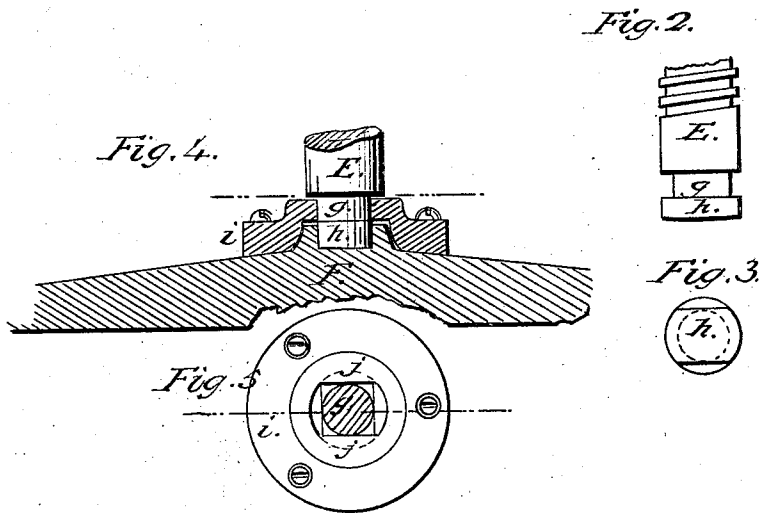
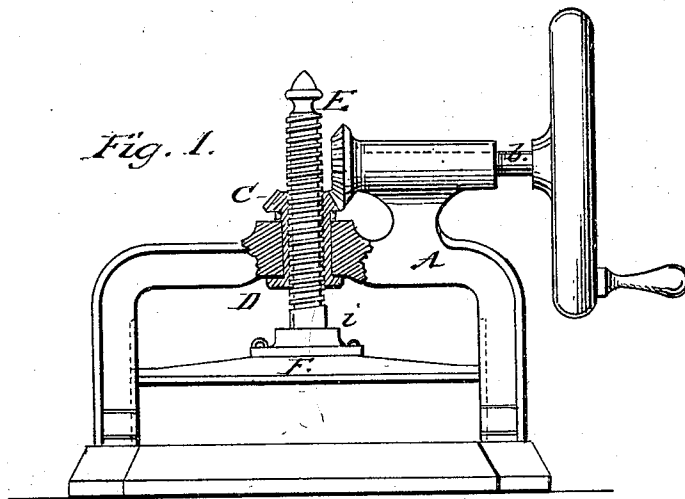


G. C. Gage.
 Copying Press.
 N^o 89,035. Patented Apr. 20, 1869.



Witnesses;
 Notaries
 John E. Gage

Inventor,
 G. C. Gage

United States Patent Office.

GEORGE C. GAGE, OF WATERFORD, NEW YORK.

Letters Patent No. 89,035, dated April 20, 1869; antedated April 9, 1869.

IMPROVEMENT IN COPYING-PRESSES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE C. GAGE, of Waterford, in the county of Saratoga, and State of New York, have invented a new and useful Improvement in Copying-Presses; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 represents a vertical sectional view of my invention.

Figures 2 and 3 are views of the nether end of the non-revolving screw.

Figures 4 and 5 are reciprocal sectional views of the device which suspends the platen to the screw, and prevents the said screw from revolving when the platen is moving either upward or downward.

The various devices, old and new, which I have combined and arranged in my invention, consist in one non-revolving vertical screw connected with the platen, and said screw is encircled by a revolving nut, to which is secured a bevel gear, which, in turn, is engaged with a corresponding gear, connected with a hand-wheel or crank, which communicates the power to the screw and platen, moving the same upward and downward.

This invention differs materially from other non-revolving screw-presses, as in those the nut slides up and down through the gear, and having a right and left-hand screw-thread cut therein, corresponding to and receiving the non-revolving screw of the platen and the stationary screw affixed to the arch above, the whole of which is much more complex than my invention, hereinafter more fully described.

A, fig. 1, represents the arch or upper frame of my screw-press, which is fitted to receive the horizontal revolving shaft *b*, to the outer end of which is secured the hand-wheel or crank; and secured to the opposite end of said shaft is a bevel gear, which is engaged with the gear *C*, secured to the revolving nut *D*.

The nut *D* is so fitted as to easily turn in the arch *A*, as represented in the drawing, fig. 1.

Through the nut *D* and gear *C* is inserted the non-revolving screw *E*, to the nether end of which is attached the platen *F*.

The screw *E* is formed, at its lower end, with an annular groove or neck, *g*, fig. 2, and flattened head, *h*, figs. 2 and 3.

The head *h* is passed through the detachable plate *i*, represented in figs. 1, 4, and 5, having an oblong opening through its centre for that purpose.

A groove or channel is cut or formed in the platen *F*, corresponding to the narrowest dimensions of the head *h*, in order to prevent the screw from turning when the nut *D* is made to revolve.

The opening in the plate *i* is at right angles with the channel in the platen *F*, and the head, *h*, of the screw *E* is represented in dotted lines *j*, fig. 5.

By this form of mechanism, the platen is allowed a certain degree of freedom, corresponding to the inequalities of the matter to be pressed.

It will be observed, by reference to the drawing, fig. 1, that the nut *D* is provided with a collar on its lower end, for the purpose of resisting the upward tendency of the said nut *D*, said collar being brought upward against the arch *A*.

Having thus described my invention,

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

The combination and arrangement of the nut *D* and screw *E*, together with the platen-holding device *g h i j*, all constructed substantially as shown, and operating as set forth.

GEO. C. GAGE.

Witnesses:

J. W. LATCHER,
JOHN E. GAGE.