A. Palmer.

Copying Press.

No. 21775. Patented Oct. 12. 1858.

Fig. 1.

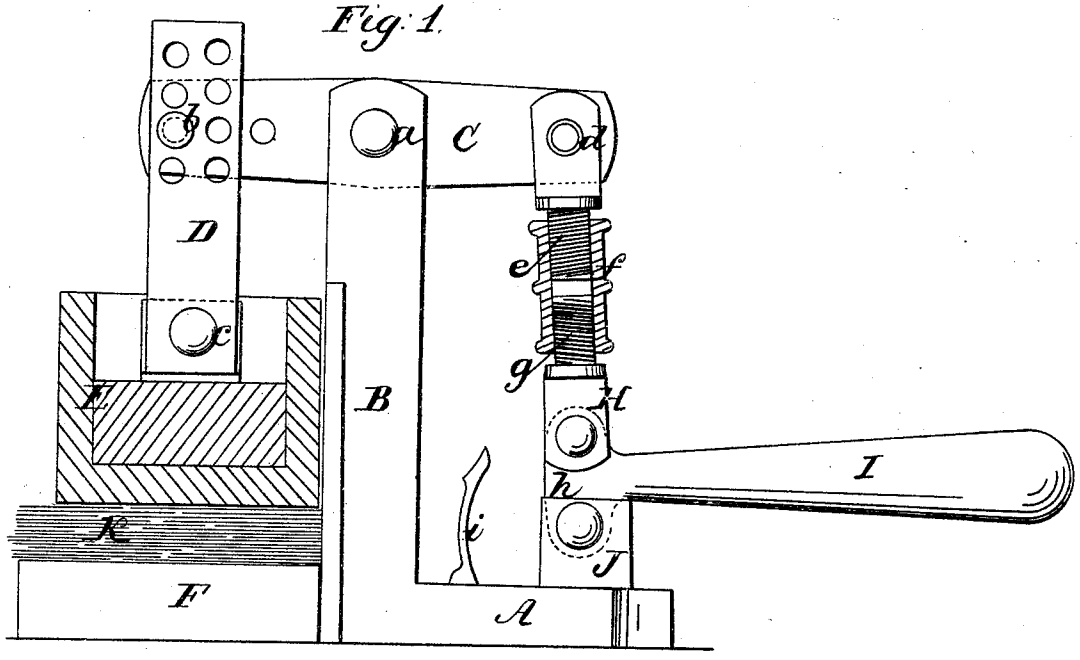
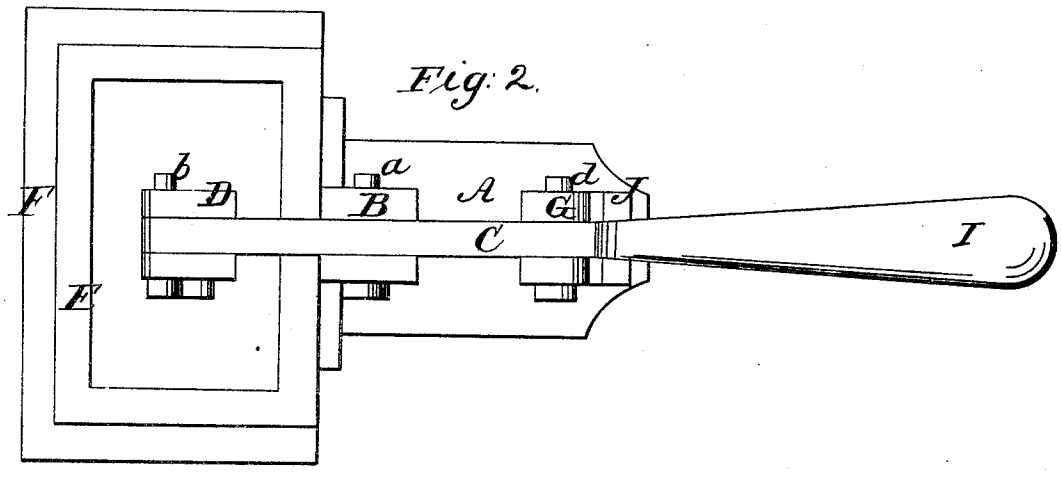


Fig. 2.



UNITED STATES PATENT OFFICE.

ARNOLD PALMER, OF LEE, MASSACHUSETTS.

PAPER-CLAMP.

Specification of Letters Patent No. 21,775, dated October 12, 1858.

To all whom it may concern:

Be it known that I, ARNOLD PALMER, of Lee, in the county of Berkshire and State of Massachusetts, have invented a new and Improved Form Press or Clamp for Holding Paper While Being Trimmed; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a side sectional elevation of my invention. Fig. 2, is a plan or top view of ditto.

Similar letters of reference indicate corresponding parts in the two figures.

The object of this invention is to obtain a cheap and durable form press or clamp, one that may be manipulated with great facility, far more so than those of ordinary construction, and expedite the work of trimming in a very considerable degree.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents a bed piece to which an upright B, is secured, and C, is a lever which is fitted in the upper part of said upright and works on a fulcrum pin *a*. To one end of the lever C, a bar D, is attached by a pin *b*, several holes being made through the upper end of D, in either of which holes the pin *b*, may be placed as occasion may require, see Fig. 1. To the lower end of the bar D, a rectangular box E, is attached by a joint *c*. The bottom of the box E, is perfectly smooth and works directly over a bed F, which is attached to the bed piece A, the bed F, being faced with lead or other material which will not injure the cutting edge of the knife which cuts upon it as herein described. The bed F, is somewhat larger in area than the bottom of box E, as shown clearly in Fig. 2.

To the end of the lever C, opposite to that where the bar D, is attached, there is attached by a pin *d*, a rod G, which has a screw thread *e*, formed on it and on the screw *e*, the upper end of a tube *f*, is fitted, said tube having an internal screw thread. The lower end of tube *f*, has a reverse screw thread formed in it and is fitted on a screw *g*, formed on a rod H, the lower end of which is pivoted to one end of a cross head *h*, of a lever I, the opposite end of the cross head being pivoted in a socket J, on the bed piece A. The ends of the cross head *h*, are of rounded or semicircular form. To the bed-piece A, and just in front of the socket J, a vertical spring catch *i*, is attached, the use of which will be presently shown.

The implement is used as follows:—The bar D, is adjusted to the lever C, so that when the lever I, is fully depressed the box E, will be at such a height to receive the pile of sheets K, to be trimmed. The pile of sheets K, is then placed under the box E, and the lever J, depressed by the hand of the operator. This movement of lever I, forces the box E, down firmly on the sheets K, and the operator then adjusts the box E, to the reciprocating knife arranged in the usual way, said knife cutting successively the edges of the sheet at the sides of the box E, which serves as a guide or pattern, the paper being cut the exact size of the box. The paper to be cut is arranged in piles by the side of the operator, the piles being as nearly equal in height as may be, but, as there will always be some difference that difference is readily compensated for by the tube *f*, which by being turned will regulate the movement or stroke of the box very nicely, so that the box E, may always be made to press firmly on the pile K. The box E, is sustained at a proper height in order to allow the piles K, of paper to be adjusted underneath it, in consequence of the spring catch *i*, catching over the end of the cross head *h*, of lever I, when said lever is elevated.

The device it will be seen may be manipulated with great facility, the piles of paper received or clamped beneath the pressure box, the pressure of which may be regulated and made sufficient at any time when necessary by adjusting tube *f*.

Having thus described my invention what I claim as new and desire to secure by Letters Patent, is,

The pressure box E, placed over the bed F, and attached to the lever I, through the medium of the bar D, lever C, and adjusting rods G, H, actuated by the nut or tube *f*, the above parts being arranged to operate as shown, and with or without the spring catch *i*, for the purpose set forth.

ARNOLD PALMER.

Witnesses:

ISAAC C. IVES,

CHAS. H. SABIN.