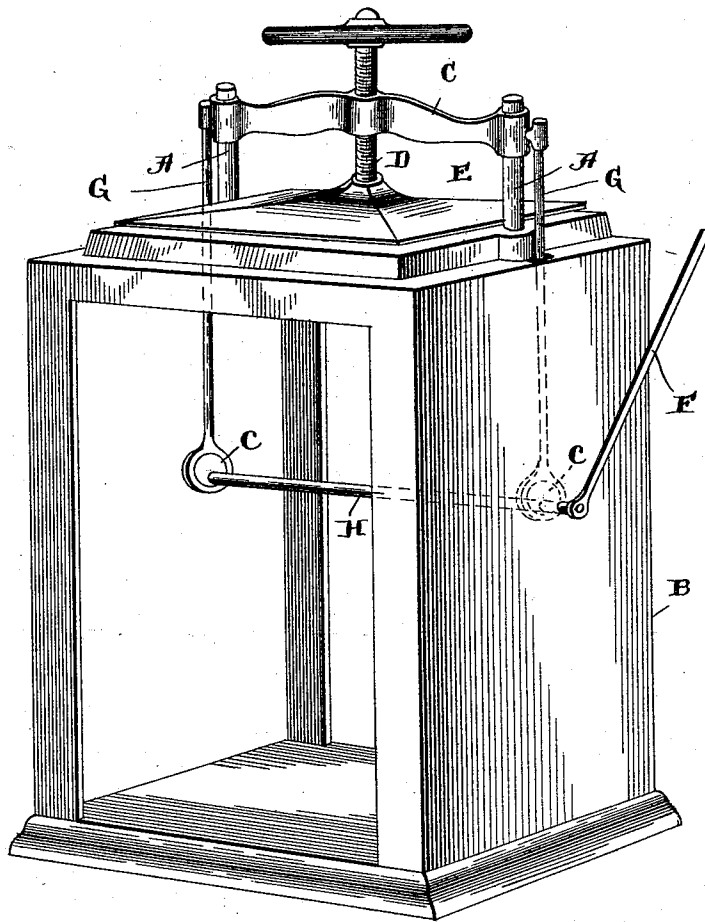


(No Model.)

S. W. HEMPSTED.
LETTER PRESS.

No. 543,731.

Patented July 30, 1895.



Witnesses
Geo. C. Frech
James W. Brown

Inventor
Samuel W. Hempsted
By Attorneys
Lehmann, Pattison & Mead

UNITED STATES PATENT OFFICE.

SAMUEL W. HEMPSTED, OF COLUMBUS, OHIO.

LETTER-PRESS.

SPECIFICATION forming part of Letters Patent No. 543,731, dated July 30, 1895.

Application filed September 21, 1894. Serial No. 523,665. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL W. HEMPSTED, of Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Letter-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 drawing, which forms part of this specification.

My invention relates to improvements in letter-presses; and it consists in the construction and combination of parts to be fully described hereinafter, and particularly pointed out in the claim.

The object of my invention is to provide an attachment to a letter-press whereby the operation of a lever suitably arranged for this purpose will cause an increase or superpressure (in excess and beyond that produced or possible by the ordinary hand wheel and screw alone) upon the book or books or other matter to be copied in the press, allowing at the same time the usual and ordinary and initial pressure to be brought to bear by means of the hand wheel and screw in the usual manner, when books and other matter of various thicknesses are to be copied.

The accompanying drawing is a perspective view of a letter-press which embodies my invention complete.

B represents a cabinet, upon the top of which is placed the base I of an ordinary letter-press, the standards A projecting vertically from the opposite ends of said base and the cross or screw beam C, by reason of suitable arrangements provided therefor, sliding up and down thereupon.

The usual hand-screw D passes through the ordinary nut located in the cross or screw beam C, being connected to and engaging the top of the pressure-plate E in the same manner as in ordinary presses.

Placed in the top of the cabinet B and outside the base I of the letter-press are the openings e, through which the vertical rods G are

connected with the ends of the cross or screw beam C, and their lower ends provided with yokes which encircle eccentrics c, rigidly fixed to the transverse shaft H, one end of which projects through and outside of the cabinet B. This projecting end is fitted with a suitable lever or handle F, by means of which the press is operated.

The height of the pressure-plate E is regulated by means of the hand-screw D in the ordinary manner, so as to permit of the insertion between the base I and the pressure-plate E of a book or books or other matter to be copied of varying thicknesses, and after the pressure of the plate E has been set down thereupon by the hand-screw D, the lever F being then operated by a downward movement in the direction indicated by arrow, actuates, through the medium of the eccentrics, the connecting-rods G, and in turn the cross or screw beam C, and this, through the screw D and the plate E, produces a superpressure upon the book or books or other matter to be copied, as hereinbefore set forth.

The movement of the lever F in the opposite direction will remove the superpressure thereby obtained, and by a simple and easy readjustment of the hand-screw D the pressure-plate is raised to permit the book, books, or other matter to be removed, as will be readily understood.

From the above description it will be seen that I have produced a very simple and practical improvement on the ordinary hand-screw copying-press, and which, by reason of the eccentrics and lever, render it possible, with slight physical exertion on the part of the operator, to obtain a pressure greatly in excess of that of the ordinary hand wheel and screw.

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

A letter press comprising a rigid bed plate, rigid standards extending upward therefrom at opposite sides, a cross beam having its ends loosely encircling said standards and car-

- rying a hand screw and pressure plate co-acting with said base, an operating shaft journaled in rigid bearings below said bed carrying eccentrics or cranks, said shaft extending in a line longitudinal to said cross beam, and
5 rods having their upper ends connected to the ends of the beam outside of said rigid standards and their lower ends connected with said cranks or eccentrics, substantially as described. 10

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

SAMUEL W. HEMPSTED.

Witnesses:

BARTON GRIFFITH,
PHILIP H. BRUCK.