J. P. WRIGHT & D. W. GARDNER.

Canvas-Stretchers.

No. 159,012. Patented Jan. 19, 1875.

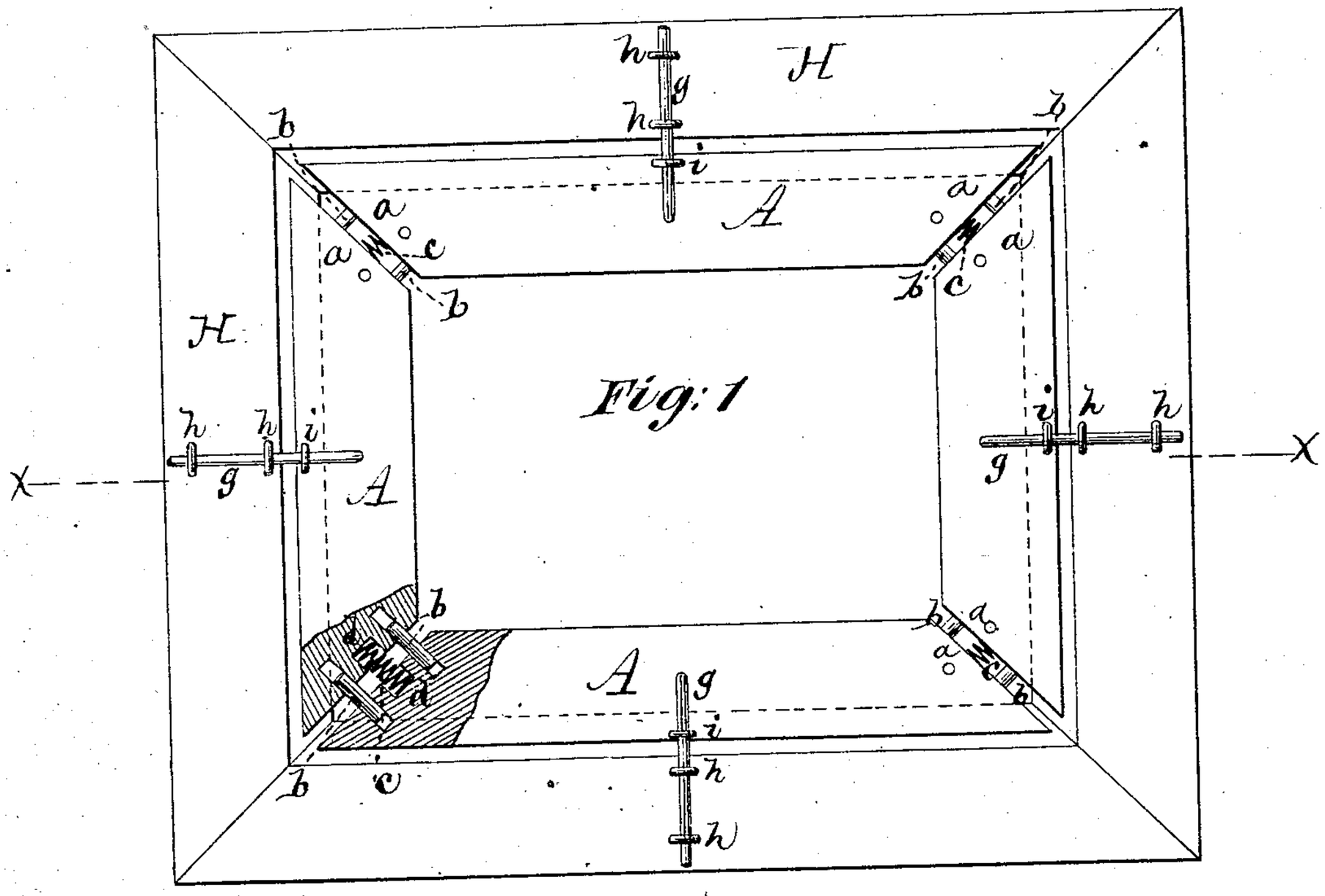


Fig: 1

Fig: 2

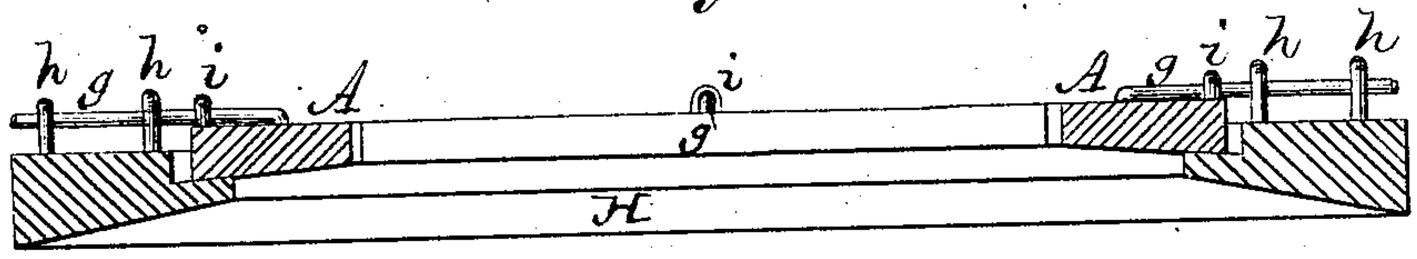
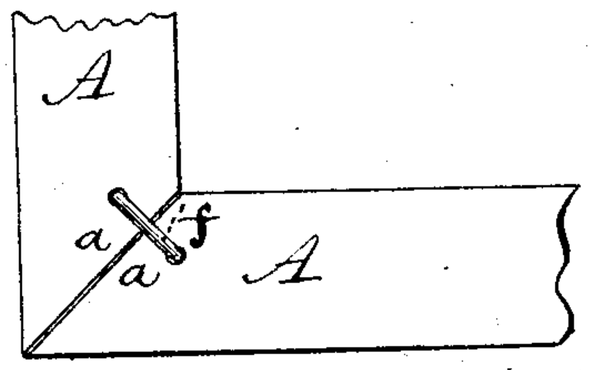


Fig: 3



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UNITED STATES PATENT OFFICE.

JOHN P. WRIGHT AND DANIEL W. GARDNER, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN CANVAS-STRETCHERS.

Specification forming part of Letters Patent No. **159,012**, dated January 19, 1875; application filed November 7, 1874.

To all whom it may concern:

Be it known that we, JOHN P. WRIGHT and DANIEL W. GARDNER, both of Green Point, in the city of Brooklyn, county of Kings and State of New York, have invented an Improved Stretcher-Frame for Pictures; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification.

Our invention relates to certain improvements in frames to which the canvas for pictures is attached; and it consists in a novel construction of such frames, whereby provision is made for its automatic expansion and contraction, in consequence of variations in the weather, both while in use by the artist and after the picture is placed in the ornamental frame, so that the canvas may at all times be stretched to the proper degree of tension.

In the accompanying drawing, Figure 1 is a back view, showing our improved frame in place in the ornamental frame, with the joints of the stretcher-frame open. Fig. 2 is a transverse section, taken in the line *x x* of Fig. 1. Fig. 3 is a detail view of one corner of the stretcher-frame, showing the joint closed.

The stretcher-frame is constructed of four side pieces, A, with their ends *a* mitered for joining them to each other. Each miter-joint is provided with two dowel-pins, *b b*, running diagonally of the frame, for the purpose of holding the joints in place, and preventing axial vibration of the side pieces A. Between the dowel-pins *b b*, in each joint, and lying parallel therewith, is a spiral spring, *c*, having its ends working in recesses *d* in the faces of the miter-joints, so that when said miter-joints are closed the springs are compressed. When the stretcher-frame is put together the joints are held in a closed position by means of keepers or staples *f*, the points of which are driven into the rear sides of the side pieces A, in which position the canvas is attached to the frame in the usual manner. After the canvas has been attached to the stretcher-frame the keepers or staples *f* are removed, and the operation of the springs *c* tends to press the side pieces A outward, and thus the canvas is stretched to the desired degree of tension.

For attaching the stretcher-frame to the ornamental frame the following means are provided: On the rear side of each of the side pieces A is a pin, *g*, one end of which is bent at a right angle with its length and driven into the side piece and secured by a staple, *i*, and the remaining portion extends laterally of said side piece, and projects beyond the edge thereof. When the stretcher-frame is placed in the ornamental frame the pins *g* bear against the rear sides of the ornamental frame H, and pass through staples *h* driven into said frame. These staples *h*, by their engagement with the pins *g*, hold the stretcher-frame in place in the ornamental frame, and also admit of any contraction or expansion of said stretcher-frame in consequence of variations in the weather, by allowing said pins to slide freely in a longitudinal direction when the side pieces A are drawn nearer to or pressed farther from each other.

What we claim as new, and desire to secure by Letters Patent, is—

The combination, with the doweled miter-joints and springs at the corners of the frame, of the external pins *g*, having their inner ends bent and inserted into the side pieces of the frame, and the staples I attached to the said pieces for the reception of the said pins, substantially as and for the purpose herein described.

JOHN P. WRIGHT.
D. W. GARDNER.

Witnesses:
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