(No Model.)

L. BAILEY.

COPYING PRESS.

No. 260,733. Patented July 11, 1882.

Fig. 1.

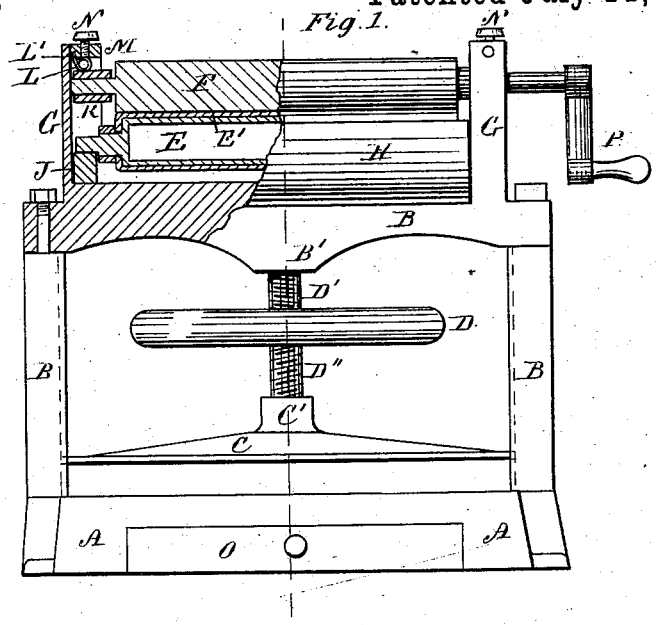


Fig. 2.

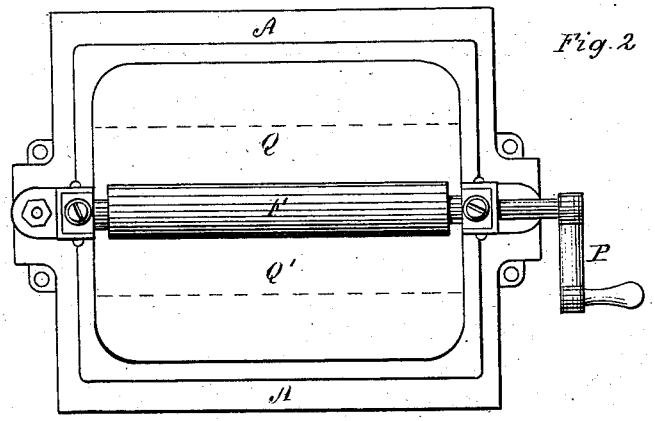
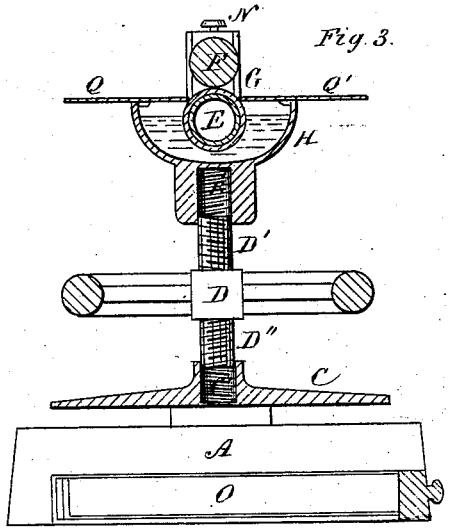


Fig. 3.



Witnesses.
Chas. L. Burdett.
W. H. Marsh

Inventor.
Leonard Bailey
by Alex. G. Ellis
Attorney

UNITED STATES PATENT OFFICE.

LEONARD BAILEY, OF HARTFORD, CONNECTICUT.

COPYING-PRESS.

SPECIFICATION forming part of Letters Patent No. 260,733, dated July 11, 1882.

Application filed January 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, LEONARD BAILEY, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Copying-Presses; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My improvement relates to presses for taking impressions from manuscript upon wetted paper, and in appliances for their more convenient use.

The object of my invention is to provide a more convenient method and apparatus for equably dampening the copying-pads which are used for wetting the copying-paper; and it also includes certain arrangements of the construction of the press required in carrying out the foregoing object.

In the accompanying drawings, illustrating my invention, Figure 1 is a front view of a letter-copying press embodying my improvement, having a part of the upper portion of the standard cut away in order to show the interior parts. Fig. 2 is a top view of the press. Fig. 3 is a cross-section from front to rear through the middle of the press.

A is the base of the press.

B is the standard, which commonly extends over the top of the press, for supporting the screw.

C is the platen, which is moved up and down by the screw, between which and the base the impression is taken.

D is the screw for giving the impression. It is shown in the drawings as operated by a hand-wheel, though the customary arms or levers can be used. This screw, instead of being made with a single or double thread turning one way, usually to the right, is composed of right and left handed threads, one above the hand-wheel and one below. These are shown at D′ and D″ in the drawings. These screws turn in sockets B′ in the cross-bar of the standard and C′ in the platen. The sockets are furnished with hollow threads to fit the screws, and are of sufficient depth to allow the screws to turn fully in without passing through either the cross-bar or the platen. This construction removes any projection of the screw or its wheel or handle from above the cross-bar, above which it is placed, as commonly constructed. This construction is required to give the space for my improved dampening devices, which will be described.

E and F are two rolls, supported above the standard B by the posts G, which form part of or are attached to the part B. These rolls are of sufficient length to allow the dampening-pads to be passed between them. The upper one is shown in the drawings as provided with a crank-handle extending through one of the posts, and the lower roll as arranged to be driven by a frictional contact with the upper one.

H is a trough for containing water. It forms part of the standard, or can be made in one piece with the posts G and attached to the standard B, as shown in the drawings. The lower roll, E, runs in this trough, and has its lower part dipping into the water. The surface of the roll E is covered with cloth or an absorbent substance, which remains wet as the roll revolves. The interior of the roll is made of metal or of any other suitable substance or material in common use. The upper roll presses upon the lower by springs, which will be described, and has its force regulated to squeeze the water out of the covering of the lower roll to the exact degree of dampness required to properly wet the pads. The upper roll is made of metal, or may be made of any suitable material. The journals of the lower roll, E, run in fixed boxes J in the posts G. The journals of the upper roll, F, run in movable boxes or bearings K, which slide up and down in grooves in the posts G, and are acted upon by springs, which can be made to exert more or less pressure between the rolls by means of adjusting-screws.

L is a spring, having the curved form shown in the drawings, with a flat end, L′, extending upward into a slot between the side of the post and the block M.

M is a block set in the top of the post and held by screws in its place; or it may form part of a cap to the post. It is made remova-

ble to allow the boxes of the rolls to be removed when required.

N is a set-screw passing through a hollow thread in the block M and bearing upon the upper side of the curved spring L. Each end of the upper roll is furnished with the same spring adjustment, and the roll is given its proper pressure by turning the knobs of the screws N.

O is a drawer in the base of the press for holding the pads. They are placed in this drawer after being used, and when they are again required for copying, whatever may be their condition as to dryness or dampness, they are put into the exact proper condition by being merely passed between the rolls before being used. This is effected by turning the crank-handle P.

Q and Q′ are thin plates, which rest in notches in the sides of the posts G and rest upon the edges of the trough H. They are held in position by the notches in the posts and by lugs upon their under sides, which prevent their removal unless the plates are turned upward. These plates serve as a table for guiding the pads into the rolls, and also provide a cover for the trough H.

What I claim as my invention is—

1. In combination with the frame which sustains the screw and platen of a screw copying-press, the roller E, the adjustable pressure-roller F, having a handle, P, and the trough H, substantially as described.

2. In combination with the frame of a copying-press, the rollers E and F, the trough H, and the plates Q, substantially as described.

3. In a copying-press provided with a trough, H, and rollers E F above the cross-bar of the frame, the right-and-left screw D, operating between the cross-bar and the platen, substantially as described.

4. In a copying-press, the combination of the herein-described dampening device, arranged on the cross-bar, and the drawer O in the base, for holding the dampened pads, substantially as described.

LEONARD BAILEY.

Witnesses:
L. H. GAGER,
THEO. G. ELLIS.