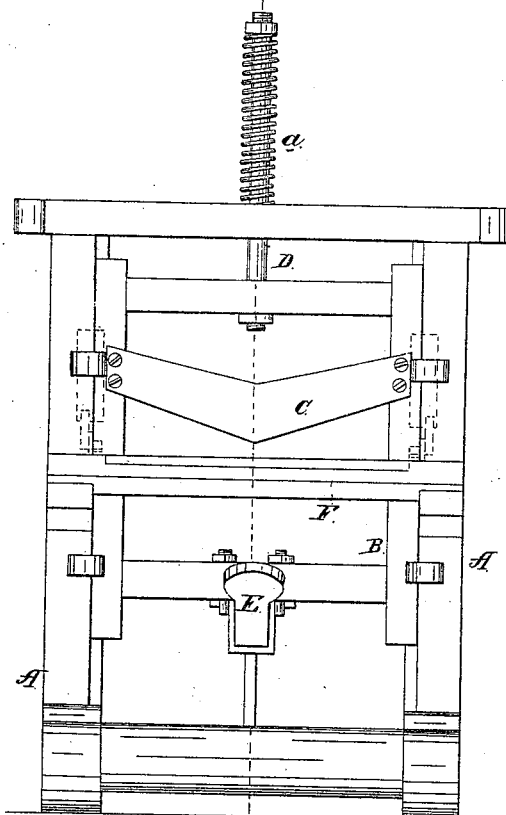


*W. H. Seymour,*  
*Joining Staves.*

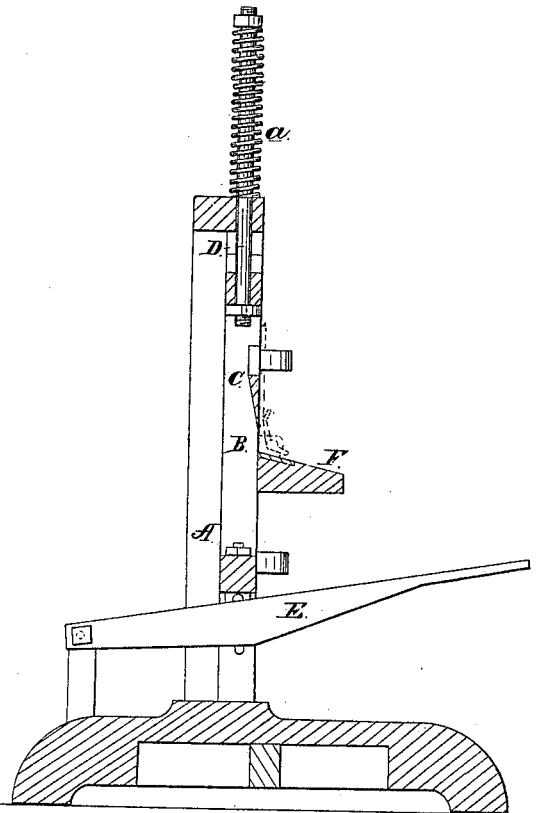
*N<sup>o</sup> 6,470.*

*Patented May 22, 1849.*

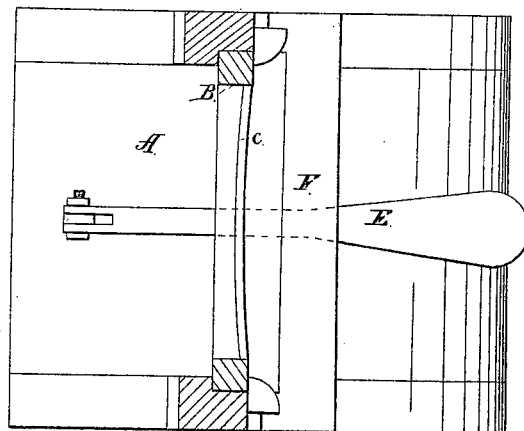
*Fig 1*



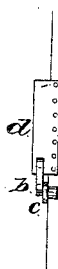
*Fig 2*



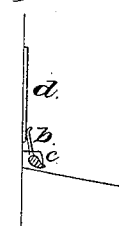
*Fig 3*



*Fig 5*



*Fig 4*



# UNITED STATES PATENT OFFICE.

WM. H. SEYMOUR, OF STOCKTON, NEW YORK.

## MACHINE FOR JOINTING STAVES.

Specification of Letters Patent No. 6,470, dated May 22, 1849.

*To all whom it may concern:*

Be it known that I, WILLIAM H. SEYMOUR, of Stockton, in the county of Chautauqua and State of New York, have invented a new and useful Improvement on a Machine for Jointing Staves, which is described as follows, reference being had to the annexed drawings of the same making a part of this specification.

Figure 1, is a front elevation of the machine. Fig. 2, is a vertical section of ditto at the line *x x* of Fig. 1. Fig. 3, is a horizontal section of ditto. Fig. 4, is a section of an apparatus for holding the stave. Fig. 5, is a front elevation of ditto.

Similar letters in the figures refer to corresponding parts.

The nature of this invention and improvement consists in securing to an upright sliding frame operated by any convenient power, a steel knife curved in the form of a segment of a circle, and made of the form of an obtuse angle on its lower edge; and arranging immediately in front of the same, an inclined table or rest on which the staves to be jointed are placed, in such a manner that when the sliding gate descends the knife will cut the edges of the staves to the required bevel and taper or bilge, and prepare it for setting up without further operation.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

A is the frame constructed of two upright posts rabbeted on their inner sides, and connected together at the top by a cross tie, and at the bottom to a suitable platform.

B is the oblong gate or frame arranged between the upright posts of the main frame, and moving in rabbets in their sides.

C, is the knife secured to the sliding gate, curved on its front face to correspond with the bilge or taper of the stave, and made in the form of an obtuse angle on its lower edge.

D is an upright shaft secured to the gate and passing through an opening in the cross tie of the frame, having a spiral spring (*a*) surrounding the same between a nut on its upper end, and the cross-tie.

E is a treadle working on a pin at one

end, and connected to the gate by a strap and ring bolts.

F is the inclined table on which the stave is placed, secured to the upright posts of the frame, immediately in front of the sliding frame, and curved on its inner edge to correspond with the bilge or curvature of the stave.

The operation of this machine is as follows: The operator stands in front of the machine and places the stave on the inclined table or rest F at the proper gage, and holds it firmly with his hands, and by the application of his foot to the treadle, causes the knife to descend, and cut the edge of the stave to the proper bevel and taper (the inclination of the table in relation to the knife, and the curvature of the knife being such as to insure this effect) and immediately releases his foot and allows the spiral spring (*a*) to raise the gate to its original position, and reverses the ends of the stave and subjects the opposite edge of the same to a like process, in a similar manner, when the stave is ready to be set up; and in this manner the operation is repeated with other staves to be jointed. Instead of holding the stave by the hand as stated in the foregoing it may be secured to the inclined table by the inclined levers, *b, b*, represented in Figs. 4 and 5. These levers are arranged immediately in front of the upright posts of the frame, and are bent at right angles inward, and in an inclined direction near their lower ends, the parts running inward, passing through staples *c* and forming the fulcrums upon which they move. They are also slightly curved at their upper ends. They are operated by means of plates or cams, *d*, secured to, and moving with the sliding gate, and extending over or overlapping the upright posts, in the following manner.

The lower ends of the plates, *d*, being curved, and situated in such a relation to the edge of the knife as to reach in their descent the upper ends of the inclined levers, just before it reaches the stave, will force the upper ends of said levers outward, and cause their lower ends to press on the ends of the stave, and hold it securely while being jointed, and upon again reaching the

upper ends of the inclined levers, will release the stave from their pressure, and allow its ends to be reversed, or a fresh stave applied to undergo a like process.

5 I claim—

The combination of the inclined angular levers, *b*, with the oblong plates, *d*, secured

to the edges of the sliding frame B, for holding the ends of the stave, during the operation of jointing as described before.

WILLIAM H. SEYMOUR.

Witnesses:

JABEZ BURCHARD,  
CORDELLO WILKINS.