(No Model.)

J. W. McCRONE.

LETTER COPYING PRESS.

No. 476,061. Patented May 31, 1892.

FIG. 1.

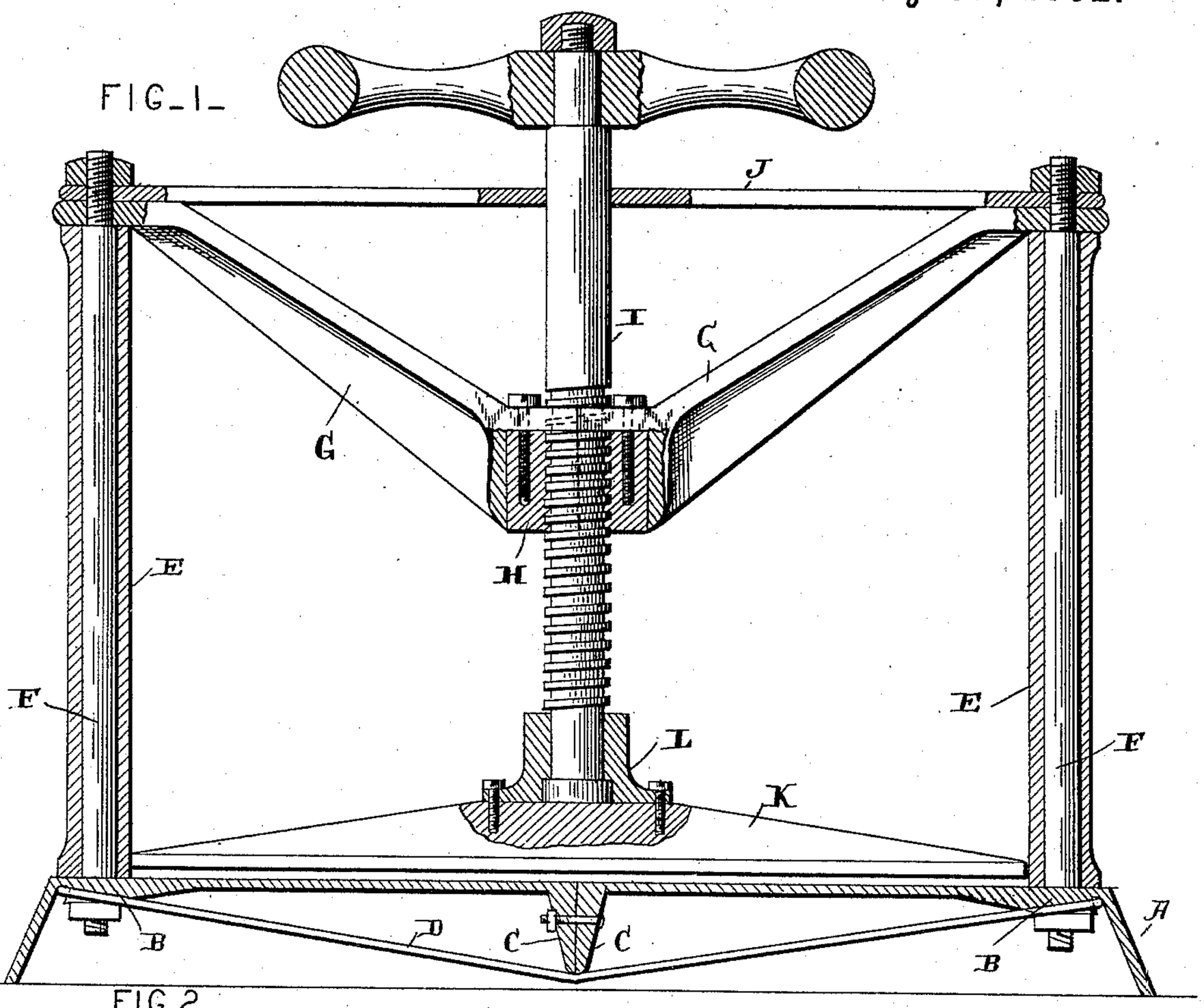
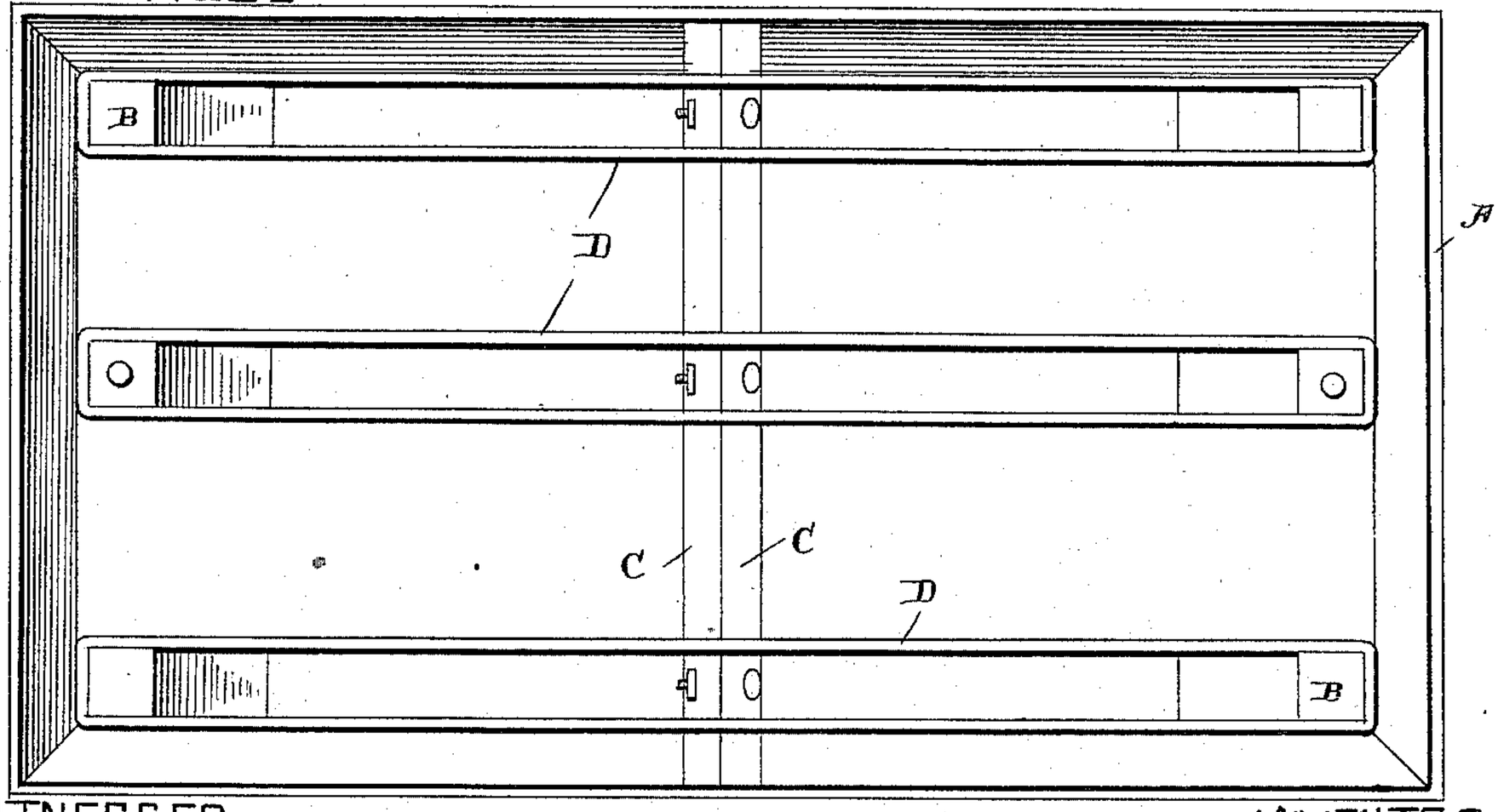


FIG. 2.



WITNESSES.

Geo. E. Frech.

A. A. Fitzgerald

INVENTOR.

John W. McCrone
per
Lehmann & Pattison
attys.

UNITED STATES PATENT OFFICE.

JOHN WALKER McCRONE, OF KANSAS CITY, MISSOURI.

LETTER-COPYING PRESS.

SPECIFICATION forming part of Letters Patent No. 476,061, dated May 31, 1892.

Application filed September 26, 1891. Serial No. 406,946. (No model.)

To all whom it may concern:

Be it known that I, JOHN WALKER McCRONE, of Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Letter-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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in letter-copying presses; and it consists in certain novel features of construction and in the combination and arrangement of parts, which will be fully described hereinafter, and more particularly referred to in the claims hereto annexed.

In the accompanying drawings, Figure 1 is a vertical sectional view of my improved press. Fig. 2 is a bottom view of the same.

The object of my invention is to construct a press in such a manner that its frame will withstand a greater amount of strain from the action of the screw than the presses now generally used, and in carrying out this idea I have made several material changes in the mode of construction from that usually followed. The base portion of the press I have strengthened by employing a truss, upon which rests a depending flange on the under side of the base portion and which prevents any tendency on the part of the said portion to spring downward.

Instead of constructing the press with an upwardly-curved yoke as a support for the screw, I substitute a downwardly-projecting frame composed of two arms, each of which is connected to a screw-nut, through which the screw passes. The outer ends of these arms I connect by a flat strip or plate of wrought-iron. By this construction when the screw is run down to a great pressure the tendency of the lower ends of the arms is to push upward, and not being rigidly connected at their meeting ends the pressure of their outer ends makes a direct pull upon the horizontal connecting-strip in opposite directions, thus converting the upward pressure into a pull upon the said plate, and thus the strength of the frame is only limited by the cohesive strength of the plate. This it would be almost impossible to break by a pressure of the character stated.

Referring to the accompanying drawings, A represents the base of the press, which is preferably formed in two parts, as here shown. The meeting edges of these parts are provided with turned-down flanges, which are bolted together, as shown. The outer edges of these portions are also flanged, so as to form a rest or support for the press. Formed upon the under side of these portions A are the depending lugs B, which are connected by a truss-rod D, which has its ends bent into hooks, which catch around the said lugs. This truss passes under the flanges C of the plates A. The truss-rod is placed in position in a heated condition, and its natural tendency to shrink when cooling securely binds it in position, and thus forms a very secure support for the base against any unusual pressure from the screw. The truss is made to extend in a line with the uprights, and any number may be applied to the base, as may be desired.

Extending upward from the ends of the press are the hollow supporting-posts E, which are constructed in the ordinary manner. Extending downward through these posts are the clamping-bolts F, which secure the parts of the press together.

Secured to each of the hollow posts E and extending downward and inward are the arms G, which have angular recesses at their lower ends, and in the cavity formed by the meeting recessed ends of these arms is placed the screw-threaded nut H, through which passes the screw I. As the recesses in the arms do not extend entirely through the inner ends of the arms, the upper sides of the arms are extended around the screw I and are secured to the nut H, as shown, thus binding the arms together and also holding the nut in place. The outer ends of the arms are secured by the vertical bolts F, to which is also secured at its opposite ends the horizontal plate or strip J. This portion is preferably constructed of wrought-iron, so as to withstand the great pressure or pull which is brought upon it, as above described. This plate is provided with a vertical opening, through which passes

the vertically-moving screw-rod I, to the upper end of which is secured an operating-wheel in the usual manner. The follower K is provided with a projection L, in which is swiveled the lower end of the screw I, thus moving the follower vertically, as may be desired.

From the above description it will be seen that the strain on the press is communicated directly to the truss below the base-plate and to the wrought-iron plate, which connects the upper ends of the arms G.

Having thus described my invention, I claim—

1. In a copying-press, a base formed in two parts and downwardly-projecting flanges on the meeting edges of the said parts, combined with lugs on the outer under edges of the said base portion and a truss secured at its ends to the said lugs, against which the said flanges bear, substantially as shown and described.

2. In a copying-press, in combination, a base, flange C, lugs D, truss-rods connecting the said lugs and bearing upward on said flange, uprights secured to said base, a horizontal plate connecting the uprights, downwardly and inwardly extending arms secured at their outer ends to the uprights, an internally-screw-threaded nut, to which the inner ends of the arms are connected, a vertical screw, and a follower, substantially as shown and described.

3. In a press, the base portion, vertical hollow posts secured thereto, clamping-bolts extending through the said posts, depending arms connected at their outer ends to the said bolts, a screw-threaded nut, to which the inner ends of the arms are connected, a horizontal plate, which is clamped by the said vertical bolts, and a vertical screw, the parts being combined substantially as shown and described.

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

JOHN WALKER McCRONE.

Witnesses:

B. F. CURTIS,

J. E. GERAULD.