

(No Model.)

W. B. SARGENT.
COPYING PRESS.

No. 419,286.

Patented Jan. 14, 1890.

Fig. 1.

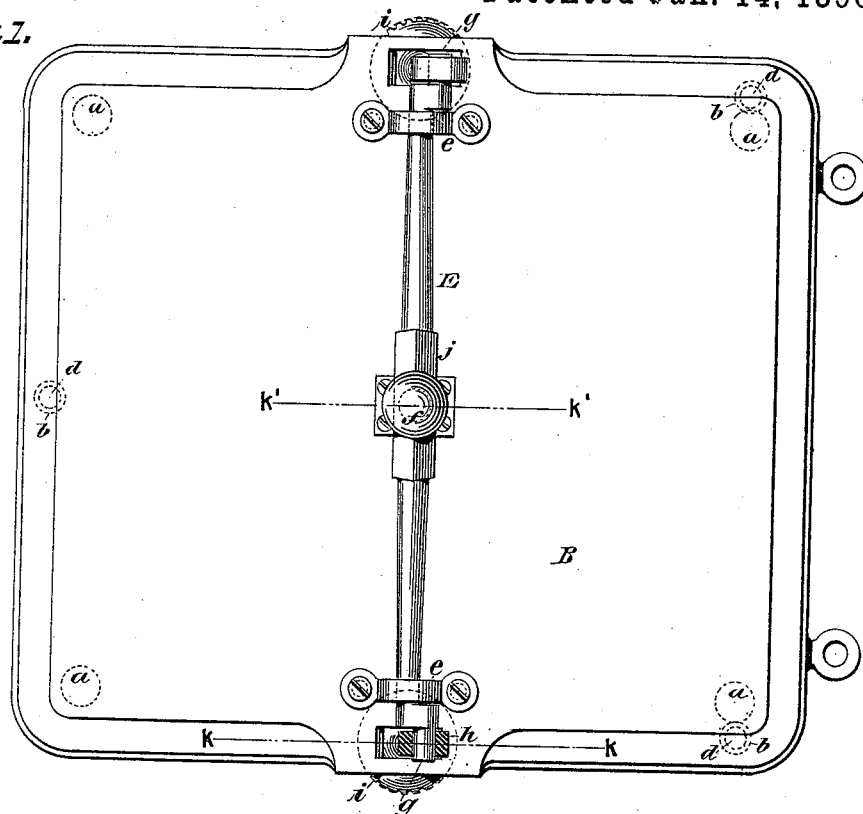


Fig. 2.

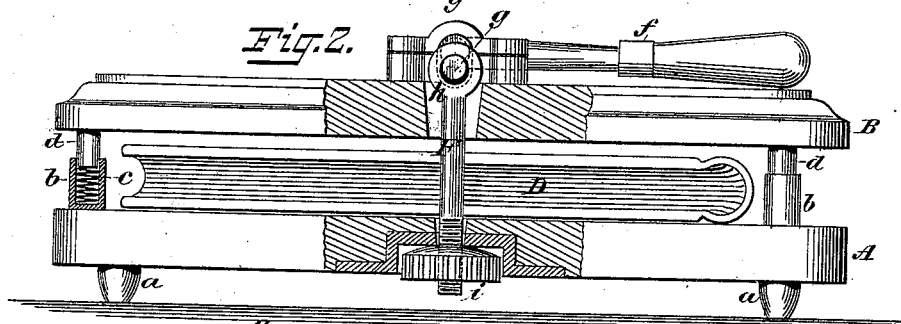
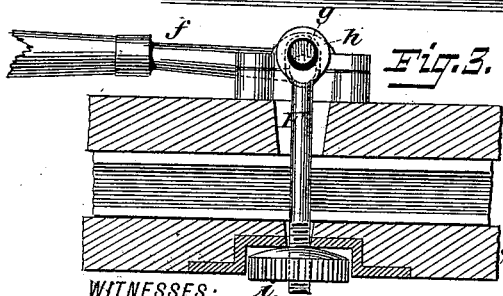


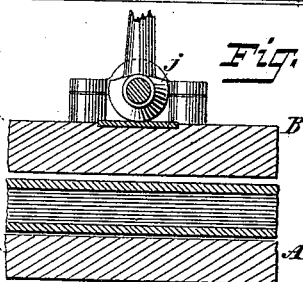
Fig. 3.



WITNESSES:

Gustave Dietrich
John M. Spear.

Fig. 4.



INVENTOR

William B. Sargent

BY

Brissin, Hale & Knautte

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM BOSMER SARGENT, OF NEW YORK, N. Y.

COPYING-PRESS.

SPECIFICATION forming part of Letters Patent No. 419,286, dated January 14, 1890.

Application filed November 13, 1888. Serial No. 290,706. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BOSMER SARGENT, a resident of the city, county, and State of New York, have invented a new and useful Improvement in Copying-Presses, of which the following is a description, reference being had to the accompanying drawings, in which—

Figure 1 represents a top view of my improved copying-press partly in section. Fig. 2 is a side view of the same partly in section, line *k k*, Fig. 1, indicating the plane of section. Fig. 3 is a similar view showing the parts in different position. Fig. 4 is a detail section on the line *k' k'*, Fig. 1.

This invention relates to a new construction of copying-press, whereby with the use of a single lever the parts can be conveniently opened and closed, it being also made adjustable for books of different thicknesses.

The invention consists in the novel combination of parts hereinafter more fully pointed out.

In the accompanying drawings, the letter A represents the lower plate and the letter B the upper plate of a copying-press. The lower plate A is provided with india-rubber or other feet *a*, by which it is supported on a table or other suitable support. From this lower plate A project tubes *b*, containing springs *c* or cushions, and into these tubes fit pins *d*, that project from the upper plate B, as shown; but the tubes *b* may project from the upper plate and the pins *d* from the lower plate, if desired. The object of these springs *c* and of the tubes and pins is to hold the upper plate normally at the greatest distance from the lower plate, for the purpose of introducing and finally removing the book D to be pressed, and also to serve as guides for keeping the upper plate during its motion always level with the lower plate; but instead of springs *c* being contained in tubes *b* and of pins *d* being used ordinary elliptical or semi-elliptical springs may be introduced between the two plates, for the purpose of lifting the upper plate and keeping it parallel during motion with the lower. On the upper side of the upper plate B are bearings *e*, in which rests a shaft E, that is provided with a handle *f*. At or near its ends this shaft has

crank-pins *g*, which project downward below the shaft, as in Fig. 2, when the press is open, and upward above the shaft, as in Fig. 3, when the press is closed. These crank-pins *g* are embraced by loops or eyes *h*, that are formed at the upper ends of upright rods F. The lower ends of these upright rods F pass through apertures in the lower plate A and are threaded to receive nuts *i*. By means of these nuts the uprights F may be lengthened or shortened to adjust the press for books of different thicknesses. The upper sides of the nuts *i* are rounded or convex, so as to permit a rocking motion of the uprights carrying said nuts, because if the upper faces of the nuts were flat, bearing against the flat lower side of the plate A, the uprights could not be rocked. Where the uprights F pass through the plates A and B said plates are slotted or perforated to a sufficient extent to permit of the rocking motion of the uprights.

Instead of having the upper sides of the nuts *i* convex, the corresponding contact-surfaces of the lower sides of the plate A may be made convex.

The shaft E, near its middle, carries a concentric enlargement *j*, (see Fig. 4,) which at all times is in frictional contact with the top of the plate A, serving to maintain by such frictional contact the shaft E and handle *f* in the desired position, whether the same be open or closed. After a book has been introduced between the plates A and B, when the handle *f* is so located as to hold the crank-pins *g* below the axis of the shaft E, as in Fig. 2, thereby holding the press open for the introduction of the book, the handle is swung over to the opposite side, as in Fig. 3, so as to give the shaft E half a revolution and carry the crank-pins vertically over the axis of the shaft E, thereby compressing the book. The frictional enlargement *j* of the shaft being in contact with the plate A serves, as stated, to hold the shaft E in the desired position. It also serves to strengthen the shaft.

The uprights F may be made each in one piece, as shown in Figs. 2 and 3, or they may be made each of more than one piece, if desired. The eyes *h* in the rods F should be a little larger than the crank-pins *g*, as shown,

thereby allowing more play to the upper plate B when the press is open for the introduction or removal of the book.

Having now described my invention, what I claim is—

1. The combination of the plates A and B of the press with the shaft E, hanging in bearings on the plate B, and having the cranks *g*, and with the uprights F secured to the plate A and connected with said cranks *g*, substantially as herein shown and described.

2. The combination of the plates A and B of the press with the shaft E, hanging in

bearings on the plate B, and having the cranks *g g*, uprights F, embracing said cranks, and nuts *i*, fitting said uprights below the plate A, as specified.

3. The combination of the plates A and B with the shaft E, hanging in bearings on the plate B, crank-pins *g g*, uprights F, and nuts on said uprights having convex contact-surface with the lower face of the plate A, as described.

WILLIAM BOSMER SARGENT.

Witnesses:

HARRY M. TURK,

ARTHUR V. BRIESEN.