

W. L. COUSLAND.
Copying-Presses.

No. 200,131.

Patented Feb. 12, 1878.

Fig. 1.

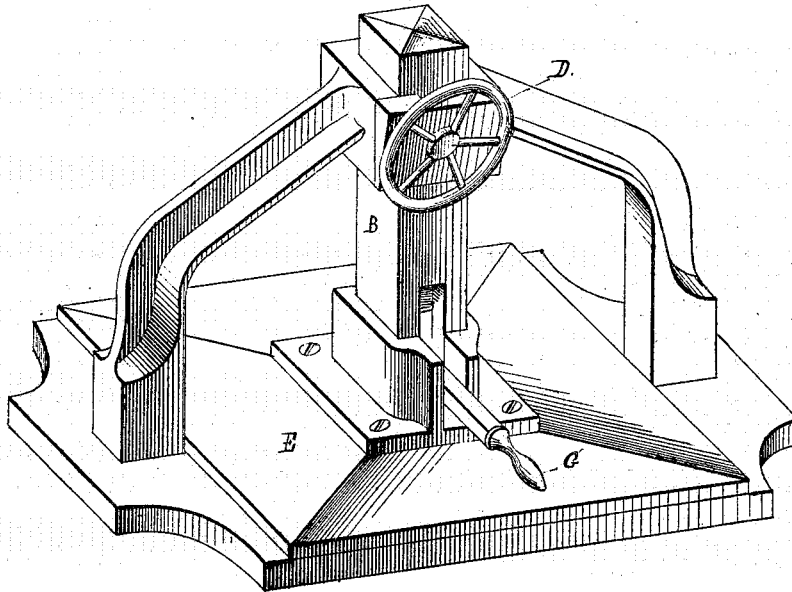


Fig. 2.

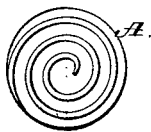


Fig. 3.

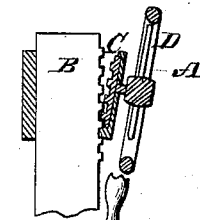


Fig. 4.

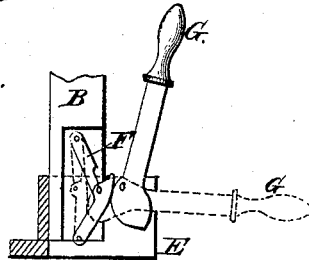
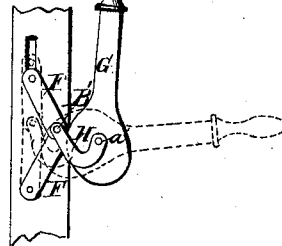


Fig. 5.



Attest.

A. Mc Coy
Wm. Cousland.

Inventor.

W. L. Cousland

UNITED STATES PATENT OFFICE.

WILLIAM L. COUSLAND, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN COPYING-PRESSES.

Specification forming part of Letters Patent No. **200,131**, dated February 12, 1878; application filed April 19, 1877.

To all whom it may concern:

Be it known that I, WILLIAM L. COUSLAND, of the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in Letter-Copying Presses; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The objects of my invention are to effect such improvements in letter-copying presses as will reduce the present loss of time, diminish muscular effort, and add greatly to the pressure-power.

The foregoing objects are accomplished by means of the combination of a movable guide-post, stationary revolving spiral, upper pressure-bed or platen, toggle-joint, and lever-cam.

This guide-post is raised or lowered by means of a lock-motion, consisting of a movable spiral adjusted at an angle, and engaged with button-heads or their equivalents placed upon said guide-post.

Conjoined to the foregoing is a toggle-joint. One end of this toggle-joint is affixed to the guide-post, the other end to the upper pressure-bed or platen. The toggle-joint is moved by a lever-cam or a lever-cam and a connecting-rod or equivalent. The lever-cam or equivalent is attached to the platen.

The action of these improvements is illustrated in the isometrical view, Figure 1, in the accompanying drawing, and still more in detail in the plan views, Figs. 2, 3, 4, and 5.

Fig. 2 represents a vertical view of the spiral A; Fig. 3, a sectional view, showing the angular adjustment and engagement of the movable spiral A with the button-heads or equivalents C placed upon the guide-post B, together with the hand-wheel D, by means of which the movable spiral A is made to revolve, causing the guide-post B to be raised or low-

ered, and effecting a lock between the guide-post B and the spiral A at any point within the range of movement.

Fig. 4 represents the connection of the guide-post B with the upper pressure-bed or platen E by means of the toggle-joint F, one end of which is attached to the guide-post B, the other to the platen E; also, the lever-cam G, which is used to straighten the toggle F; and since the guide-post B is stationary, (being locked above at A,) the platen E is forced down. The developed pressure exerted depends upon the combined leverage of the lever-cam and toggle-joint.

Fig. 5 shows a connection, H, which is made between the toggle F and the cam G, whereby the weight of the platen E is prevented from drawing the toggle into a perpendicular, for the reason that the connections A' and B' of the connecting-rod H with the toggle F and the lever-cam G are made in such a manner as to be in a straight line when the platen is suspended.

It will be seen from the foregoing that when the guide-post B is lowered the platen E is brought in direct contact with the copying-book, and that the pressure is both applied and withdrawn by the movement of the lever.

Having described my improvements in letter-copying presses, I now specify what I claim as new in my invention, and for which I desire to secure Letters Patent—

The combination of a movable guide-post, attached to the upper pressure-bed or platen, raised or lowered by means of a lock-motion, consisting of a movable spiral, turned by a hand-wheel, and engaged with button-heads or teeth placed on the guide-post, together with a toggle-joint, operated by a lever-cam and connecting-rod, substantially as set forth.

In testimony that I claim the foregoing as my own I hereto affix my signature in presence of two witnesses.

W. L. COUSLAND.

Witnesses:

A. MCCOY,
WM. COUSLAND.