

No. 732,833.

PATENTED JULY 7, 1903.

H. LE R. DAVISON & D. J. WOOLLEY.

COPYING PRESS.

APPLICATION FILED MAR. 28, 1902.

NO MODEL.

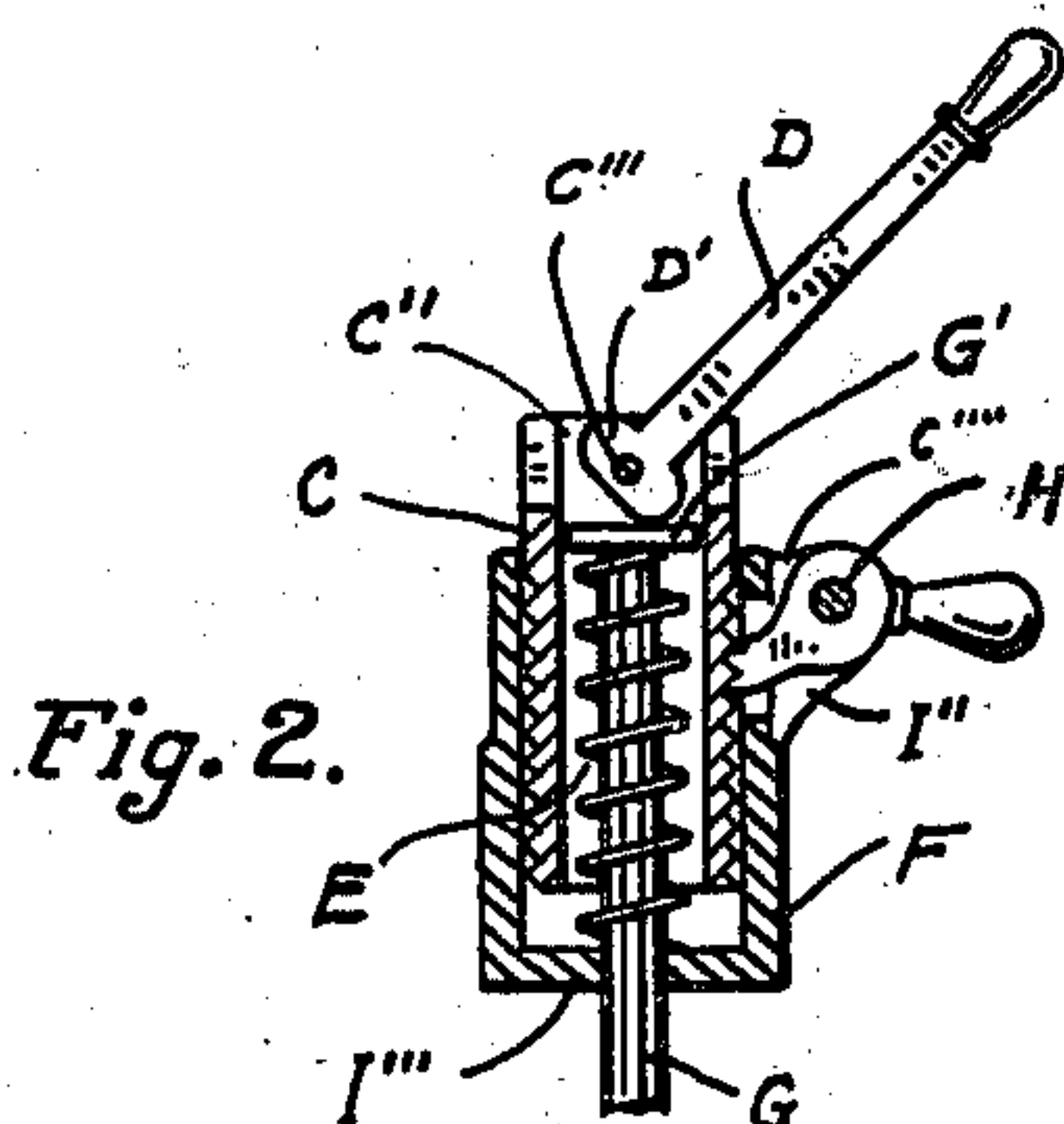


Fig. 2.

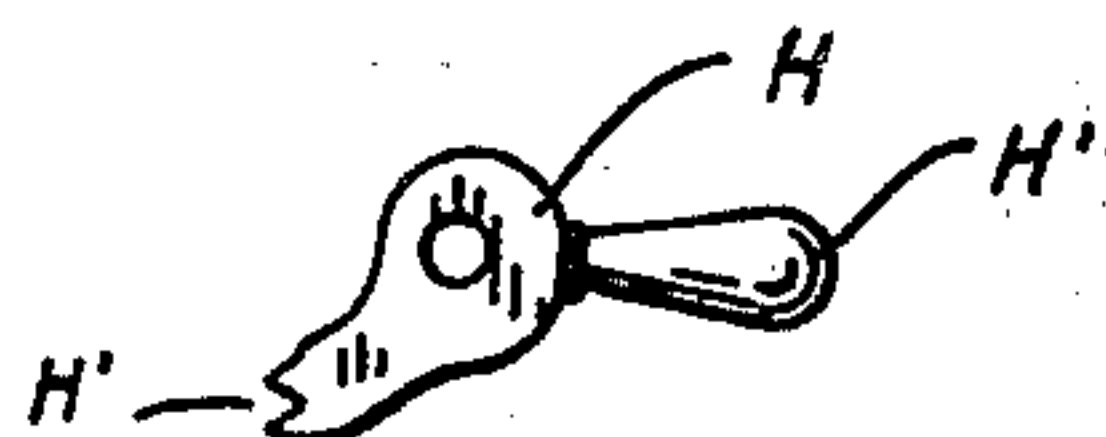


Fig. 3.

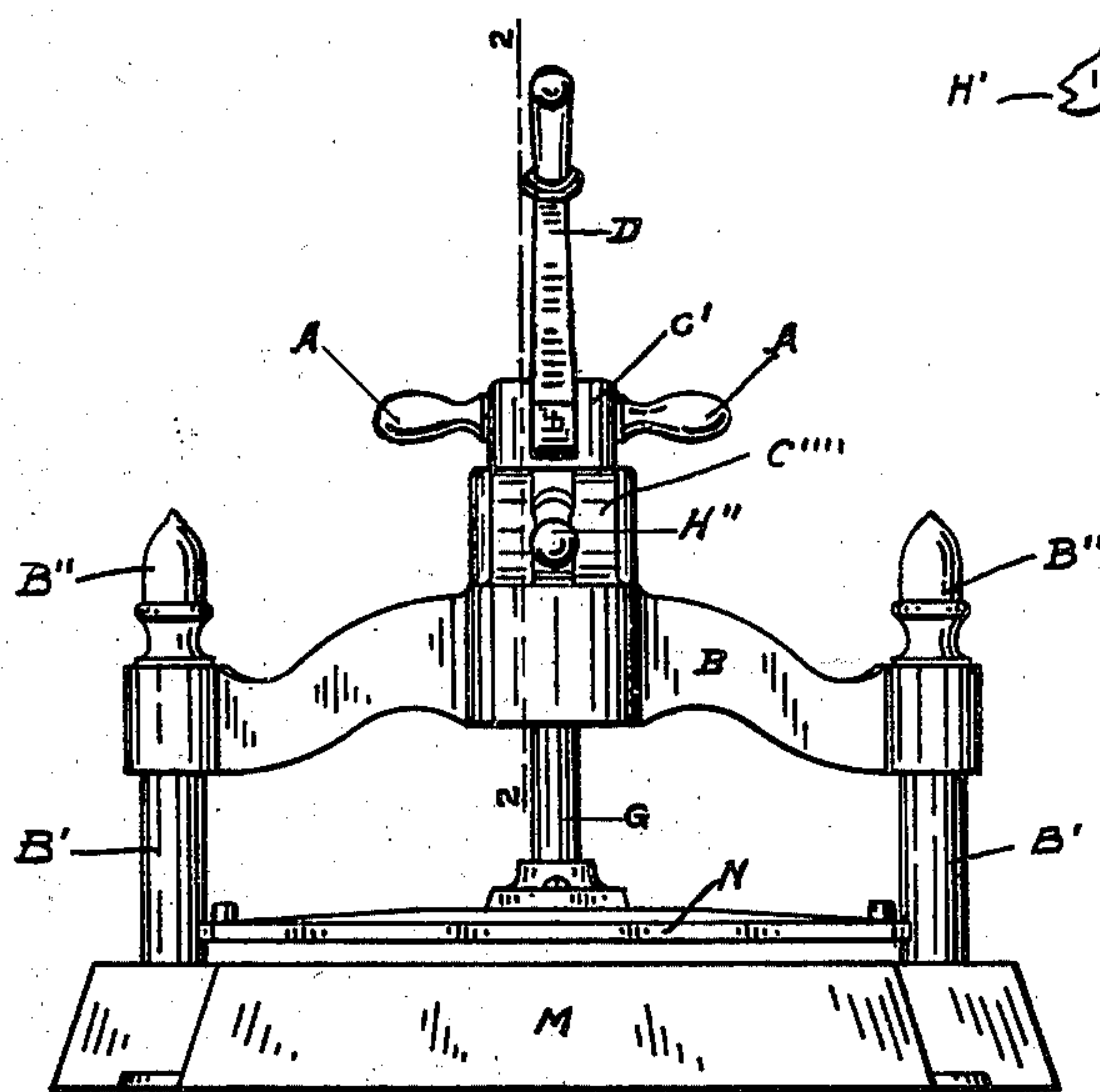


Fig. 1.

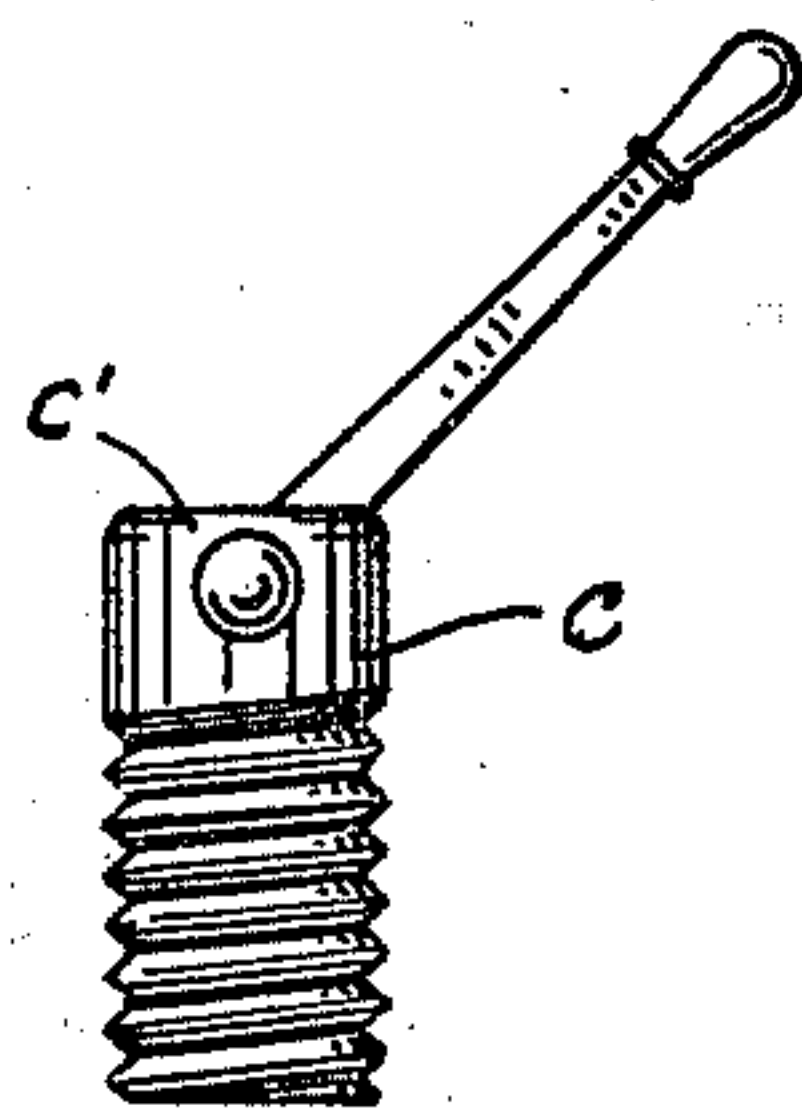


Fig. 4.

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UNITED STATES PATENT OFFICE.

HENRY LE ROY DAVISON AND DAVID JAY WOOLLEY, OF LINCOLN,
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COPYING-PRESS.

SPECIFICATION forming part of Letters Patent No. 732,833, dated July 7, 1903.

Application filed March 28, 1902. Serial No. 100,448. (No model.)

To all whom it may concern:

Be it known that we, HENRY LE ROY DAVISON and DAVID JAY WOOLLEY, citizens of the United States, residing at Lincoln, in the county of Lancaster and State of Nebraska, have invented a new and useful Copying-Press, of which the following is a specification.

This invention relates to an improved copying-press wherein a pressing-lever is used instead of a rotary pressing-wheel, the object of the invention being to provide a press with means for allowing objects of different thicknesses being placed between the base of the press and the pressing-platen and then by operating the lever to make the copy.

Another object is to provide a press so that the pressure can be varied in the shortest possible time.

These and other objects not hereinbefore mentioned are accomplished by the construction illustrated in the accompanying drawings, wherein like letters of reference indicate corresponding parts in the several views, and in which—

Figure 1 is a front elevation of our improved press, showing the pressing-lever in its raised and non-pressing position. Fig. 2 is an enlarged vertical sectional view on the line 2 2, Fig. 1, parts being shown in elevation. Fig. 3 is a detail enlarged view of the latch. Fig. 4 is a detail enlarged view of the sleeve, showing the sleeve detached from the yoke.

In the drawings, M designates the base of the press, and B' the posts extending upwardly therefrom.

B designates the arch, which is supported by the posts. The arch is secured in place by means of ornamental nuts B''. Formed integral with the arch B and positioned at its longitudinal center is a cylinder I', on which is formed a bifurcated lug I''. The cylinder is provided with a bottom I''', which has a centrally-disposed aperture, as shown in Fig. 2.

N designates the platen. Secured to this platen in any suitable manner is a shaft G. This shaft extends upwardly through the aperture in the bottom of the cylinder and is provided with a cap G' on its upper end. Interposed between the cap and bottom of the cyl-

inder is a coiled spring E, surrounding the shaft. This spring will normally hold the platen and shaft in their uppermost position.

C designates a sleeve adapted to fit over the portion of the shaft G within the cylinder. The outer surface of this sleeve is screw-threaded to a point adjacent its upper end, as shown at C', while the interior of the cylinder is smooth, so that it can readily slide over the shaft. The upper end of this shaft is bifurcated, forming shoulders C''. Passing transversely through these shoulders is a bolt C''', screw-threaded on its opposite ends, on which are screwed the handles A.

D designates the cam-lever. The lower end of this lever is provided with the oppositely-extending cam portions D'. These cam portions are located between the bifurcation on the upper end of the sleeve, and the lever is pivoted to this sleeve by means of the bolt C'''. When the sleeve is in position over the shaft G, the lower end of the lever will rest upon the top of the cap G'. When the lever is turned down in either direction, one of the cams will bear against the top of the cap, thereby forcing the shaft G and platen N downwardly.

H designates a latch for holding the sleeve in its adjusted position after the pressure to be exerted on the platen has been determined. This latch is pivoted within the bifurcated lug I'' on the cylinder. The inner end of this latch is provided with a series of teeth H'. These teeth are adapted to engage the screw-threads on the sleeve C, as shown in Fig. 2, when the latch is in its normal condition. The outer end of the latch H is provided with a handle H'', which is heavier than the end carrying the teeth. By this construction the teeth will be held firmly against the screw-threads, thereby holding the sleeve in its adjusted position.

In the operation of the device if the outer end of the latch is raised the teeth will become disengaged from the threads on the sleeve. When this is accomplished, the spring E will force the platen to its uppermost position. When the latch is released, the gravity action of the handle will force the teeth outward until they become again engaged with the threads on the sleeve.

When it is desired to use the press, a copy-book is placed in position on the base of the press and the platen forced down on top of the book by means of pressing on top of the platen, the latch yielding so that this can be done. After this is accomplished the sleeve can be rotated in either direction to adjust the pressure, and then the lever is turned down to complete the pressing operation. Inasmuch as there is generally only one copy-book used in an office at a time, after the sleeve has been once adjusted it is not necessary to further rotate the same, and the only operations necessary are to first place the book in position on the press and then turn down the lever. As the lever has a double cam, it can be pressed down in either direction to accomplish its work and can be approached from either side of the press.

We are aware that many minor changes can be made in the construction and arrangement of parts without in the least departing from the nature and principles of our invention.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a copying-press, the combination with the arch, of a cylinder carried by the arch provided with a bottom and the bottom being provided with an aperture, a platen, a shaft extending upwardly therefrom and through the aperture in the bottom of the cylinder, a spring for normally holding the platen away from the base of the press, a sleeve surrounding the upper portion of the shaft, a cam-lever pivoted to the upper end of the sleeve bearing against the upper end of the shaft, for pressing the shaft and platen downwardly, and means for vertically adjusting the sleeve.

2. In a copying-press, the combination with the arch, of a cylinder carried by the arch provided with a bottom and the bottom being provided with an aperture, a platen, a shaft extending upwardly therefrom and through the aperture in the bottom of the cylinder, a spring for normally holding the platen away from the base of the press, a sleeve surrounding the upper portion of the shaft, a cam-lever pivoted to the upper end of the sleeve bearing against the upper end of the shaft, for pressing the shaft and platen downwardly, screw-threads on the outer surface of the sleeve, a tooth carried by the cylinder adapted to engage the threads, and means for moving the tooth to and from the threads.

3. In a copying-press, the combination with the arch, of a cylinder carried by the arch provided with a bottom and the bottom being provided with an aperture, a platen, a shaft extending upwardly therefrom and through the aperture in the bottom, a spring for normally holding the platen away from the base of the press, a sleeve surrounding the upper portion of the shaft, a cam-lever pivoted to the upper portion of the sleeve bearing against the upper end of the shaft for pressing the shaft and platen downwardly, screw-threads on the outer surface of the sleeve, and a gravity-latch normally engaging the threads on the sleeve.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

HENRY LE ROY DAVISON.
DAVID JAY WOOLLEY.

Witnesses:

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RALPH EDWARD DAVISON.