C. F. GRABO.

PRESS.

No. 29,585. Patented Aug. 14, 1860.

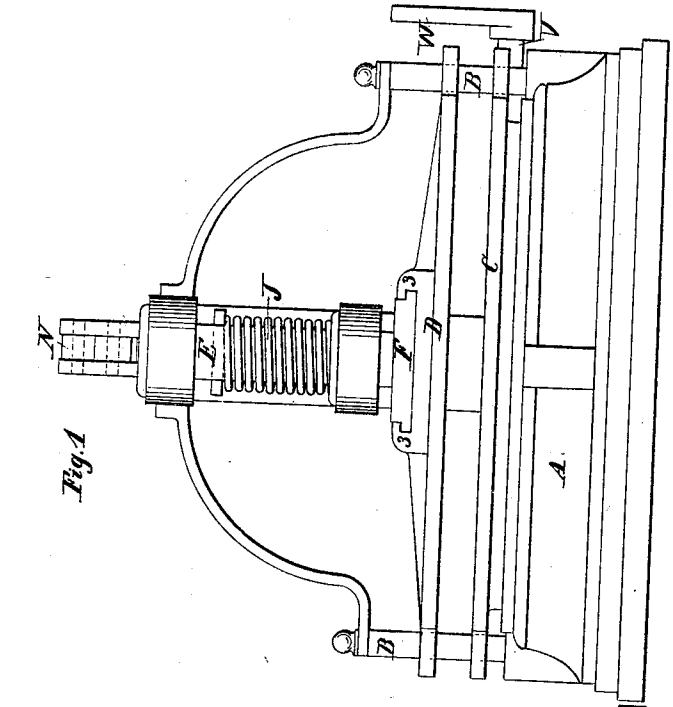


Fig. 1.

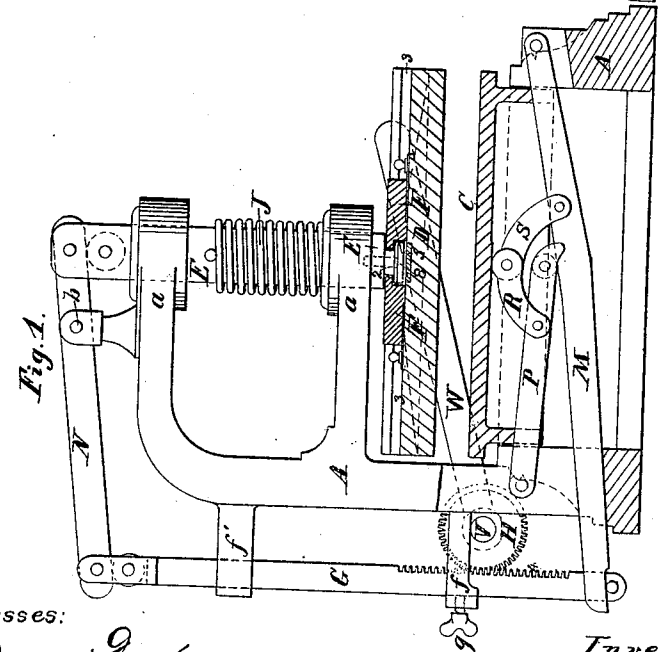


Fig. 1.

Witnesses:

Ferdinand Becker

Frederick Brulbeck.

Inventor:

Charles Franz Grabo

UNITED STATES PATENT OFFICE.

CHARLES FRANZ GRABO, OF BOSTON, MASSACHUSETTS.

COPYING-PRESS.

Specification of Letters Patent No. 29,585, dated August 14, 1860.

To all whom it may concern:

Be it known that I, CHARLES FRANZ GRABO, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Press; and I hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Figure I represents a front view and Fig. II a cross section of my improved press.

The nature of my invention consists in the combination of levers acting upon the top and bottom platens of a press so as to operate both platens simultaneously, and secondly in the manner of attaching the upright bolt to the top platen to be easily detached for the purpose of using the same as a seal press.

A is the frame of the machine, on each side of which bolts B B are fixed to guide the platens C and D in their up-and-down motion.

E is an upright bolt passing through bearings in the arms, *a*, *a*, of the frame A, to the lower end of which the top platen D is attached. For that purpose a groove (2) is turned in at the lower end of said upright bolt E, into which pieces, F, F, sliding in grooves, 3, fast to the top platen, D, fit. A spiral spring, J, is attached to this upright bolt E, acting against the lower arm, *a*, to lift this bolt and the top platen D upward when required.

f f' are guides fastened on the back of the frame A through which a rod, G, passes, having teeth (4) cut in its lower end so as to form a rack, into which a small wheel H is made to work. The top end of this rod G is connected to a lever N working on a fulcrum, 6, and having its other end attached to the upright bolt E. The lower end of the rod G is connected with the lever M acting upon the lever P, as well as on the combined joint R and S, which latter act against the under side of the lower platen C. By this arrangement of levers with the rod G, an upward motion communicated to said rod G will produce a simultaneous motion on both platens C and D toward each other. Through the guide *f* a setscrew, *g*, passes acting upon the rod G, so as to hold the same in any desired position. The wheel H is fast on a shaft, V, turning in suitable bearings and provided with a lever W on one end for the purpose of operating the same. By this arrangement of operating both platens simultaneous and by the combination of levers acting against said platens the necessary pressure is exerted on the book or paper, and a book of greater or less thickness as well as a single sheet of paper may be acted upon without any further adjustment being required, on account of the difference of thickness introduced between the platens.

To the bottom of the upright bolt, E, a metallic die, 8, for embossing is attached while the counter die, 5, may be attached to the top of the platen D. If the press is intended to be used as a seal or embossing press, the upright bolt E is disconnected from the top platen, D, by withdrawing the pieces F, F, out of the groove, 3, in said bolt, E, when said top platen D will fall upon the bottom platen, C, and be moved with the same and simultaneous with the metallic die.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the rod, G, with the levers N and M acting simultaneously upon the top and bottom platens of a press in the manner and for the purpose substantially as described.

2. The manner of attaching the upright bolt E to the top platen as described, and for the purpose substantially as specified.

CHARLES FRANZ GRABO.

Witnesses:

FERDINAND DREHER,

FREDERIK BROELBEEK.