(No Model.)

B. F. JACOBS.

PRINTER'S PROOF PRESS.

No. 271,468. Patented Jan. 30, 1883.

FIG. 1.

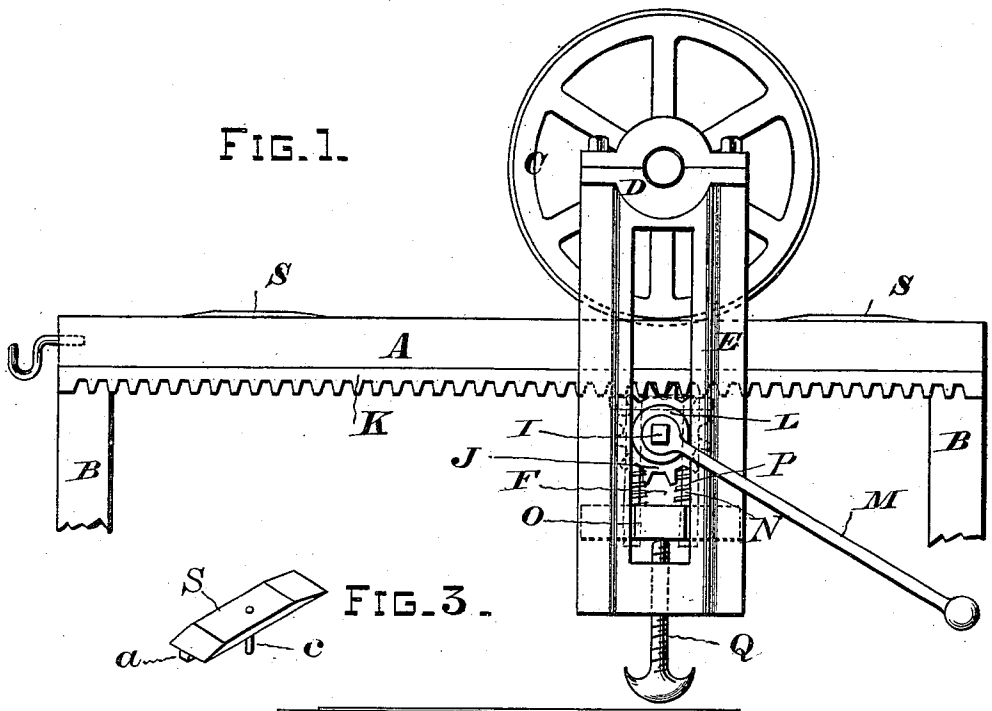
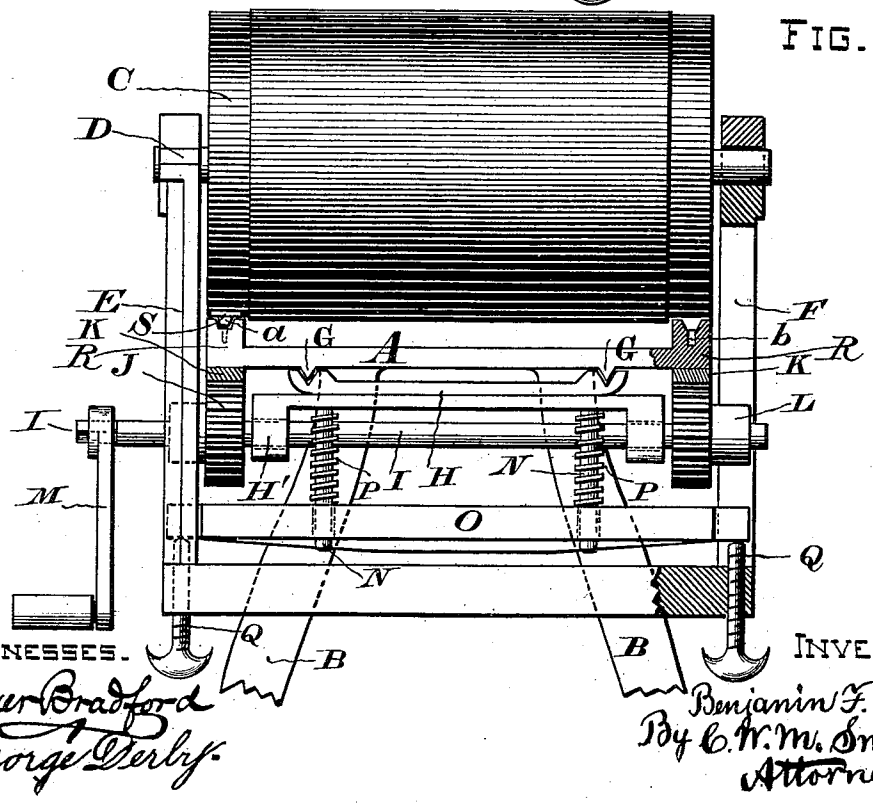


FIG. 3.

FIG. 2.



WITNESSES.

Wilmer Bradford

George Derby.

INVENTOR.

Benjamin F. Jacobs

By C. W. M. Smith

Attorney

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

BENJAMIN F. JACOBS, OF SAN FRANCISCO, CALIFORNIA.

PRINTER'S PROOF-PRESS.

SPECIFICATION forming part of Letters Patent No. 271,468, dated January 30, 1883.

Application filed June 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN FRANKLIN JACOBS, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented a new and useful Proof-Press for Printers, of which the following is a specification.

My invention relates to improvements in printers' proof-presses; and the objects of my invention are, first, to provide a proof-press for printers' use of such construction that the proofs can be easily and rapidly taken; and, second, to afford facilities for the proper adjustment of the proof-roller, so that the type will not be bruised or injured by passing the impression-roller over the faces thereof. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved proof-press. Fig. 2 is an end view, partly in section. Fig. 3 is a perspective view of one of the "shoes."

Similar letters refer to similar parts throughout the several views.

The table or bed-plate A is mounted upon suitable legs, B B, and supports and carries the proof-roller and its operating mechanism.

The proof-roller C is journaled in suitable bearings, D, situated at the upper end of the carriage or traveling frame E, which has slots F F cut in the upright portions thereof.

The under side of the bed-plate A is provided with two parallel V-shaped projecting ribs or rails, G G, which form a track or guides upon which is slid a plate, H, having grooves near either end, which conform to the ribs G. This plate H has two downwardly-projecting lugs, H', which form a bearing for the shaft I, carrying the toothed or gear wheels J J, which mesh into the racks K K, firmly secured upon the under side of the bed-plate. The gear-wheels J J are placed between the uprights of the carrier, and their hubs L are of such a diameter as to snugly fit (without friction or binding) within the vertical slots F, cut in said uprights, and have vertical play therein. One or both ends of the shaft carrying the said gear-wheels may be made square to receive a removable crank-handle, M, by means of which the machine is operated.

To the under side of the traveling guide-plate H are securely attached, near each corner, the downwardly-projecting bolts or pins N, which enter and pass through holes bored in a lower or tension plate, O. The pins N are surrounded by a coiled expansion-spring, P, as clearly shown in Fig. 2. The tension-plate O has a rib formed on its under side to strengthen it and has a projecting lug or rabbet at each end, which closely fits within the slot or groove F in the carriage and rests upon the upper ends of the set or thumb screws Q Q, which pass upward through the base of the carriage, as shown.

The galley plate or table A is provided with parallel grooves or track R, in which are placed shoes S S, the upper faces of which are beveled off toward both ends, and they also have upon their under side a rib, *a*, which enters the groove formed by each set of rails or tracks R R, and in order that the shoes upon opposite sides of the table may be placed directly opposite to each other and at an equal distance from the end of the table, I drill a series of holes, *b*, in the bottom of the groove formed in the tracks R R. The said holes *b* receive a downwardly-projecting pin, *c*, formed upon the shoes S S, and by this means the exact distance of the shoes from the end of the table can be easily regulated. It will be readily seen that by thus constructing the shoes and rendering them capable of being moved along in the tracks or grooves on the table at both sides of the carriage or roller frame the impression or proof roller will mount the inclined faces of the shoes and be elevated just sufficient to pass over the first series of types at either end of the galley or form, and not bruise the contents of the galley either in mounting or passing off at the opposite end thereof. While this step is being taken the carriage E and plate O will be carried upward, thereby compressing the springs P P, and impart an upward yielding and at the same time a downward pressure of the parts of sufficient force and character to take the impression without injuring the types. The extent or degree of this pressure is governed by the thumb-screws Q Q, which are operated to cause the plate O to press or bear with greater or less force against the springs P, placed between the said plate and the guide-plate H. By this means,

during the operation a sufficient upward pressure is had to press the gear-wheels J J steadily against the rack K on the under side of the table along which they are caused to move.

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

1. In combination with the galley plate or table A of a printer's proof-press, the proof-roller C, carriage E, guide-plate H, shaft I, carrying gear-wheels J J, meshing with racks K K, pins N, expansive springs P P, tension-plate O, and set-screws Q, all constructed, arranged, and operating substantially as and for the purpose set forth.

2. The combination, with the proof-roller C, of the carriage E, guide-plate H, springs P P, tension-plate O, and set screws Q Q, arranged and operating substantially in the manner and for the purpose set forth.

3. In a printer's proof-press, the galley plate or table A, having raised tracks R R at each side thereof, and provided with an impression-roller traveling upon said tracks, in combination with the double-inclined shoes S S, constructed and arranged to operate substantially in the manner and for the purpose set forth and specified.

In testimony that I claim the foregoing I have hereunto set my hand this 12th day of June, 1882.

BENJAMIN FRANKLIN JACOBS.

Witnesses:
CHAS. E. KELLY,
WILMER BRADFORD.