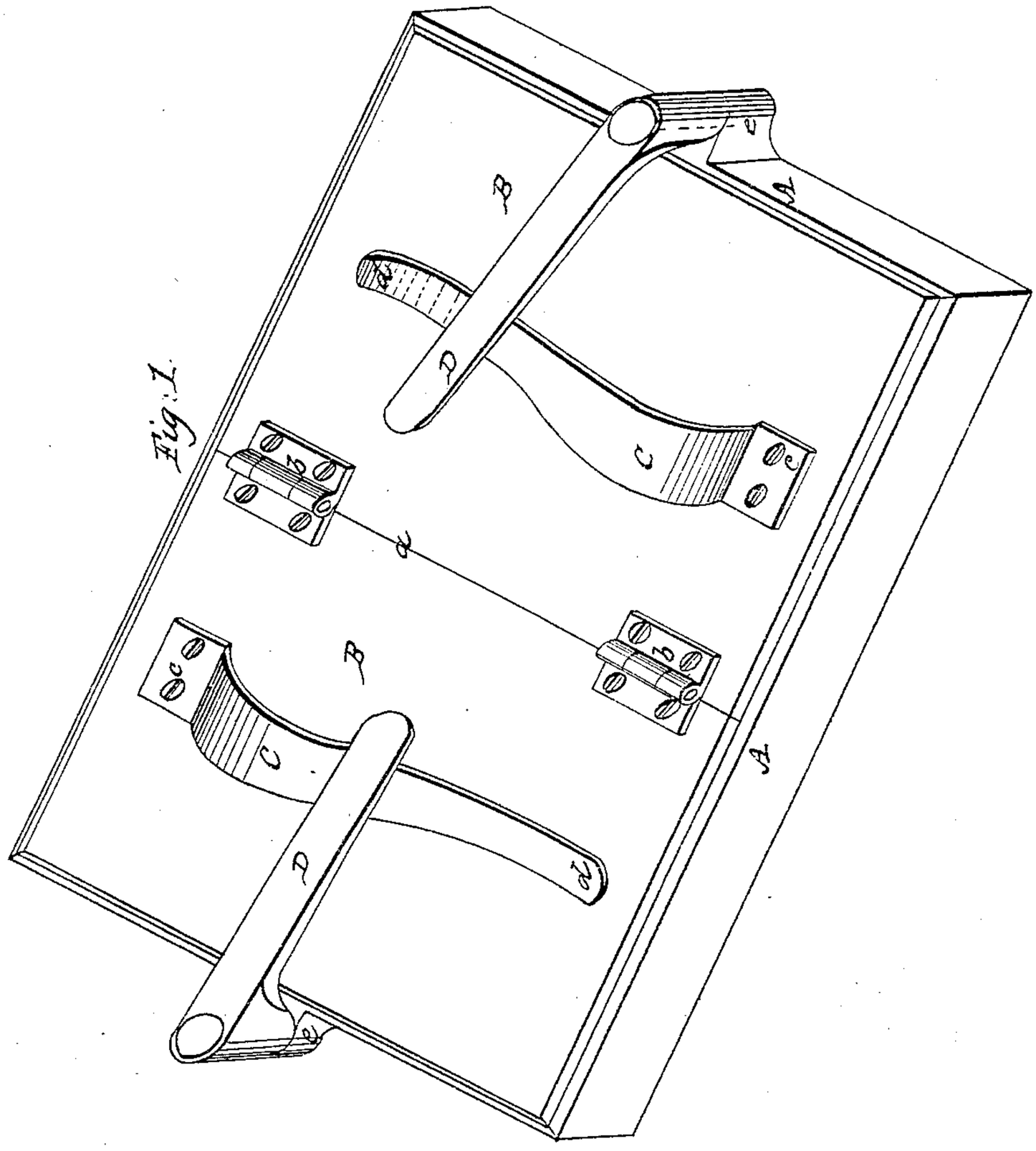
O. H. Burdick,

Photographic-Printing Frame,

No. 42,344. Patented Apr. 19, 1864.

Fig. 1.



Witnesses:
J. W. Hilborn
J. A. Potter

Inventor:
O. H. Burdick
By atty N. B. Stoughton.

UNITED STATES PATENT OFFICE.

ORRIN H. BURDICK, OF AUBURN, NEW YORK.

PHOTOGRAPHIC-PRINTING FRAME.

Specification forming part of Letters Patent No. **42,344**, dated April 19, 1864.

To all whom it may concern:

Be it known that I, ORRIN H. BURDICK, of Auburn, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Photographic-Printing Frames; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, (marked Figure 1,) which represents a perspective view of the rear of the printing-frame, and exhibits the invention claimed.

The usual mode of fastening the back to the printing frame is by turning or shooting bolts, or by catches of still more imperfect construction and operation, which fasten without allowing for varying pressure upon the glass according to its thickness. "Self-acting pressure," as it is termed, is applied by means of springs underneath the back, pressing upon the velvet pad that lies upon the glass. It is evident that such self-acting pressure varies with every varying thickness of glass, and that, if adjusted for a thin glass, would be excessive on thick glass; or, if adjusted for thick glass, would be insufficient for thin glass, as the spring or springs vary so much by the slightest expansion or contraction; besides, metal springs, bearing upon glass through the medium only of a cloth pad, are apt to crack it, as the pressure is not uniformly distributed throughout the surface.

In my proposed improvement I combine the spring-pressure with the fastenings on the outside of the hinged backs, so that the pressure upon the glass shall be more uniform and entirely under the control, skill, or judgment of the operator, who can change it at pleasure and make it greater or less, as circumstances may require; and my invention consists in applying to the outside of the hinged and divided backs, bowed or arched springs, upon which clamping-arms pivoted to the frame can act to hold the back, pad, and paper to the glass, and by which arms and springs the amount of pressure may be regulated by the operator by turning the arms to a greater or less degree over the springs.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawing.

A represents a frame made in any of the usual ways and of any of the materials used for that purpose.

B is a back, divided at *a*, and hinged together, as at *b*, so that one section may be raised to inspect the work while the other holds the paper from being moved or misplaced. The back B is so made as to nicely fit into the frame, and between it and the glass negative a cloth pad is placed in the usual way.

On each of the hinged sections of the back is placed a bowed or arched spring, C, which may be fastened at one end, as at *c*, and free at the other end, as at *d*, or both ends may be free, but held to the back by slot and pin, to allow it free motion endwise.

To lugs or suitable projections, *e*, on the frame are pivoted the arms D D, which, when turned toward each other, come against the springs C, and press them and the back down against the glass, and the operator uses his discretion as to the extent of pressure, which he can readily tell by the resistance upon the arms as they press or move over the crown of the springs. When the arms are swung around clear of the frame, the back can be removed, or either section of it may be raised without the other, as before mentioned.

By this contrivance uniform discretionary pressure can be obtained without any risk of cracking the glass, a casualty which so often happens with the very best hitherto-known frames.

Having thus described my invention, what I claim is—

The combination of the bowed or arched springs on the back with the pivoted and horizontally-turning arms on the frame, both the springs and arms having at least one free end for the purpose of holding and regulating the pressure of the back, pad, and paper to the glass in photographic-printing frames, substantially as described.

O. H. BURDICK.

Witnesses:

DAVID WRIGHT,

ROLLIN TRACY.