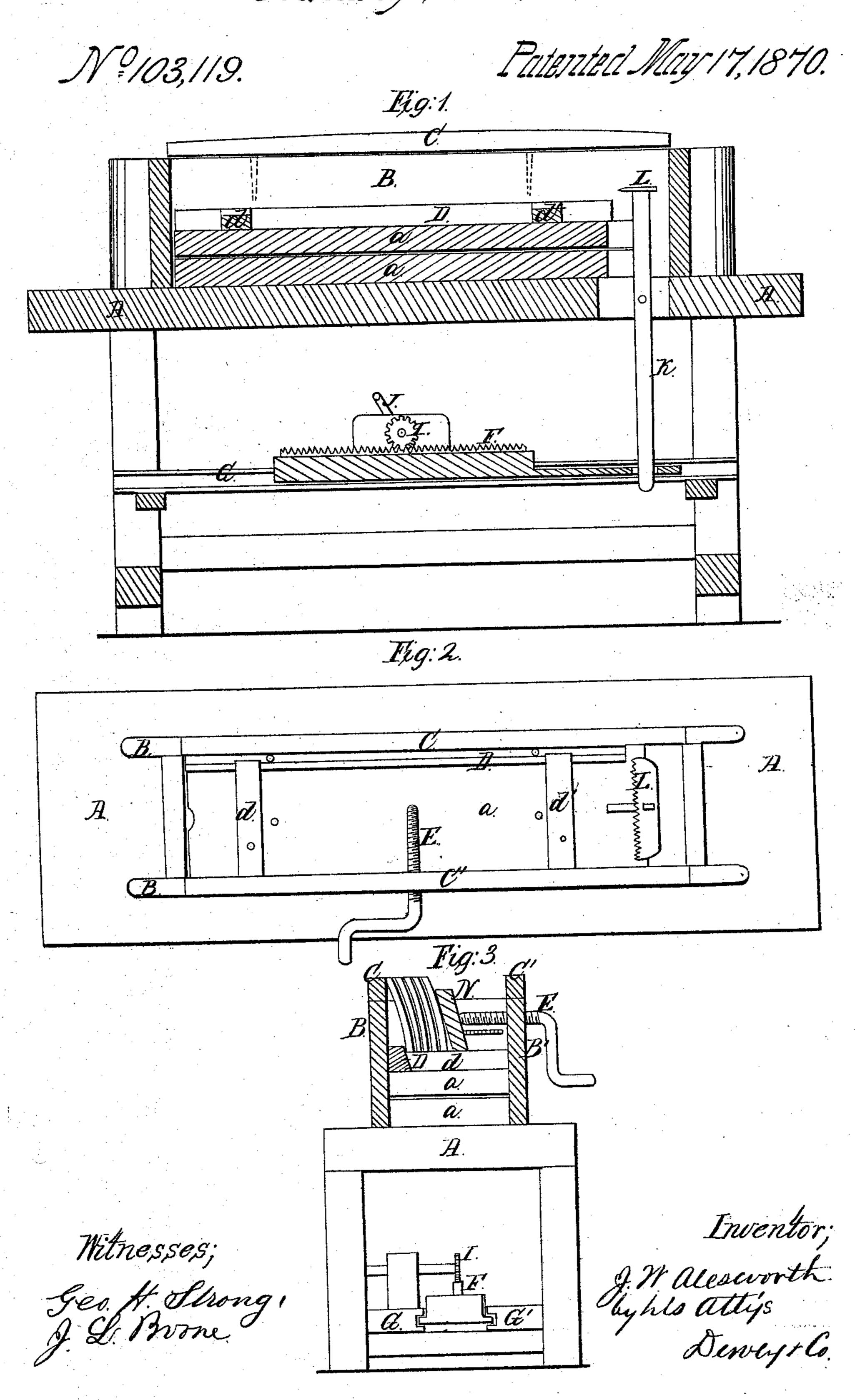
## J. M. Alesmorth. Jointing Stars.



## Anited States Patent Office.

## JOHN WESTLEY ALESWORTH, OF SANTA CRUZ, CALIFORNIA.

Letters Patent No. 103,119, dated May 17, 1870.

## IMPROVEMENT IN MACHINES FOR JOINTING STAVES.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, John Westley Alesworth, of Santa Cruz, county of Santa Cruz, State of California, have invented an improved Guaging-Box for Barrel-Staves; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains, to make and use my said invention or improvements without further invention or experiment.

The object of my invention is to provide an improved gauge-box for giving to barrel-staves the proper bevel and taper to produce the swell in the center of the barrel, allowing the workman to give each stave the same bevel and taper, and operating upon several at the same time with the greatest ease and accuracy.

The nature of my invention consists in applying certain modifications or additions to the gauging-box for shingles, for which a patent was granted me December 24, 1867, No. 72,581, said modifications or additions consisting chiefly in combining with the gauging-box a clamp, operated by a rack and pinion, to hold the ends of the staves while the operation of shaping the edges is being performed.

To more fully illustrate and explain my invention, reference is had to the accompanying drawings forming a part of this specification, of which—

Figure 1 is a side sectional elevation.

Figure 2 is a plan.

Figure 3 is an end view.

Similar letters of reference in each of the figures indicate like parts.

A is a strong table, of any convenient height, upon the top of which is placed a box having the sides B B'.

These sides have longitudinal strips of wood C C' placed on their top, which have their upper faces rounded or made in a curve, and metal-faced, and are secured to their sides by pins which project from them and enter holes in the tops of the sides, making them removable, in order that others may be substituted for them, having more or less curve, as desired.

The box is provided with a number of false bottoms, a a, in order to give any desired width to the staves, and a beveled strip of wood, D, is placed in the angle formed by the side and bottom, and secured by pins or cross-pieces d d, upon which the staves to be operated upon are placed, where they are held by a screw,

Below the bottom of the table is placed a rack, F, set in a block, which slides in ways formed by two boards G G passing longitudinally across from the legs at one end to the legs at the opposite end, and separated a little way apart.

This rack is driven back and forward by a pinion, I, which is operated by the hand-wheel J, or other convenient device.

A lever, K, is secured to the end of the block, which is operated by the rack F, and passes up into the end of the box, being pivoted where it passes through the top of the table, and having a piece of metal, L, which is provided with teeth on one side, secured at its top, and which serves as a clamp to the end of the staves to prevent their being moved by the knife while they are being trimmed.

A block, N, is placed between the staves and the end of the screw, so as to protect them from injury.

A number of boards, of about the same width, are selected, and the false bottoms arranged so that the point to be beveled and tapered is on a line with the circular top of the longitudinal strip. The beveled strip D is then placed in the angle formed by the side and false bottom, and secured by the cross-strips d d'. A number of boards having been cut to the proper length, as many as can be easily trimmed at once are placed in the box, resting against the beveled strip D and the top of the box, which causes them to stand at an incline, when the block N is placed against them, and the screw turned until it binds them firmly against the side. The wheel J is then turned, and the claw or clamp L is forced against their ends, and locks them so securely that there is no danger of their moving while being shaved. The portion of the staves which projects above the sides of the box are then shaved off with a drawing-knife, giving them the proper shape for being put together to make a barrel.

The clamp L, being attached so as to turn on the top of the lever, will accommodate itself to several different lengths when the boards are placed next to each other according to their lengths. After one side has been beveled and tapered, the boards may be turned over, and the other side treated in the same manner.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

The gauging-box herein described, in combination with the self-adjusting clamp L, operated by the lever K, rack F, and pinion I, as and for the purpose specified.

In witness whereof I have hereunto set my hand and seal.

JNO. WESTLEY ALESWORTH. [L. s.]

Witnesses:

J. H. LOGAN, WM. W. WADDELL.