

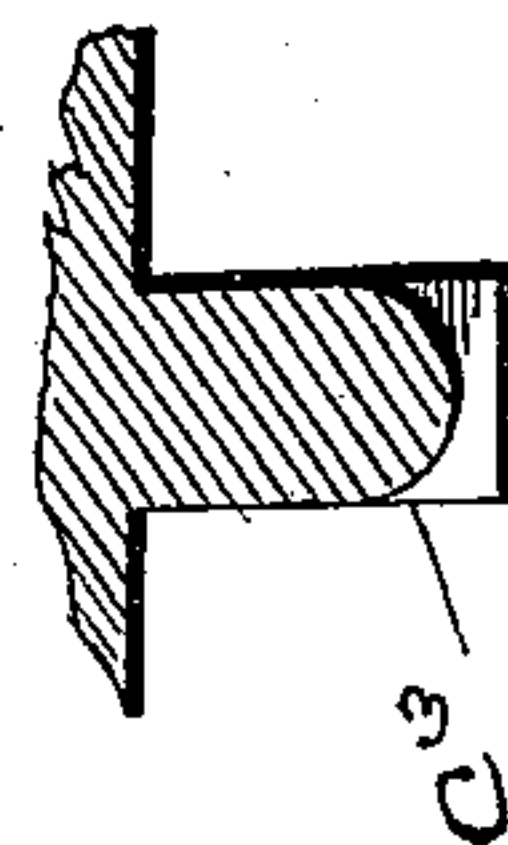
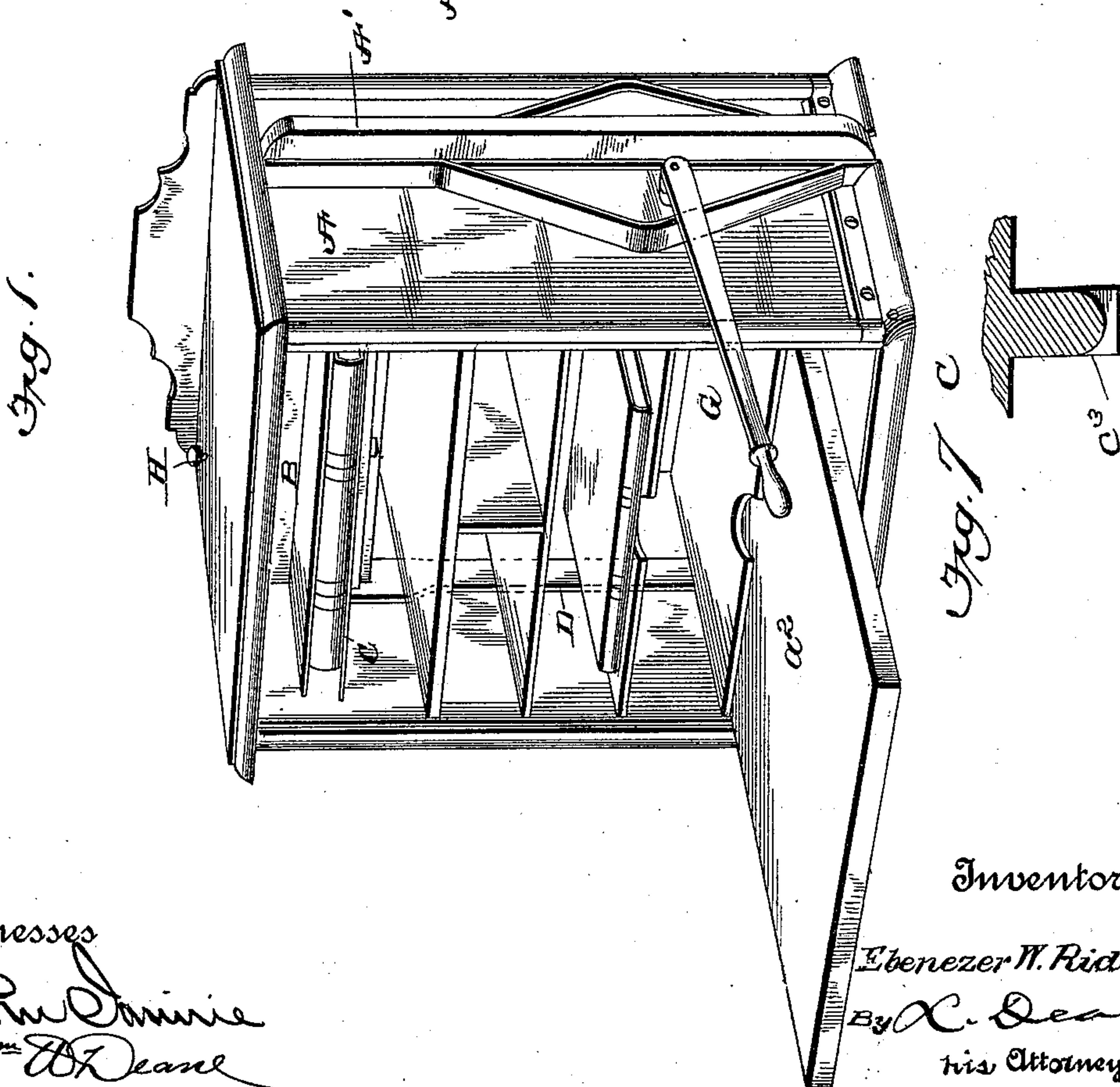
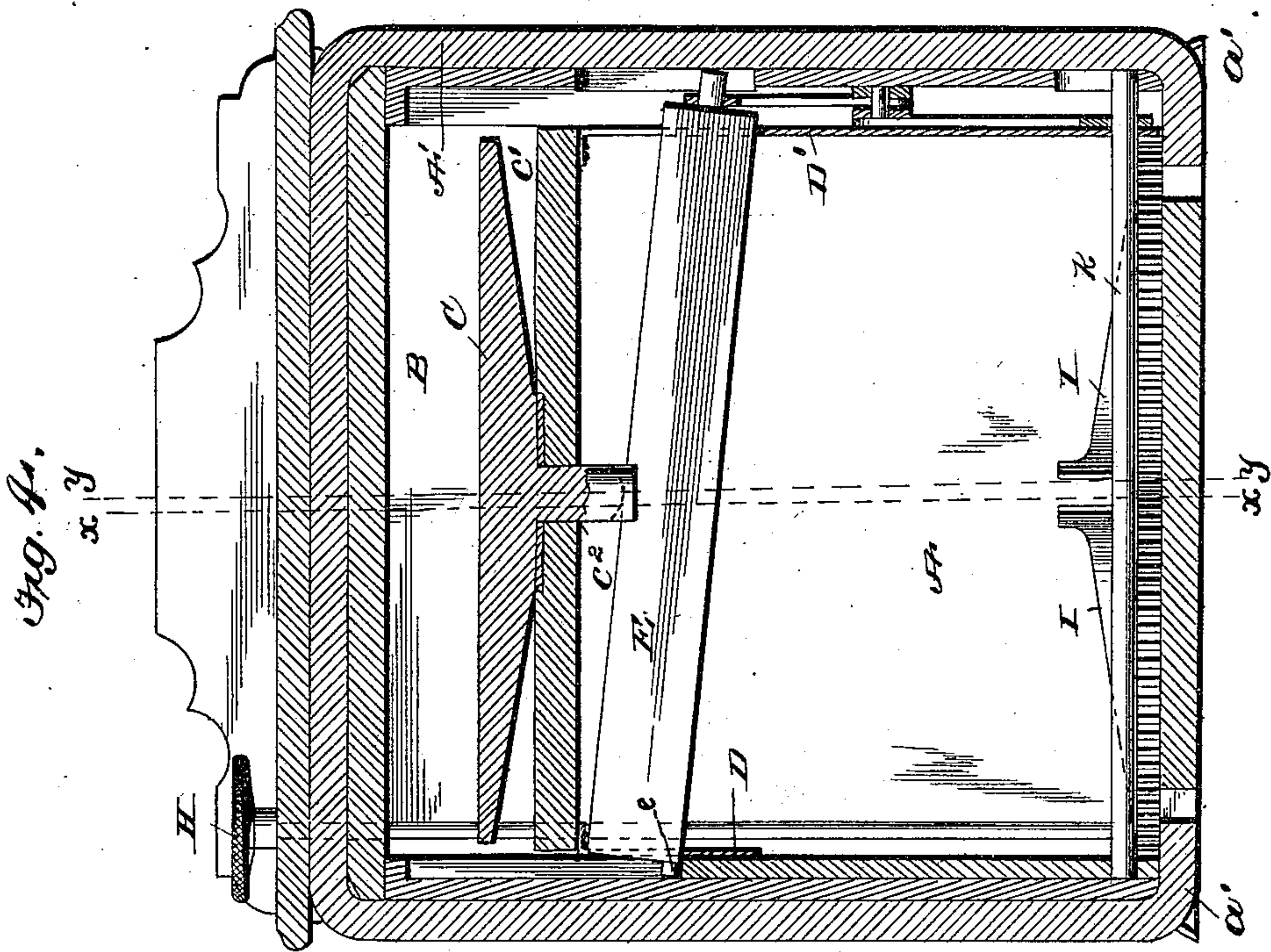
(No Model.)

3 Sheets—Sheet 1.

E. W. RIDER.
COPYING PRESS.

No. 510,296.

Patented Dec. 5, 1893.



Witnesses
John D. Davis
Wm. W. Deane

Inventor
Ebenezer W. Rider,
By C. Deane
his Attorney.

(No Model.)

E. W. RIDER.
COPYING PRESS.

3 Sheets—Sheet 2.

No. 510,296.

Patented Dec. 5, 1893.

Fig. 6.

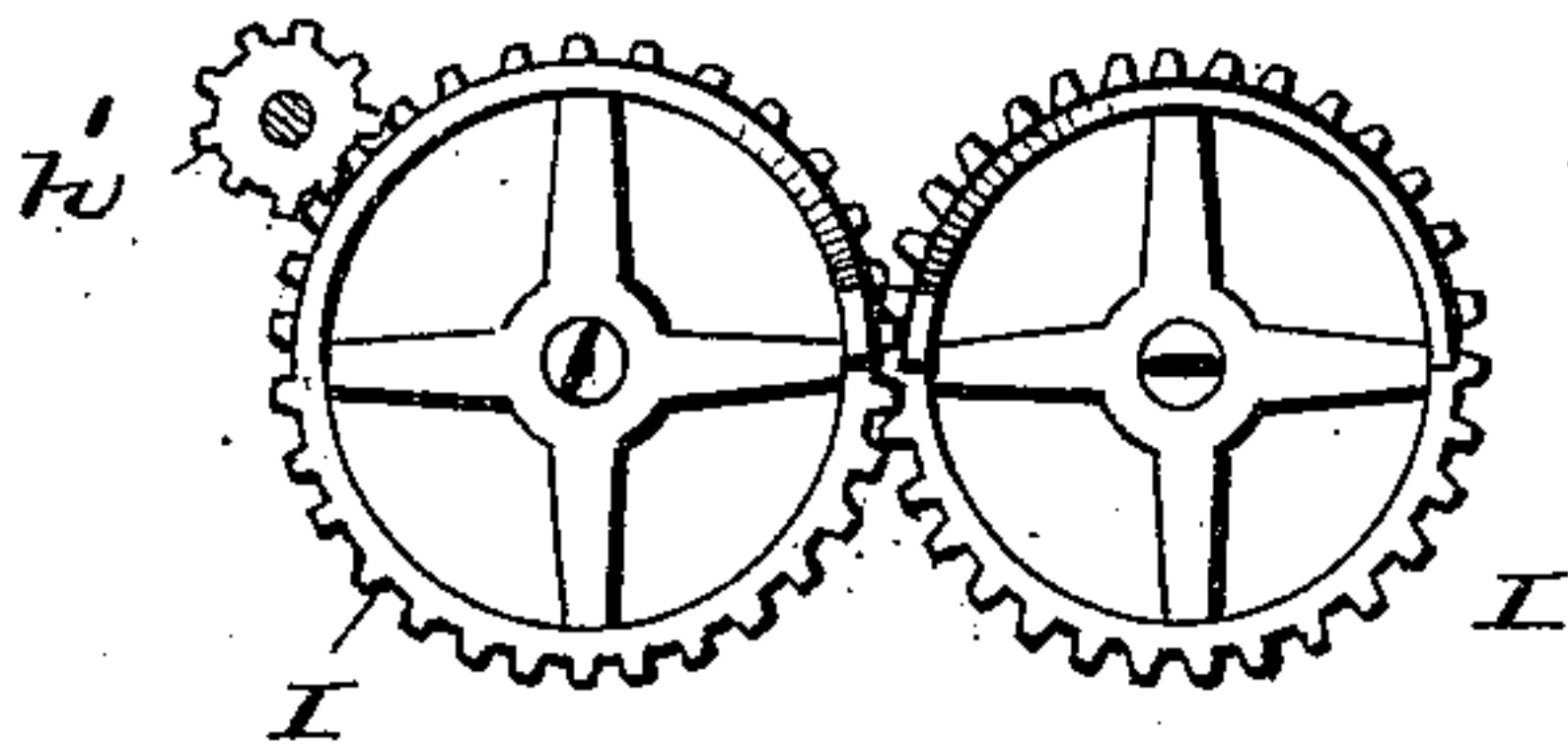
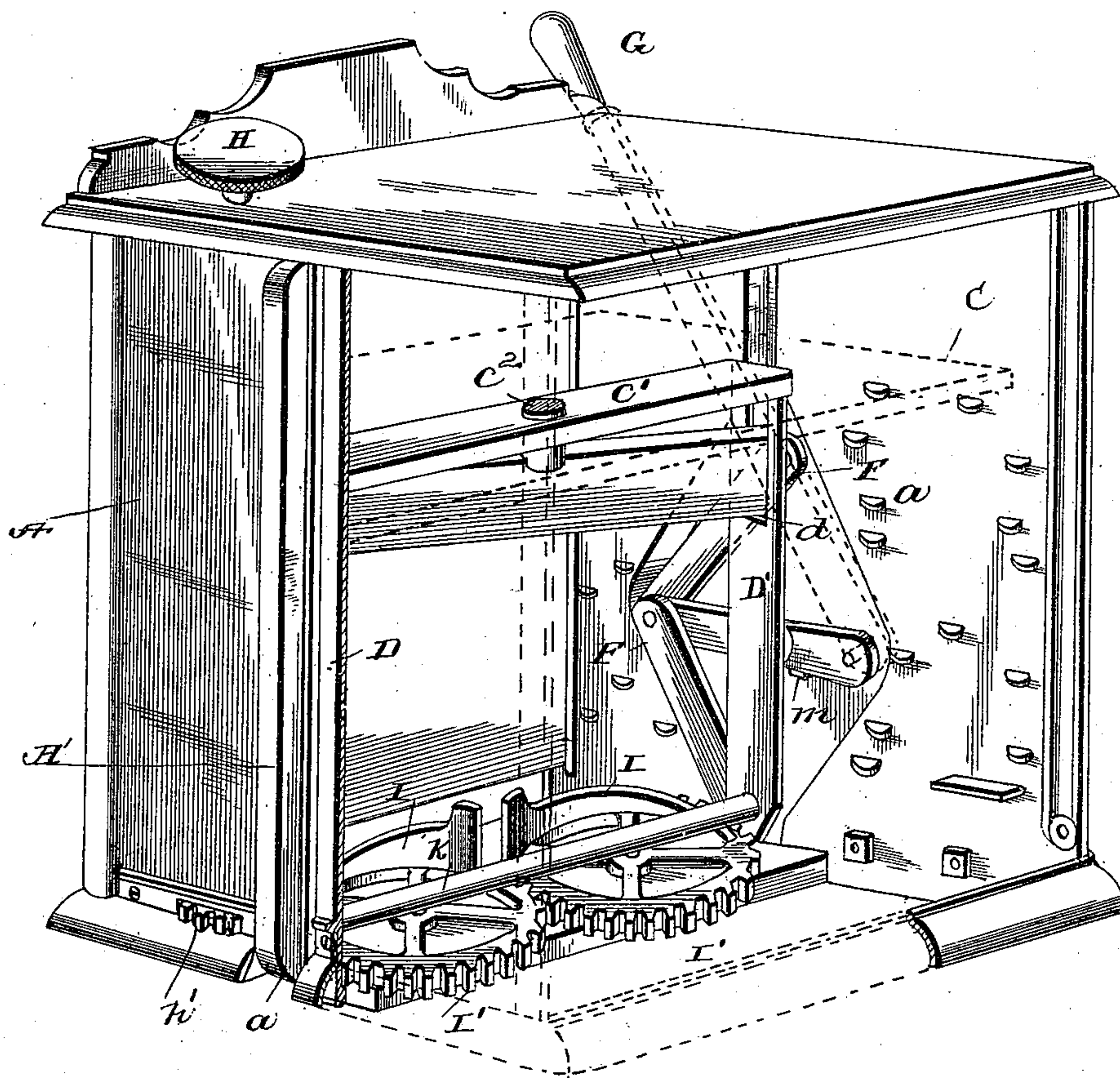


Fig. 2.



Witnesses

John Jamieson
Wm. Deane

Inventor

Ebenezer W. Rider.

By *Deane*

his Attorney

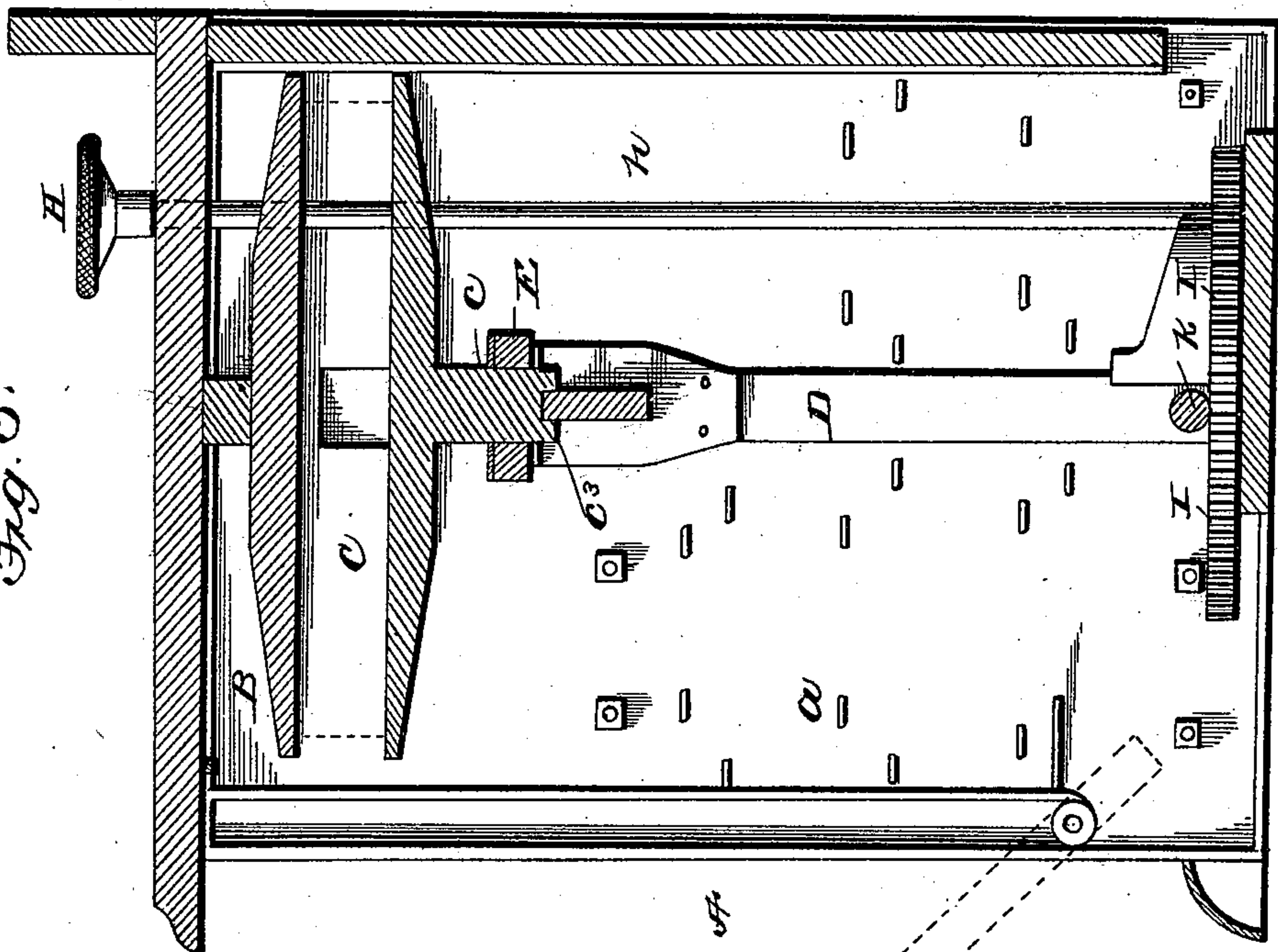
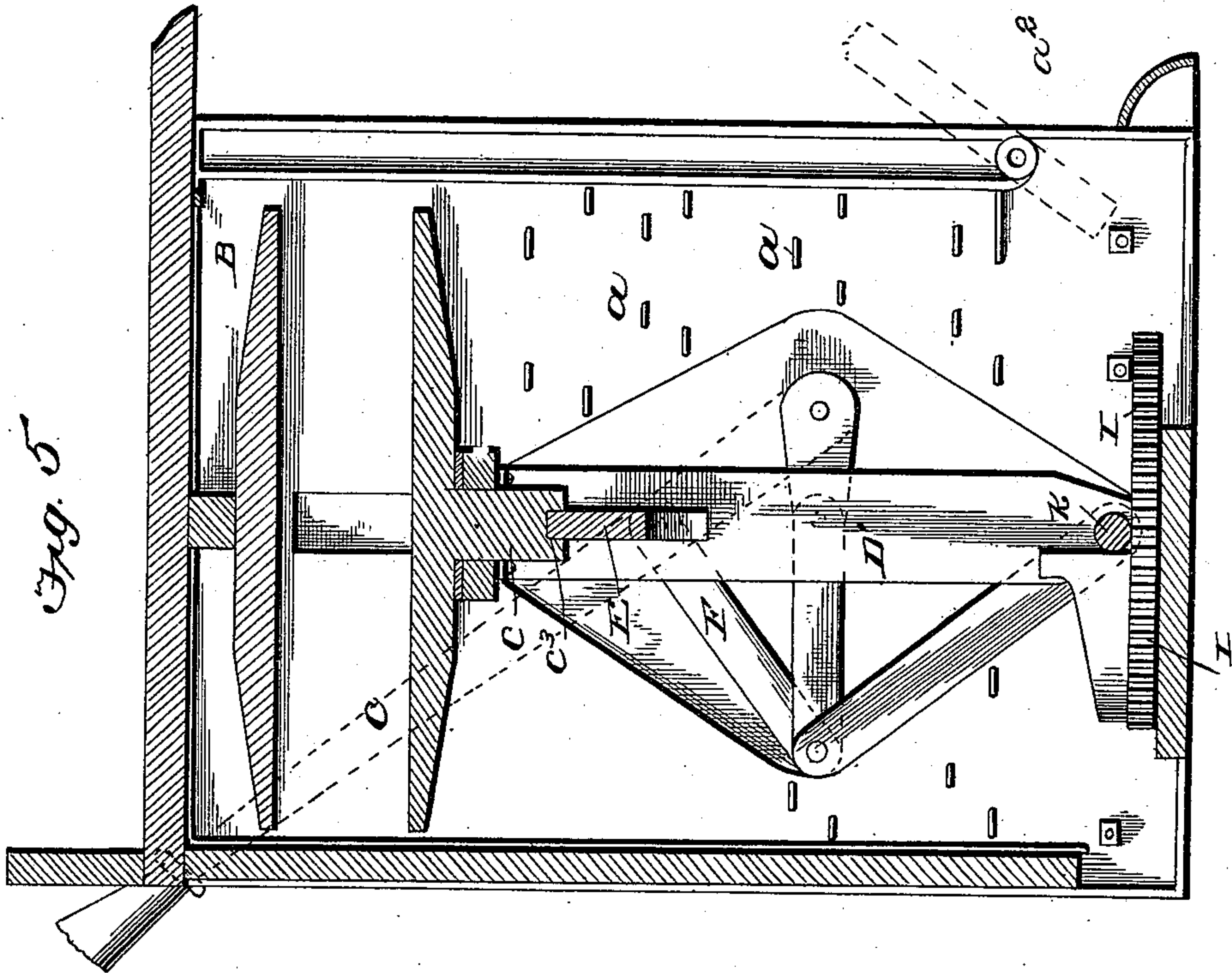
(No Model.)

3 Sheets—Sheet 3

E. W. RIDER.
COPYING PRESS.

No. 510,296.

Patented Dec. 5, 1893.



Witnesses

John D. Smith
Wm. W. Deane

Inventor

Ebenezer W. Rider.

By L. Deane

his Attorney

UNITED STATES PATENT OFFICE.

EBENEZER W. RIDER, OF RACINE, ASSIGNOR TO THE MILWAUKEE OFFICE
SPECIALTY COMPANY, OF MILWAUKEE, WISCONSIN.

COPYING-PRESS.

SPECIFICATION forming part of Letters Patent No. 510,296, dated December 5, 1893.

Application filed February 11, 1893. Serial No. 461,848. (No model.)

To all whom it may concern:

Be it known that I, EBENEZER W. RIDER, a citizen of the United States, residing at Racine, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Copying-Presses; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improved copying press and it has for its object, among other things, to greatly expedite and facilitate the operation of the press; to promote efficiency; to vary the adjustment of the follower according to the thickness of the letter book to be accommodated, and to provide for a relatively variable movement of the follower; and to these ends my invention consists in the novel combination and arrangement of parts substantially as hereinafter more fully disclosed and pointed out in the claims.

In the accompanying drawings:—Figure 1, is a perspective view of my improved copying press and cabinet showing door of cabinet open. Fig. 2, is a broken perspective view thereof, more fully disclosing the interior of the cabinet. Fig. 3, is a vertical sectional view on line $x-x$ of Fig. 4. Fig. 4, is a front sectional elevation, the door of the cabinet being removed. Fig. 5, is a section on the line $y-y$ Fig. 4. Fig. 6, is a detail in plan of the cam gears and the operating pinion. Fig. 7 is a detail of the pendent stud.

In the embodiment of my invention, I provide a suitable closure or cabinet A, from the inside of which project series of relatively arranged lugs or projections a , adapted to form brackets for shelves to hold press-letter books on. The cabinet has a door a^2 , by which the front can be closed when desired. Passing about centrally around the sides and top of the cabinet is the strap or band A' , preferably of steel; the lower short ends of this band are curved at a' , to fit snugly under and thereby be secured to the bottom edges of the cabinet. This strap or band in fact sustains all the pressure or strain of the operative parts when the machine is being used.

Suitably secured in the closure or cabinet

A, close to its top but beneath the strap A' , is a plate B, and parallel with this plate is carried a follower C, having, at its center, upon the lower side, a preferably cylindric stud c , passing through a cross-bar c' , below, centrally apertured at c^2 , and secured at its ends to the upper ends of, and carried by upright slides $D D'$, arranged at the inner sides of said closure or cabinet. The stud c , has in its lower edge a slot c^3 , receiving an edgewise disposed bar or lever E, suitably pivoted at one end e , upon one of the slides D, and at the other passing through an elongated slot d , in the opposite slide D' , and connected at its extreme end to a toggle lever mechanism F, actuated by an exterior hand lever G. The other end of the bar E, is operated by the wheel H, and shaft h , in a manner to be hereinafter described. The bottom of the slot c^3 , is in the arc of a circle to afford a variable bearing thereon for the cross-bar c' , at its center to permit of the relatively unequal or variable movement of the follower so as to secure a uniform pressure upon the interposed letter book, in whatever position it may be during the act of copying.

I I, are two cams carried by circumferentially toothed or cogged, intergearing wheels or gears $I' I'$, suitably journaled in position upon the bottom part of the press while with one of said gears or wheels is geared by a pinion h' , on the lower end an upright shaft h , provided with the hand-wheel H, at the top of the press for its actuation, and by suitably turning which the cams, through said gearing and pinion, are moved in opposite arcs in contact with a bar or rod K, connecting the upright slides $D D'$, whereby, it is obvious that said slides, bearing the supporting bar of the follower, can be vertically adjusted to vary the adjustment of the follower according to the thickness of the letter-book to be accommodated. It will be also observed that this press is easily operated and efficient, and can be adjusted as to the pressure to be put on the book with nicety and facility.

What I claim is—

1. The combination, with the follower of a copying press, of slides carrying the support therefor and connected together by a rod or

bar, and the intergeared cams adapted to engage said rod or bar, and means for actuating said cams, substantially as specified.

2. The combination, with the follower of a copying press, of slides carrying the support therefor and connected together by a rod or bar, the intergeared cams and a hand-wheel shaft or rod geared to said cams, substantially as set forth.

3. The combination, with the follower of a copying press, of the cross bar forming the support therefor and a lever having a variable connection with said follower, by means of the stud *c*, and slot *c*³, whose bottom is in the form of an arc of a circle substantially as and for the purpose set forth.

4. The combination, with the follower of a copying press having a pendent stud at its center, provided with a slot the bottom of which is in the arc of a circle of a support therefor and a lever engaging said stud at the bottom of said slot, substantially as set forth.

5. The combination of the follower of a copying press and its supporting beam or bar arranged beneath the follower of the pivoted

cross bar or lever, the toggle-lever mechanism connected to said pivoted cross-bar or lever and a hand lever actuating said toggle-lever mechanism, substantially as specified.

6. In combination with a cabinet copying press having the movable part as described, and the lever and cams and connected mechanism for operating the same, the metal strap or band about the sides and top of the cabinet and having short ends extending under and thereby secured to the bottom of the cabinet, as described.

7. In combination with the cabinet A, having within it the fixed plate B, and the follower C, operated by the cross bar *c*', the lever E, toggle mechanism F, the cams I I, bars D D', and the hand lever G, substantially as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

EBENEZER W. RIDER.

Witnesses:

C. J. RICHARDS,
JOHN H. MORGAN.