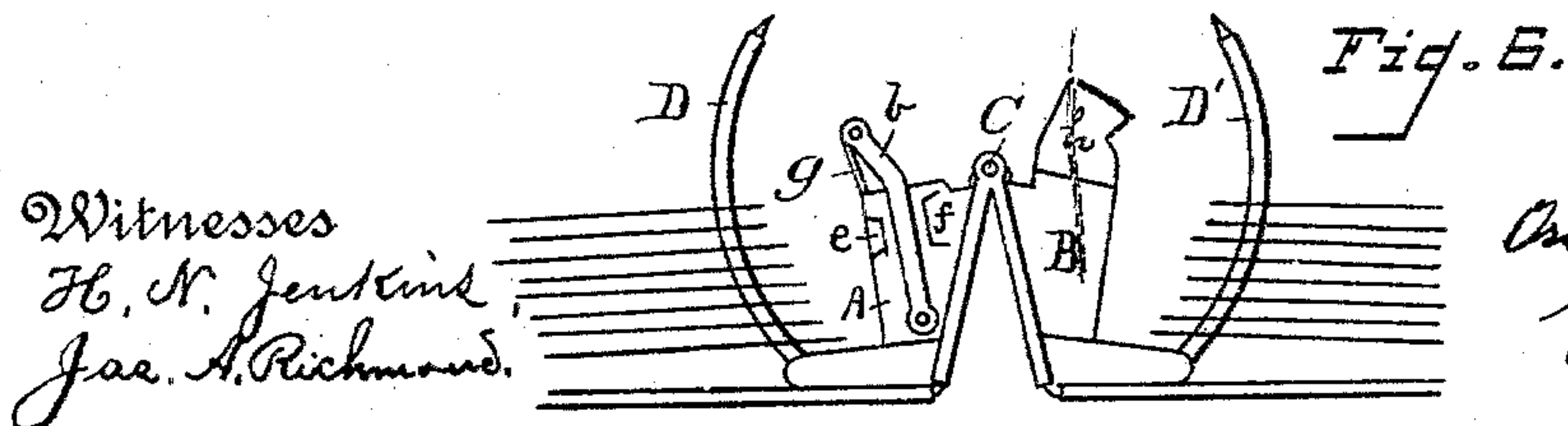
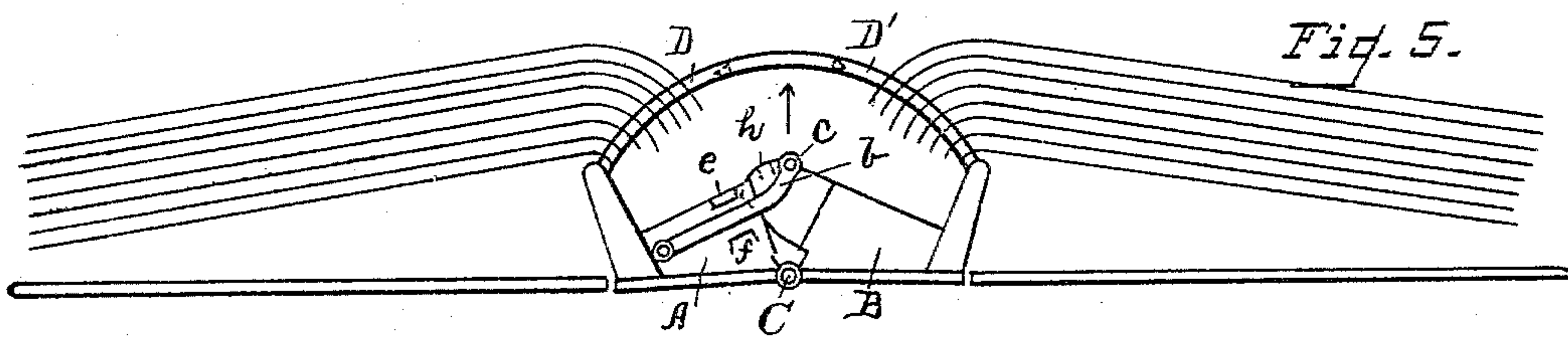
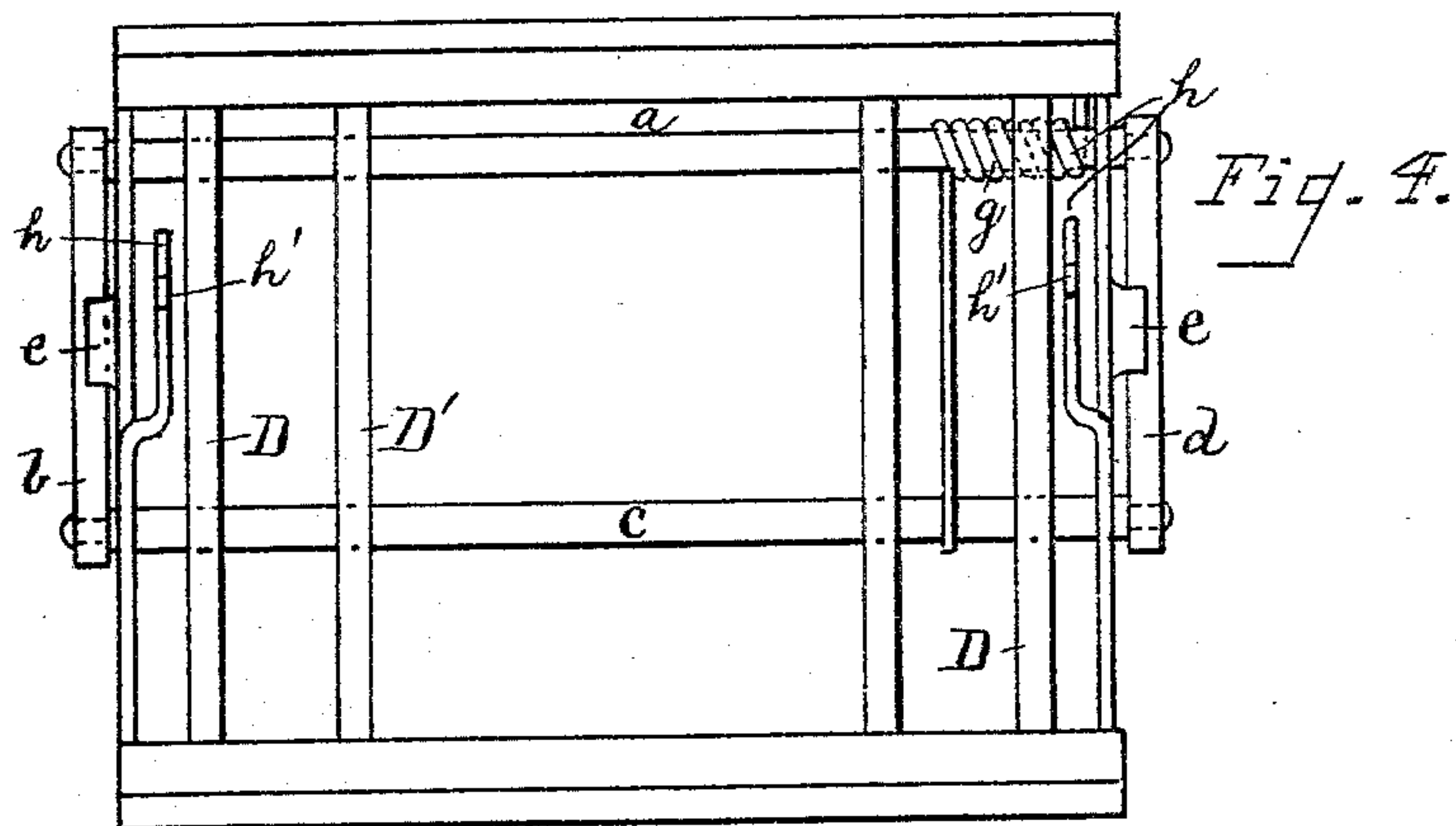
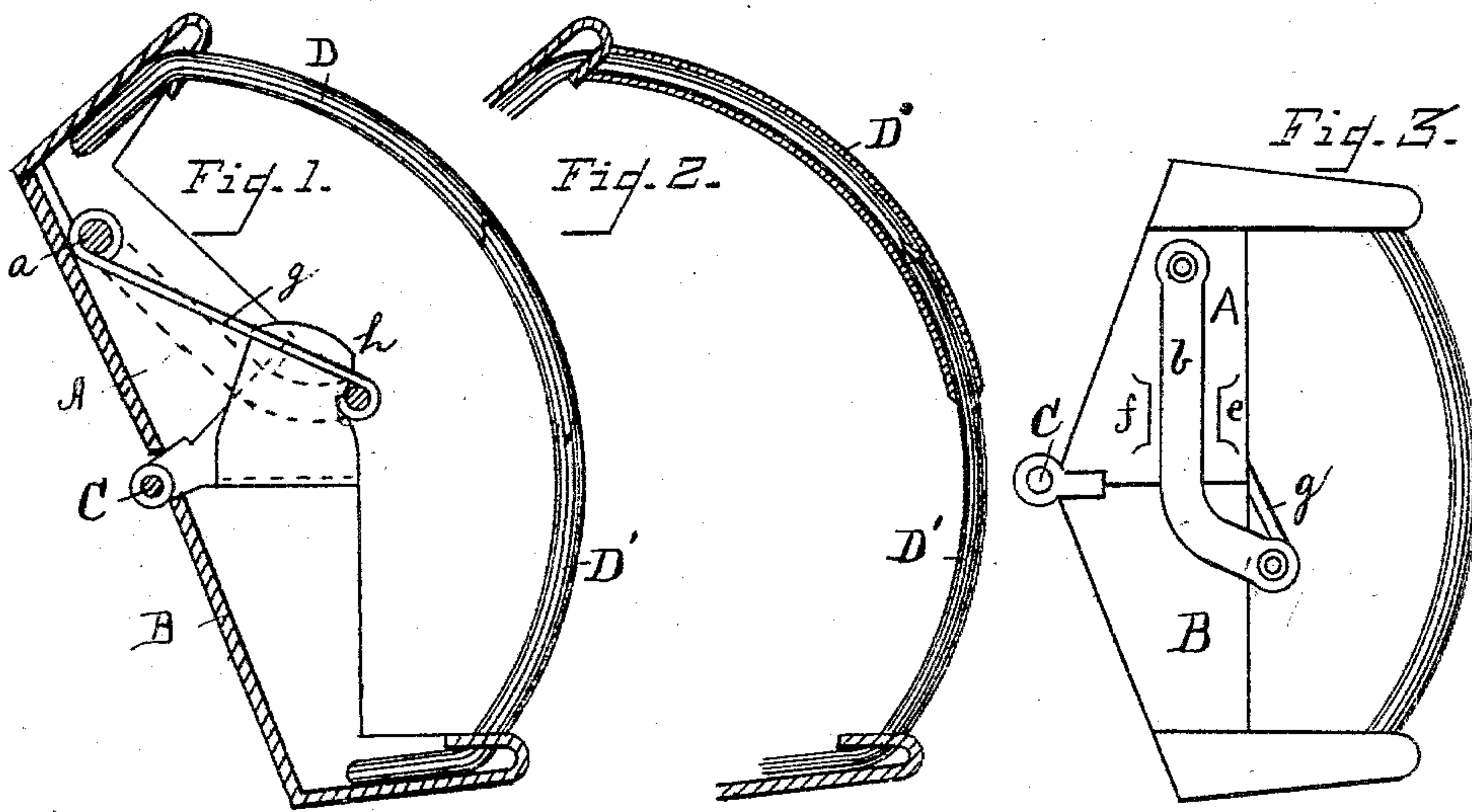


(No Model.)

O. ASSMANN.
BINDER FOR LOOSE SHEETS OF PAPER.

No. 561,932.

Patented June 9, 1896.



Witnesses
H. N. Jenkins
Jas. A. Richmond.

Inventor
Oswald Assmann
by G. Pittman
Attorney

UNITED STATES PATENT OFFICE.

OSWALD ASSMANN, OF TEGELEN, NETHERLANDS.

BINDER FOR LOOSE SHEETS OF PAPER.

SPECIFICATION forming part of Letters Patent No. 561,932, dated June 9, 1896.

Application filed August 21, 1895. Serial No. 560,054. (No model.) Patented in Germany January 15, 1895, No. 82,364, and in England July 15, 1895, No. 13,583.

To all whom it may concern:

Be it known that I, OSWALD ASSMANN, a subject of the Queen of the Netherlands; and a resident of Tegelen, Netherlands, have invented new and useful Improvements in Binders for Loose Sheets of Paper, (for which I have obtained patents in Germany, No. 82,364, dated January 15, 1895, and in England, No. 13,583, dated July 15, 1895,) of which the following is a specification.

The present invention has for its object a binder for loose sheets of paper, such as letters, and it permits of an easy access to any individual sheet, so that the said sheet may be removed from the file with the greatest facility or replaced in the same or any other order.

In the accompanying drawings, Figure 1 shows a binder in a sectional end elevation with binding-needles crossing each other in half-open state ready for the inspection of the leaves. Fig. 2 shows a modification of the binding-needles going into each other, one being hollow to receive the other in its tube. Fig. 3 is an end elevation of the binder closed. Fig. 4 is a plan view. Fig. 5 shows the binder in half-open position with the leaves turned to the right and to the left, and Fig. 6 shows the binder fully open with the binding-needles apart to allow the leaves to be withdrawn.

The binder is composed of two jaws A and B, hinged together at C, and being provided with curved needles D D', which either cross each other, as in Fig. 1, or pass one into the other, as shown in Fig. 2.

The jaw A is provided with a frame composed of the bars *a* and *c* and of the lateral arms *b* and *d*, which frame is hinged thereto, so as to swing around the bar *a*, the motion being limited by stops *e* and *f*, laterally projecting from both ends of the jaw A. A spring *g*, wound upon the bar *a*, presses with one end upon the bar *c*, and thus gives to the frame the tendency to press downward and to lean with the arms *b d* against the stops *f*. The other jaw, B, is provided at either end with a projection *h*, bent in any suitable manner so as not to interfere with the parts of the jaw A. The jaws may be made solid, of

wood or of any other material, or may be hollow—for instance, be bent of sheet metal, as shown in the drawings—and holding the binding-needles secured thereto by any convenient means of attachment. The projections *h* are provided with notches *h'*, adapted to receive the bar *c* when the binder is open, thus checking a further opening and holding the binder in the state shown in Figs. 1 and 5. The needles in this position do not allow the removal of any of the sheets without tearing the same, though an easy inspection of all the leaves is possible.

If it is desired to withdraw sheets or to place new ones, it is only necessary to lift the bar *c* in the direction of the arrow, Fig. 5, so as to be free from the notches *h'*, whereby the arms *b* and *d* strike against the projections *e e*. Then it is easy to turn the binder into the position Fig. 6, so that any one of the sheets retained therein may be withdrawn or fresh sheets may be pushed upon the points of the needles D or D' to be bound in by closing the binder. The front edge of the projections *h* is suitably curved so as to allow the bar *c* to glide upward when the binder is closed and to fall into the notches *h h'*, and further to glide upon the body of the jaw B when the binder is fully closed, as indicated by Fig. 3.

Having thus described my invention, what I claim is—

A binder composed of two jaws hinged together, and carrying the curved binding-needles, one jaw having a spring-actuated swinging frame, and the other notched projections to receive the outer bar of said swinging frame for holding the binder in a half-open position, substantially as described and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses; this 2d day of July, 1895.

OSWALD ASSMANN.

Witnesses:

J. MÜLLER,
L. ESSER.