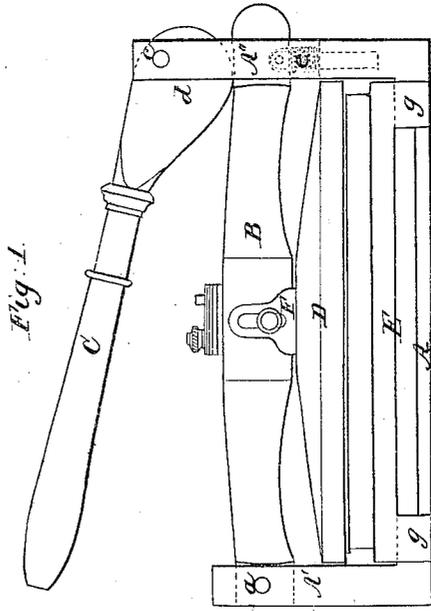
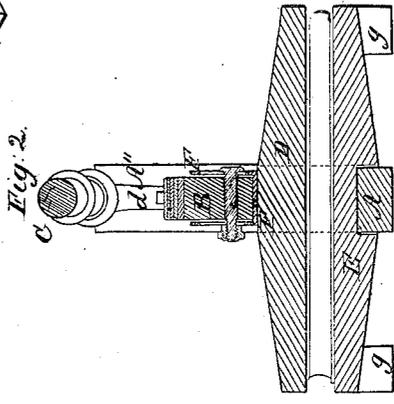
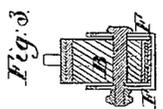
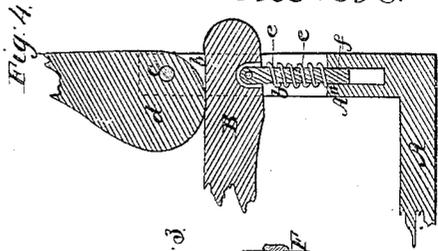
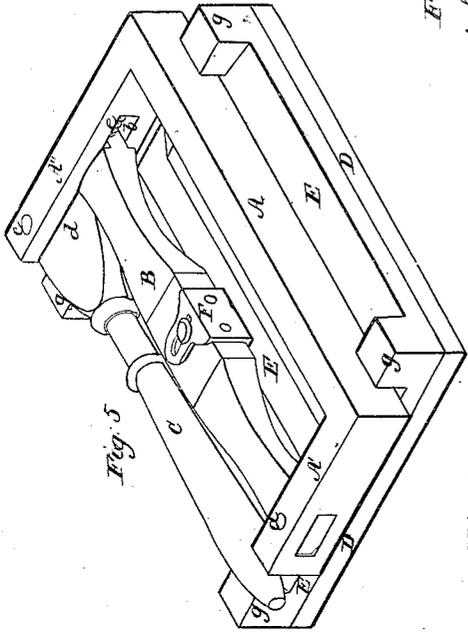


*E. & J. B. Platt.*  
*Copying Press.*

*N<sup>o</sup> 21902.*

*Patented Oct. 26. 1858.*



# UNITED STATES PATENT OFFICE.

EDWIN PLATT AND JACOB B. PLATT, OF CLARKE COUNTY, GEORGIA.

## COPYING-PRESS.

Specification of Letters Patent No. 21,902, dated October 26, 1858.

*To all whom it may concern:*

Be it known that we, EDWIN PLATT and JACOB B. PLATT, of the county of Clarke, in the State of Georgia, have invented new and useful Improvements in Copying-Presses; and we do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of our invention consists in the manner in which the follower is made at pleasure to maintain a variable mean distance from the bed plate, and in such an arrangement of the different parts of our press as that they can be easily separated from each other and packed in a manner convenient for transportation.

To enable others to make and use our travelers' copying press we will now describe its construction and operation.

Figure 1 is an elevation of the press. Fig. 2 is a cross section on the line  $x-x$  of Fig. 1. Fig. 3 is a cross section of a portion of the press in the same line showing the arrangement for lowering the play of the follower. Fig. 4 is a longitudinal section of a portion of the press showing the manner in which the follower is relieved from pressure. Fig. 5 is an isometrical projection showing the press as packed for transportation.

A, A', A'',—Figs. 1, 2, 3,—is a strong rectangular frame of three sides, and made of any suitable material, one of the sides A being a horizontal bar, and the other two sides A' and A'' being upright and constituting standards for the support of the fulcrum of the levers B and C. The lever B has its fulcrum at  $a$  in the standard A' and extends thence to the standard A'' through and beyond a vertical slot  $b$  in which it projects and vibrates—see Figs. 1, 4 and 5. The lever C has its fulcrum at  $c$  in the standard A'' and above the vibrating end of the lever B. This end of the lever C is set eccentrically upon its fulcrum  $c$  so as to form a cam  $d$  whose greatest radius will be in contact with the end of the lever B when the greatest pressure is being exerted. This will be clearly understood on referring to the drawing where Figs. 1 and 4 show the levers B and C in two different positions. When the lever C is thrown up so as to relieve the vibrating end of the lever B from

pressure through the cam  $d$  this end of the lever B is forced up by the spiral spring  $e$  Figs. 1, 4 and 5, so as to follow the cam. This spring is placed between the under side of the lever B and the bottom of the slot  $b$  in the standard A'', and is kept in place by the guide rod  $f$ . The middle portion of the lever B is allowed to project below the adjacent parts, so that its center only shall be in contact with the back of the follower D, which also has a corresponding rise or projection for the purpose of contact at its center.

The bedplate E has at each of its four corners a short standard  $g$  which serve as supports for the machine while it is being used. The bed plate has also a groove on its under side running either lengthwise or crosswise, into which the horizontal bar A is made to fit, in order that it, the bar A, with its uprights and levers may be kept in a central position. This groove is seen in Fig. 2, where the bar A is shown in section. The follower D has the same form and area of surface as the bed plate and they are both of a configuration most suitable for strength and rigidity under pressure.

Sometimes it may be necessary to reduce the mean width of the space between the faces of the follower and bedplate. For instance, it may be required to use a thinner book than that ordinarily used, and the throw of the lever B by the cam  $d$  may not be sufficient to give pressure upon the thinner book. The follower D must then be brought down to suit, yet still be in contact with the lever B. To this end a stirrup F, Figs. 1, 2, 3 and 5, is attached to the middle of the lever B by means of a screw bolt and nut, which screw bolt passes through the lever, from side to side, and through slots in the sides of the stirrup. The slots allow the stirrup to slide up and down upon the bolt. The stirrup is brought down a sufficient distance from the under side of the lever B and the space between the two filled with plates of metal to maintain the distance. These plates are seen in Fig. 3, where the stirrup is shown as having been so brought down, and also in Figs. 1 and 2, where the stirrup is empty and the plates are on the top of the lever B, where they are ordinarily placed for safe keeping, being retained in place by pins with a screw and nut which pass

through corresponding holes in the plates. Similar pins, to keep the plates in the stirrup, extend up from its bottom and when it is empty pass into holes in the under side  
5 of the lever B.

To render this press portable it is only necessary to remove the book from between the follower and bed plate, let them come together—their faces in contact—slip the  
10 bar A out from the groove in the bottom of the bed-plate and then draw the latter and the follower out from between the standards A' and A''. Turn the two together so that they shall be bottom upward, and lay the  
15 frame A A' A'' with its levers sidewise down upon the bottom of the bed plate and between the small standards *g, g*, so that the position of all the parts shall be as rep-

resented in Fig. 5, and the packing is complete.

What we claim as new and desire to secure by Letters Patent is—

1. The stirrup F and its plates, arranged and operating substantially as set forth and described.

2. We also claim the frame A A' A'' in combination with its levers, so arranged with the bed plate and follower as that they can be easily separated from each other and then packed to form a portable copying  
30 press.

EDWIN PLATT.  
JACOB B. PLATT.

Witnesses:

JERRY D. BOWLES,  
W. L. MITCHELL.