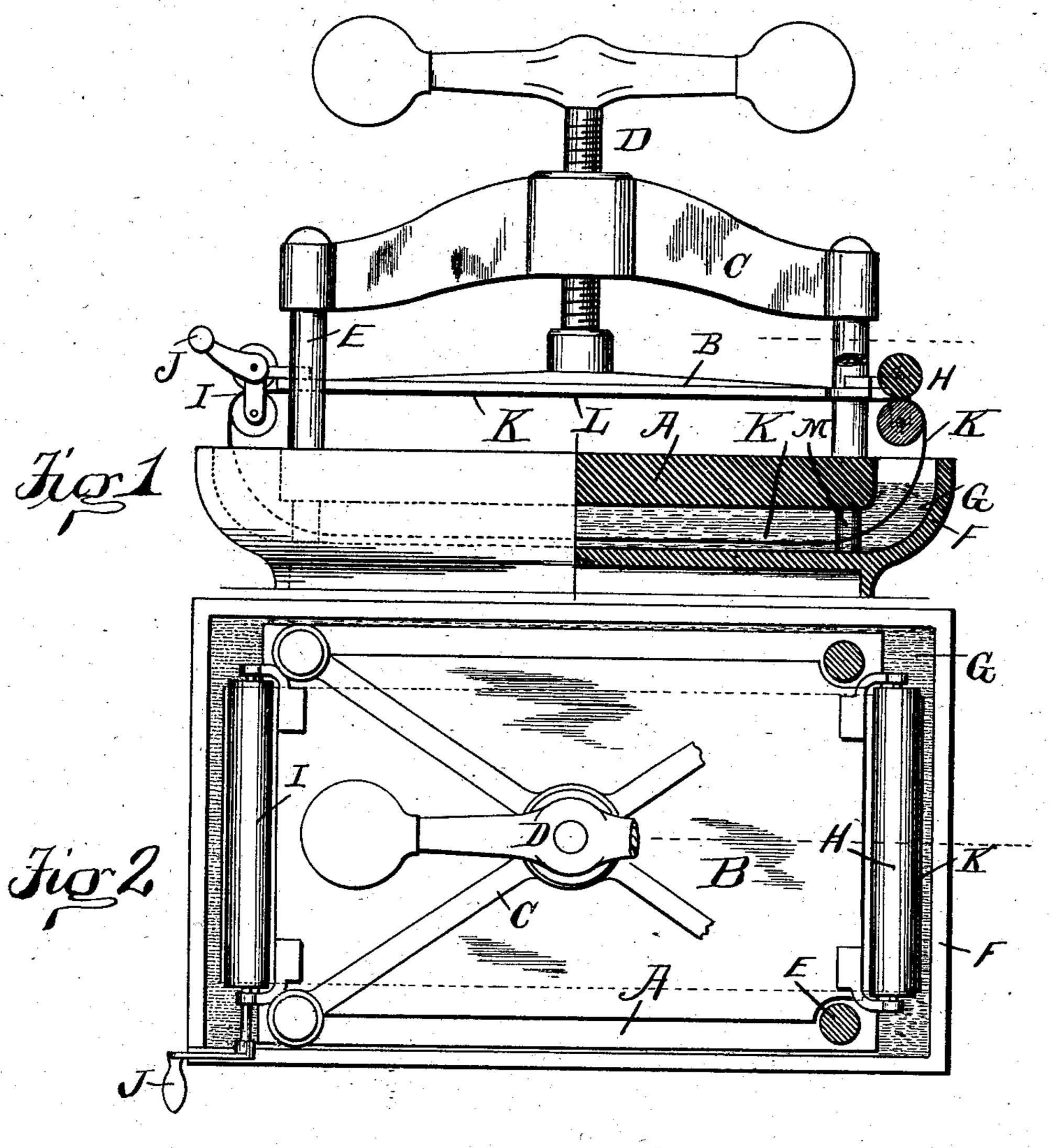
(No Model.)

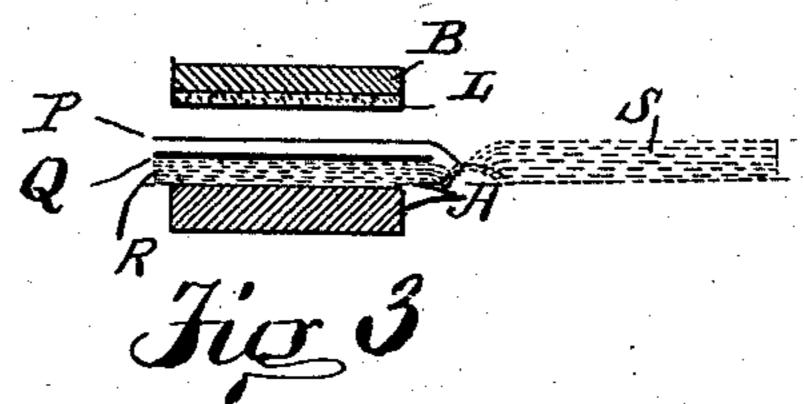
## E. COPE.

## LETTER COPYING PRESS.

No. 289,983.

Patented Dec. 11, 1883.





WITNESSES: Howklands RS Carr Egra Coke INVENTOR

My James W. SEE

ATTORNEY

## United States Patent Office.

EZRA COPE, OF HAMILTON, OHIO.

## LETTER-COPYING PRESS.

SPECIFICATION forming part of Letters Patent No. 289,983, dated December 11, 1883. Application filed January 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, EZRA COPE, of Hamilton, Butler county, Ohio, have invented certain new and useful Improvements in Letter-5 Copying Presses, of which the following is a specification.

This invention pertains to that general method of letter-copying which consists in subjecting the written letter to the action of a 10 moist thin sheet, which dissolves out part of the ink and absorbs it, pressure being applied to prevent the running of the ink.

The nature of my improvement will be understood from the description and claims.

In the accompanying drawings, Figure 1 is a side view of a letter-copying press embodying my improvements, parts being shown in section; Fig. 2, a plan of the same, and Fig. 3 a section illustrating the mode of operation.

A represents the bed of the press; B, the platen; C, the top bridge; D, the pressingscrew; E, the four corner-posts for guiding the platen; F, a water-vessel, in which the press stands; G, the water in said vessel; H, a pair 25 of rollers journaled to the platen of the press;

I, a similar pair of rollers at the other end of the platen; J, a hand-crank to turn rollers I; K, an endless web of felt or other absorbent material, passing through both pairs of rollers, 30 through the water in vessel F, and under the

platen B; L, the portion of web K lying just below the platen, and M the feet of the press resting in vessel F.

In Fig. 3 the section is illustrative, B rep-35 resenting the platen; L, the portion of web K just below the platen; A, the bed of the press; Q, the letter to be copied, and P the thin absorbent sheet on which the copy is to be made.

In operation, the crank J is turned till a 40 wetted portion of the web K is brought under the platen, the rollers H wringing the surplus water out of the web as it passes through them, leaving the proper degree of moisture in the portion L. The letter to be copied,

45 with the thin sheet laid on it, is then put into the press and pressure applied. The platen at once applies the moisture to the thin sheet, and prevents the improper running of the

ink. The sheet P may of course be one of the pages of a common letter-copying book, 50 which is inserted open into the press, one-half of the open book of course projecting outside, as will be understood from Fig. 3, R being that portion of the book in the press of which P is one of the leaves, and S that portion out- 5;

side of the press.

I contemplate the use of pressing means other than a screw, a water-vessel placed elsewhere than directly under the bed of the press, the mounting of the absorbent web upon the 6 bed instead of the platen of the press, the use of a web not endless, and also other suitable means for actuating the web. In brief, I contemplate modifications of the specific devices set forth without departing from the general  $\epsilon$ principle of my present invention, as hereinafter particularly pointed out and distinctly claimed.

I claim— 1. The combination, in a copying-press, of the bed and platen and the absorbent web mounted between them, substantially as and for the purpose specified.

2. The combination, in a copying-press, of the bed and platen, the absorbent web mounted between them and prolonged outward from between them, and means for shifting the web, substantially as and for the purpose specified.

3. The combination, in a copying-press, of the bed and platen, the water-vessel, the absorbent web mounted between the bed and platen and prolonged to reach into the watervessel, and means for shifting the web, substantially as and for the purpose specified.

4. The combination, in a copying-press, of the water-vessel, the bed standing therein on legs, the platen, the endless web mounted between the bed and platen and passing under the bed in the water-vessel, and means for shifting the web, substantially as and for the purpose specified.

EZRA COPE.

Witnesses:

J. W. SEE, R. S. CARR.