(No Model.)

W. H. LEWIS.

PHOTOGRAPHIC PRINTING FRAME.

No. 331,980.

Patented Dec. 8, 1885.

Fig. 1.

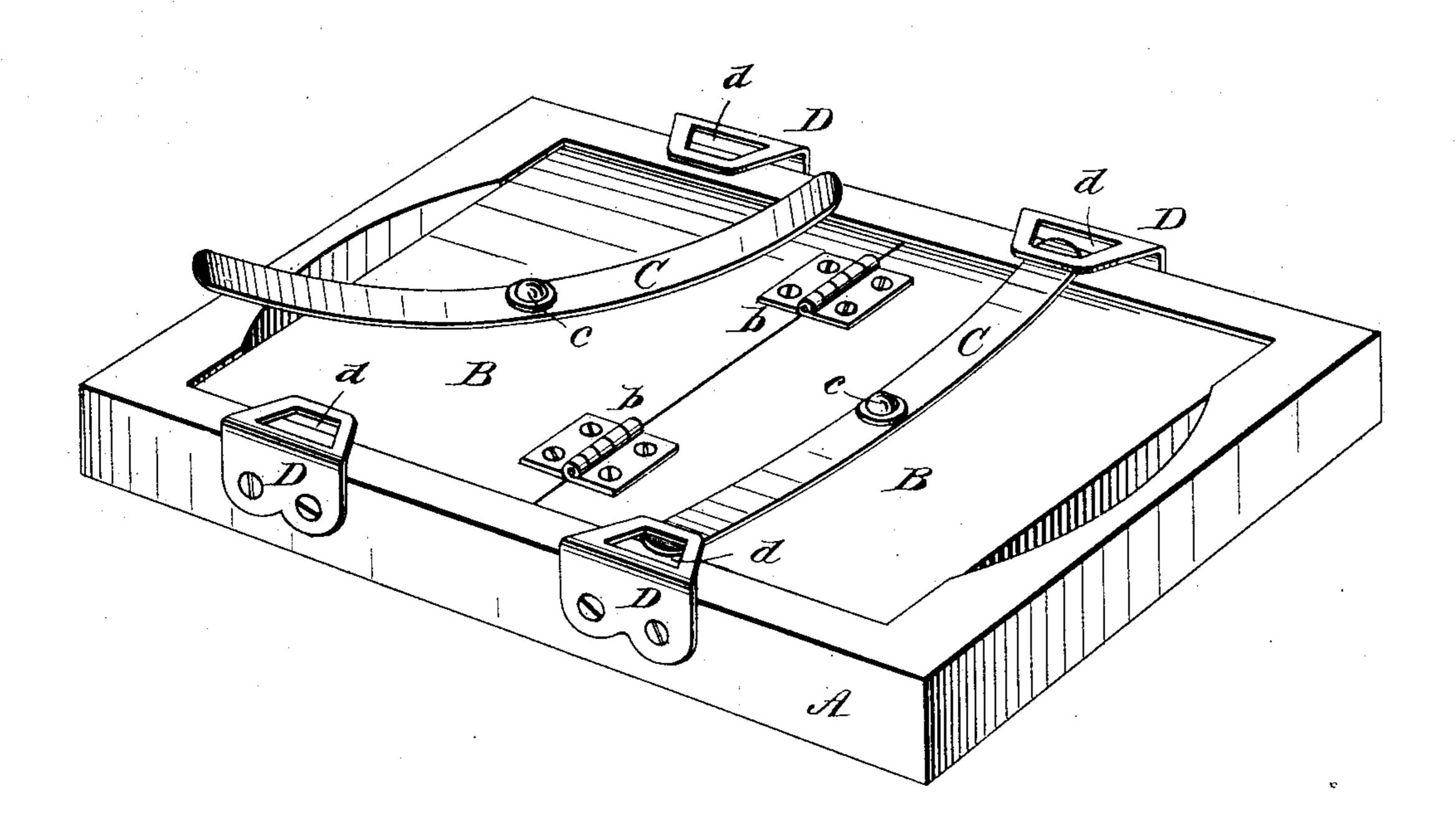
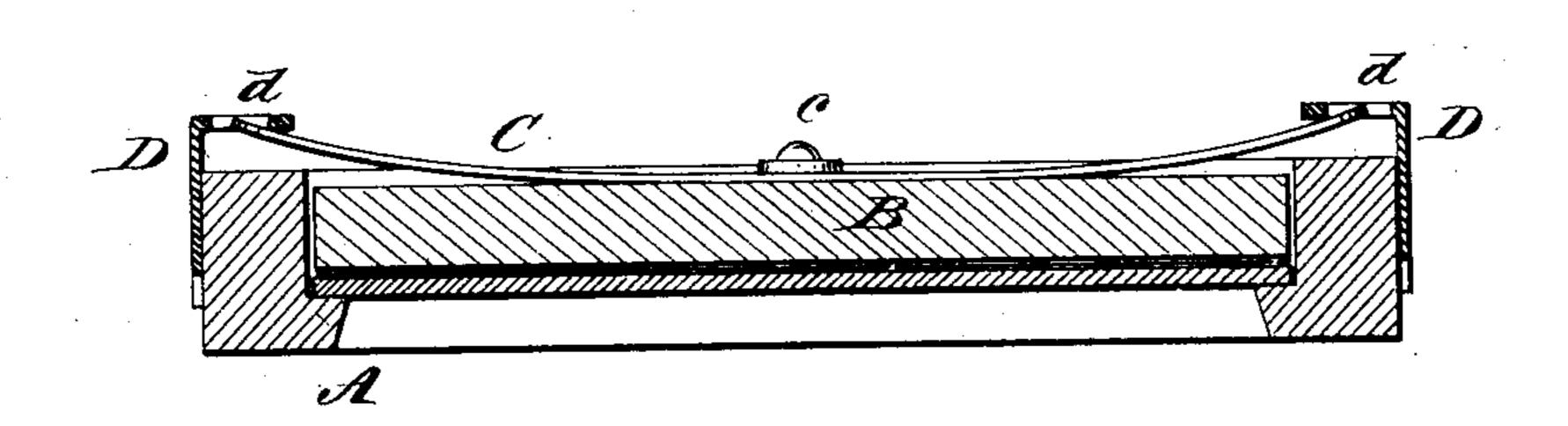


Fig. 2.



WITNESSES:

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WILLIAM H. LEWIS, OF NEW YORK, N. Y., ASSIGNOR TO E. & H. T. ANTHONY & CO., OF SAME PLACE.

PHOTOGRAPHIC-PRINTING FRAME.

SPECIFICATION forming part of Letters Patent No. 331,980, dated December 8, 1885.

Application filed May 7, 1885. Serial No. 164,662. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. LEWIS, of the city, county, and State of New York, have invented certain new and useful Im-5 provements in Photographic-Printing Frames, of which the following is a full, clear, and ex-

act description.

This invention more especially relates to that description of flat photographic-printro ing frames having back boards arranged so that the progress of the printing may be watched without danger of shifting the paper, and in which flat bowed springs pivoted to the back board or back-board sections are 15 used, and arranged to pass at their ends, when suitably swiveled for the purpose, under ears or lip-pieces on the sides of the back of the frame, to give a uniform pressure, and whereby perfect contact between the positive paper 20 and negative plate is insured. In such photographic-printing frames the springs which hold the back board down to its place have no positive lock with the ears or lip-pieces on the frame. They consequently require careful ad-25 justment to put them in a proper holding position under said ears, and are liable to be accidentally or otherwise disturbed or swiveled on the removable or opening and closing back board, which of course interferes with or mars 30 the printing.

My invention has for its object the remedying of this defect; and it consists in a combination, with the printing-frame, of one or more swiveling locking-springs applied to its back board 35 and ears or lip-pieces applied to the frame, constructed to engage in a positive manner with the locking ends of the springs, and so that the springs cannot be disengaged from said ears without first springing them inward 40 and afterward turning or swiveling them.

The invention also consists in a special construction of the ears or catches attached to the frame for holding the swiveling spring or springs when the back board is closed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 represents a view in perspective, as seen from its rear, of a photographic-print- 50 ing frame embodying my invention, and Fig.

2 a transverse section of the same.

A is the frame proper for holding the negative and positive or sensitive paper, and B B its removable back board, constructed in sec- 55 tions, hinged together, as at b, as usual, to facilitate examination of different portions of the print. CC are the springs, pivoted, as at cc, to the back board, for holding said board to its place; and D D, the ears or lip-pieces 60 attached to the frame proper, and under which the ends of the springs C C pass when printing by the frame. These ears D D are constructed—as, for instance, by notches or apertures d d in them—to form positive catches 65 with the ends of the springs, that are bent or turned up for the purpose, and so that they engage with the notched portions of the ears, thus making the springs locking ones. Said springs are engaged with the ears or catches 70 by applying the fingers on both their opposite end portions to depress them, and then swiveling them under the catches, when they will form a positive lock and cannot be accidentally disturbed.

When it is required to open or remove the back board of the printing-frame, pressure is again first required to depress the end portions of the springs in order to disengage them from the catches, and then the springs swiv- 80 eled from underneath the catches. The operation in either case is a rapid and easy one; but there is no liability of the springs slipping their hold when passed under the catches, as the engagement is a positive one, and mere-85 ly exerting a swiveling pressure on the springs will not disengage them.

It is not absolutely necessary, though preferable, that the springs should lock at both of their ends with the ears or lip-pieces, as 90 they might simply pass under the ears at one of their ends and lock with the ears or catches at their opposite ends.

Having thus described my invention, what I claim as new, and desire to secure by Letters 95 Patent, is—

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1. The combination, with the photographicprinting frame A, of the catches, lips, or earpieces D, having notches or openings d in their backs, substantially as and for the pur-5 pose specified.

2. The combination, with the frame proper, A, and its back board, of the notched catches

D and the pivoted bowed springs C, constructed to engage with said catches, essentially as and for the purpose herein set forth. WILLIAM H. LEWIS.

Witnesses: EDGAR TATE,

EDWD. M. CLARK.