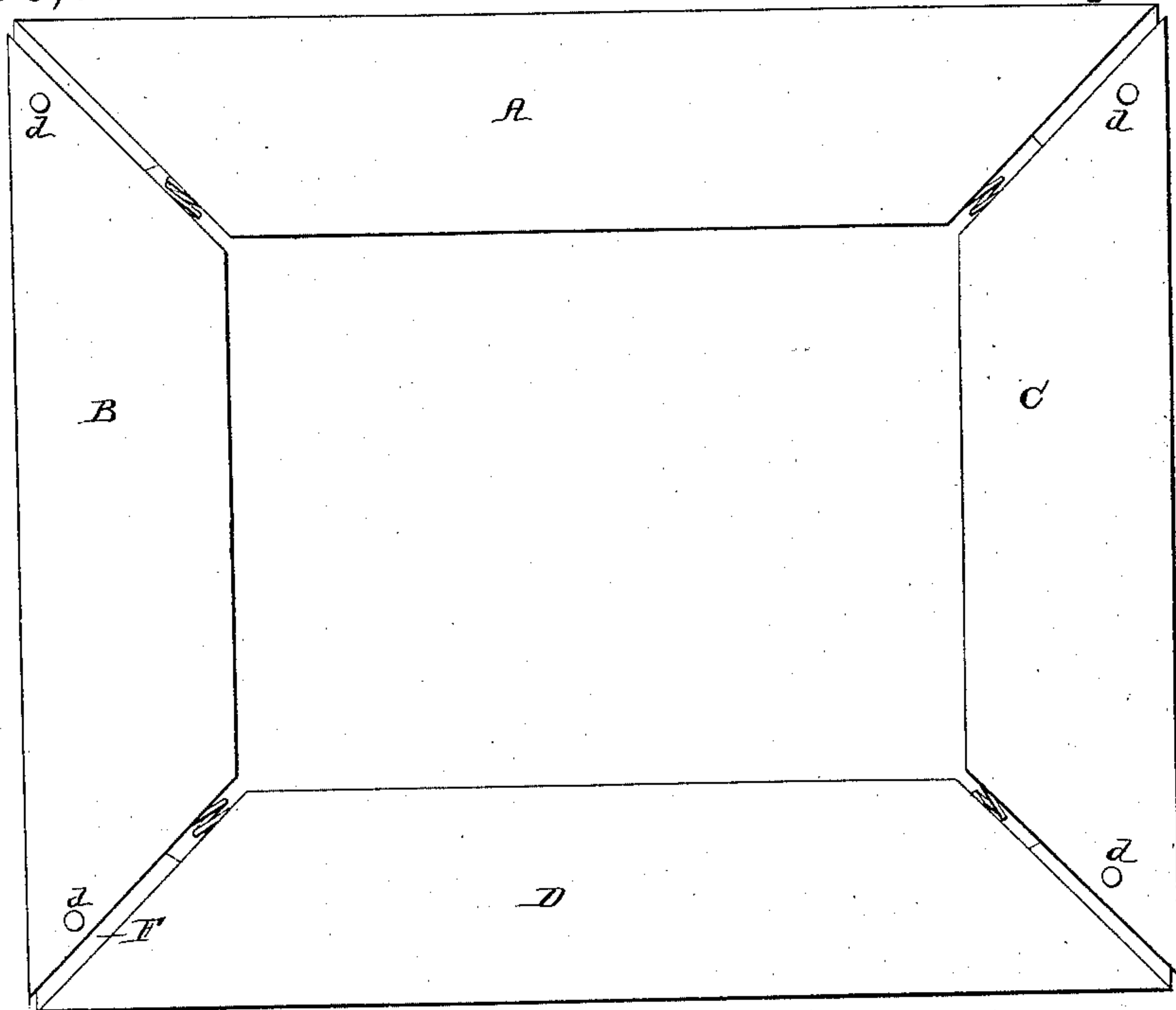


*J. E. Todd,*

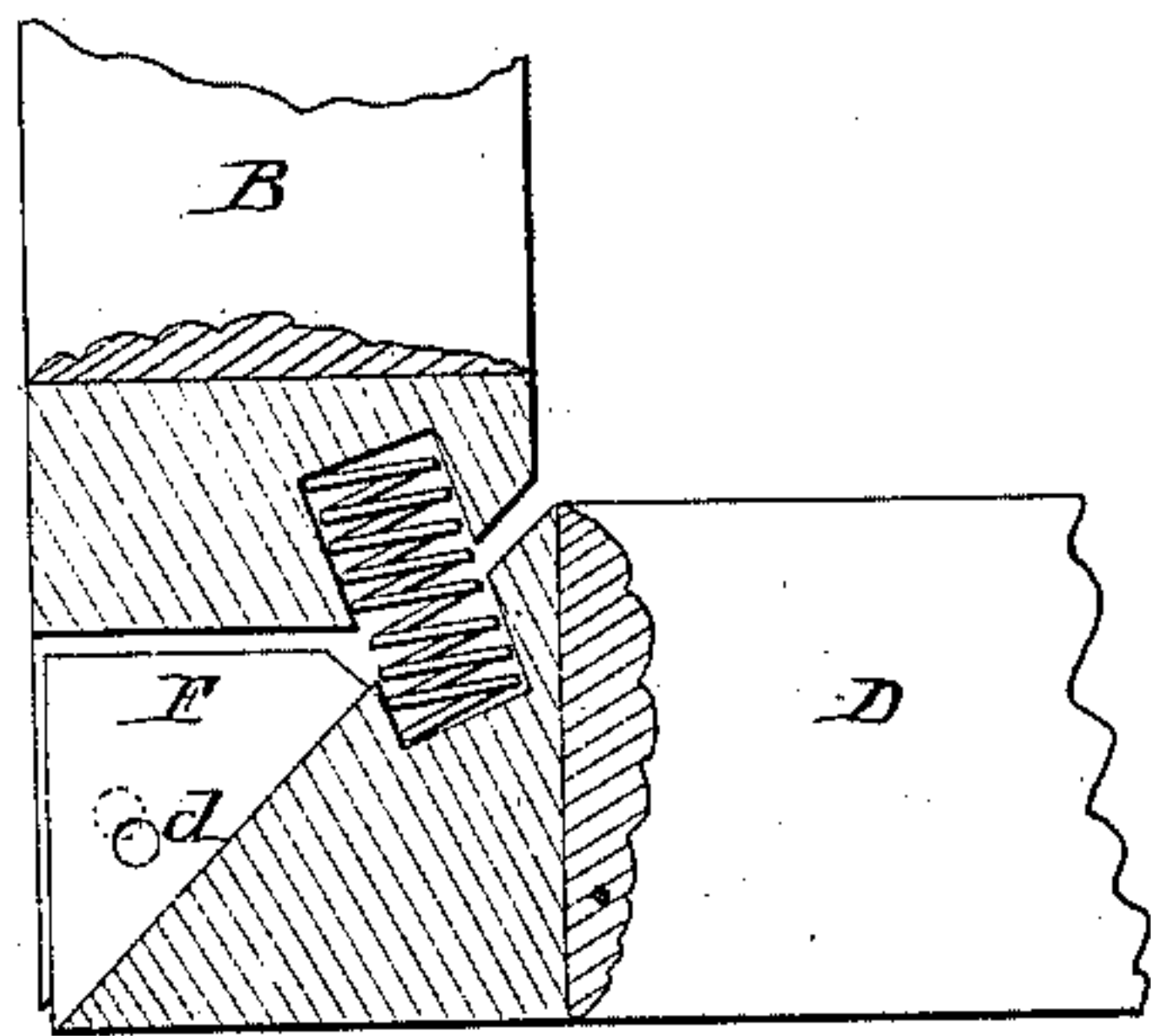
*Canvas Stretcher,*

*N<sup>o</sup> 58,154.*

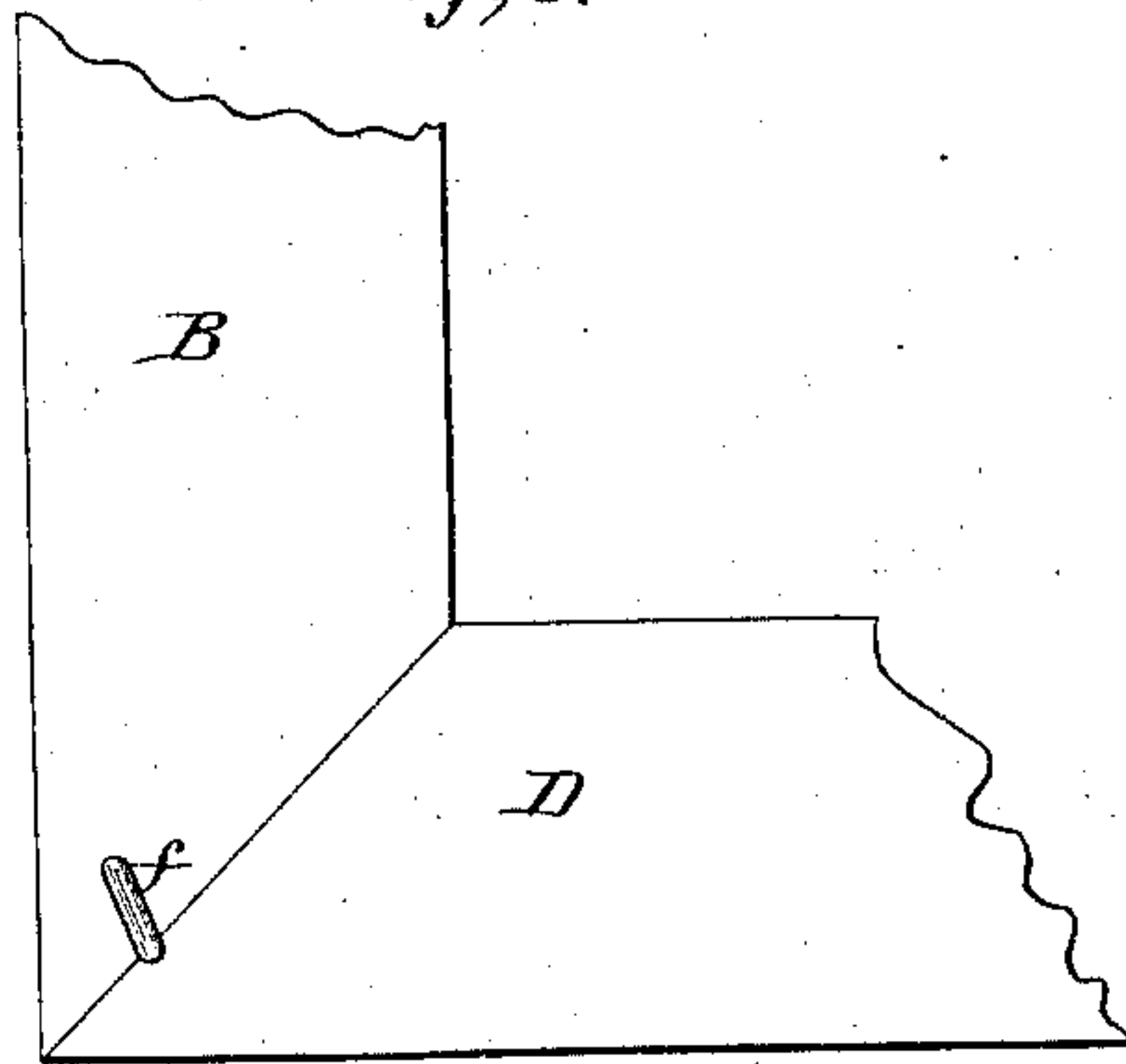
*Patented Sep. 18, 1866.*



*Fig; 2.*



*Fig; 3.*



*Witnesses;*  
*John B. Shumway*  
*W. A. Heine*

*Inventor;*  
*Joel E. Todd*  
*By his atty*  
*John E. Carl*

# UNITED STATES PATENT OFFICE.

JOEL E. TODD, OF MIDDLETOWN, CONNECTICUT.

## IMPROVEMENT IN ARTISTS' STRETCHERS.

Specification forming part of Letters Patent No. 58,154, dated September 18, 1866.

*To all whom it may concern:*

Be it known that I, JOEL E. TODD, of Middletown, in the county of Middlesex and State of Connecticut, have invented a new and useful Improvement in Artists' Stretchers; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a back-side view of a stretcher complete; Fig. 2, a section showing one of the corners as expanded to stretch the canvas, and in Fig. 3 the same corner as closed for the purpose of securing the canvas to the stretcher.

My invention relates to an improvement in the construction of artists' stretchers, whereby the angles are made self-adjusting, avoiding the use of keys or wedges.

To enable others skilled in the art to construct and use my improvement, I will proceed to describe the same as illustrated in the accompanying drawings.

A, B, C, and D are the four sides. I form the ends of each, the one with a tenon, E, upon the angle, the other the corresponding mortise, so that the two will fit closely together and yet allow the tenon to move freely

in the mortise. Into each piece, near the inner angle, I bore a hole, into which I set a spiral spring, F, (see Fig. 2,) the tendency of which is to force the parts asunder, as seen in Fig. 1. I set the joint closely together, as in Fig. 3, then bore a hole, *d*, through the tenon and mortise, into which I insert a pin, *f*, which securely holds the joint in that position. In this position the canvas is secured to the stretcher in the usual manner; then, on withdrawing the pin *f*, the spring will expand the several angles, so as to stretch the canvas, and yield to accommodate the contraction of the canvas, which often occurs from various causes.

By this construction the use of keys or wedges is entirely avoided, thereby reducing the cost of construction and producing an article far superior to the common stretcher, as the canvas will, by the yielding or expansion of the springs, be always tightly drawn.

Having therefore thus fully described my improvement, what I claim as new and useful, and desire to secure by Letters Patent, is—

Making the angle of artists' stretchers self-adjusting by means of springs F, or equivalent therefor, substantially as herein described.

JOEL E. TODD.

Witnesses:

M. A. HINE,  
JOHN H. SHUMWAY.