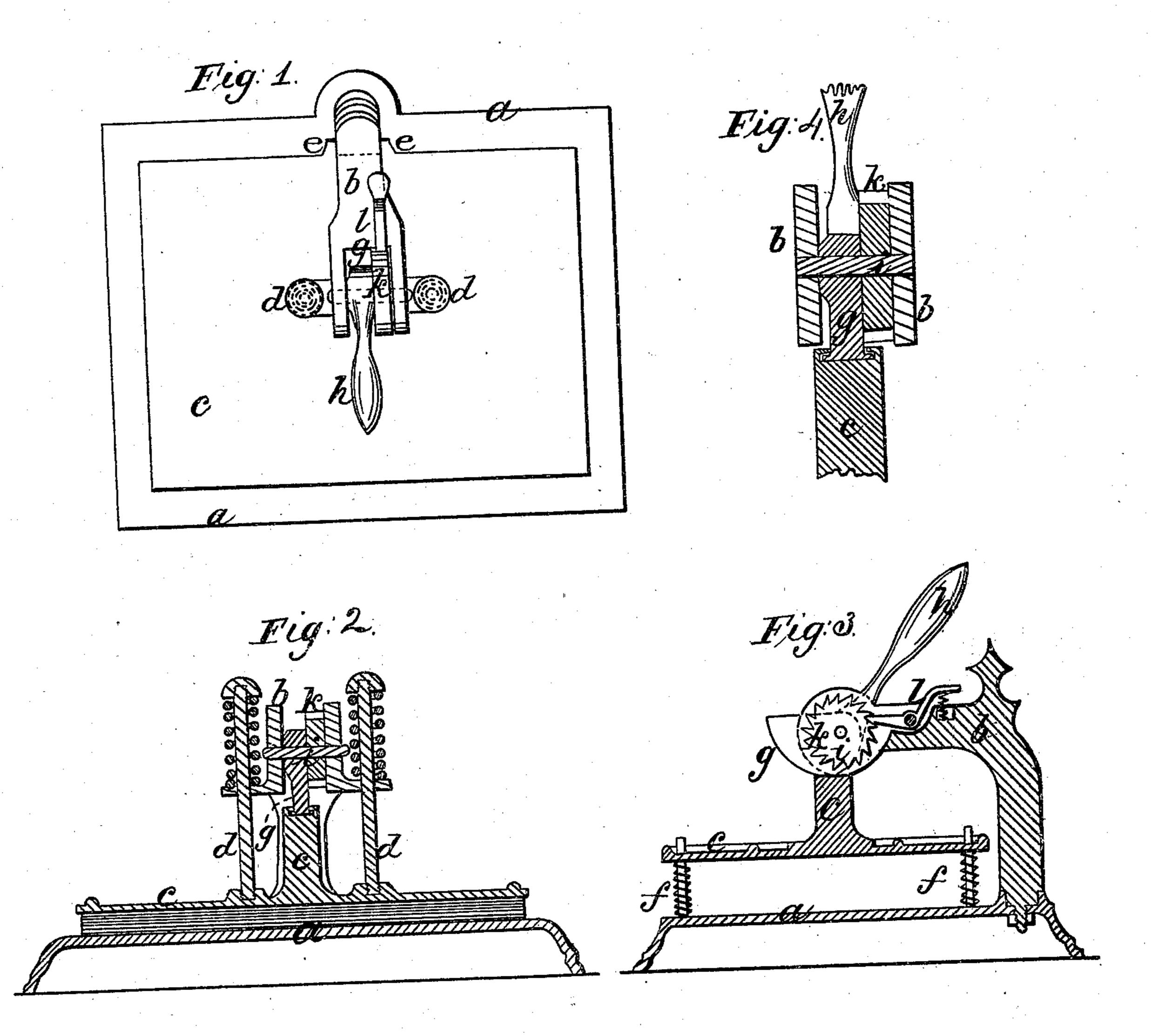
## PLaurence & C.Jefferys. Conying Press. Nº48021. Patented May 30.1865.



Witnesses; Chast Smith James Ederrell fr Inventor; Dansens George Jefferrys

## United States Patent Office.

PHINEAS LAWRENCE AND GEORGE JEFFERYS, OF NEW YORK, N. Y., ASSIGNORS TO THEMSELVES AND BENJAMIN LAWRENCE, OF SAME PLACE.

## COPYING-PRESS.

Specification forming part of Letters Patent No. 48,021, dated May 30, 1865.

To all whom it may concern:

Be it known that we, Phineas Lawrence and George Jefferys, of the city and State of New York, have invented and made a certain new and useful Improvement in Copying-Presses; and we do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a plan of our copying-press. Fig. 2 is a vertical longitudinal section. Fig. 3 is a section at right angles to Fig. 2, and Fig. 4 is a section of the cam of the lever

separately.

Similar marks of reference denote the same

parts.

Copying-presses have heretofore been usually made with a screw to compress the book between the bed and follower, and in some instances a cam has been used to give a powerful pressure, after adjustment of the parts has been effected, by a screw.

The nature of our said invention consists in a copying-press formed with a cam to act upon the follower, in combination with a ratchet-wheel and pawl that prevent the cam turning back after the pressure has been given, so that the press may remain at any given point, with the book exposed to the necessary compression.

In the drawings, a is the bed, from which rises the head-block b, which we have shown as an arm on one side of the bed a, but it might be extended across and attached at the other side of the bed a.

c is the follower, which is guided by the rods d through the head-block, or guides may be provided on its edge, as at e, or the guide-

rods f may be employed upon the bed  $a_n$  as seen in Fig. 3. We have represented springs around these guide-rods d and f to elevate the follower when the pressure of the cam is released.

g is a cam on the pin or axis i, and h is the lever to turn said cam. k is a ratchet-wheel or segment, formed with or attached to the cam g. These all occupy a jaw or mortise in the head b, and l is a spring-pawl, taking the teeth of k and holding the same and cam g at any point to which the cam may have been turned by the lever h. The cam, acting on a projection upon the follower c, compresses a book or other article placed between a and c. The cam may be employed to raise the follower by the use of projections upon the follower entering grooves in the sides of the cam parallel with the eccentric face thereof. (See Fig. 4.) The ratchet-teeth may be formed upon the circular parts of the lever, around the fulcrum thereof, instead of being on a circular projection at the side thereof, as shown.

A copying-press made with the head coming up from one side gives facility for using large books or sheets of paper.

What we claim, and desire to secure by Let-

ters Patent, is—

A copying-press formed with a cam-lever to act upon the follower, in combination with the ratchet and pawl, for the purposes and as specified.

In witness whereof we have hereunto set our signatures this 25th day of March, 1865.

P. LAWRENCE. GEORGE JEFFERYS.

Witnesses:

JAMES E. SERRELL, Jr. CHAS. H. SMITH.