing feature of our present invention as compared with our said prior invention.

In the accompanying drawings, Figure 1 is a front elevation of a portion of a case constructed according to our present invention; Fig. 2, a plan of the same; Fig. 3, a vertical sectional elevation of one of the channels and adjoining parts, showing the pusher in its highest position retracted; Fig. 4, a view similar to Fig. 3, showing the pusher in its forward position; Fig. 5, a view similar to Fig. 3, showing the pusher adjusted for two types; Fig. 6, a view similar to Fig. 3, showing the pusher adjusted to four types. Fig. 7, a sectional view on plane of line 7 7, Fig. 6, the types, pusher, &c., being omitted. Fig. 8 is a view similar to Fig. 3, showing five types partly advanced; Figs. 9 to 12, detail elevations of the pusher-support.

The type-containing channels C rest upon the type-floor F, which is formed with a series of slots *f*, to admit of the forward movement of the pusher-blades P. The type-channels C C are supported laterally in a vertical position by the side walls or holders H. The slots *f* are central with relation to the channels above, and being only sufficient in width to admit the pusher-blades (which are comparatively thin) leave type-supporting surfaces *t t* on either sides of the slots *f*. These type-supporting surfaces *t t* are simply the portions of the floor F within the channels, and support the lowest types therein until forwarded by the pusher-blades, which advance against the heels of the types centrally and forward them upon the floor F until their front ends or faces project sufficiently beyond the front edge *f'* of the table F to admit of their being grasped by the fingers of the compositor. Each of the slots *f* ex-

tend backward a distance sufficient to accommodate its pusher-blade P and the support S thereof, the side walls of the slot maintaining the pusher-blade and support in alignment.

The pusher-blade support S may be adjusted vertically in any desired or suitable manner other than that shown in the drawings, which, however, illustrates a convenient arrangement for regulating the position of the pusher with relation to the type-floor E. As shown, a front extension s of the support S is formed with a screw-thread engaging with the worm W, seated in the frame-work under the table F. By turning the worm W in one direction or the other by means of its head w the support S is raised or lowered, carrying with it the pusher-blade P.

In order to admit of the vertical movement of the pusher-blade P without change of relation to the forwarding mechanism, its rear end is formed with the vertical slot p, in which rests the pin or stud r upon the reciprocatory bar or rod R, to which motion is communicated at the proper time in any desired or well-known manner needless to describe in this connection.

It will be seen that the blade P is practically free to move in a vertical direction within the limits of the height of the slot p, and thus its front edge p' is maintained in a vertical position under all conditions of adjustment and encounters the heels of the types squarely and all together.

The spine of each containing-channel C is slotted vertically to a height corresponding to the highest position of the pusher-blade P, as is also the rear wall of the holder H, and the adjustment of each face-plate G to correspond to that of the pusher is effected by a worm-screw V or equivalent mechanism.

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

1. In a type-case, the combination of a type-support, a type-forwarding blade, and a vertically-adjustable support for said type-forwarding blade by which the position of the latter may be regulated with relation to the type-support, substantially in the manner and for the purpose described.

2. In a type-case, the combination of a type channel and support, a type-support, a front guard adjustable with relation to said type-support, a reciprocating type-forwarder blade, and a vertically-adjustable support for said type-forwarding blade by which the position of the latter may be regulated with relation to the said type-support, substantially in the manner and for the purpose described.

3. In a type-case the combination of a type-support, a type-forwarding blade connected with the reciprocating mechanism by means which will admit of the vertical adjustment of the type-forwarding blade without disconnecting the parts, and a vertically-adjustable support for the said type-forwarding blade by which the position of the latter may be regulated with relation to the type-support, substantially in the manner and for the purpose described.

4. The combination of the type-floor F, pusher P, formed with the slot p, the reciprocatory rod R, having the stud r, in said slot, and the adjustable support S, the whole arranged and operating substantially in the manner and for the purpose described.

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