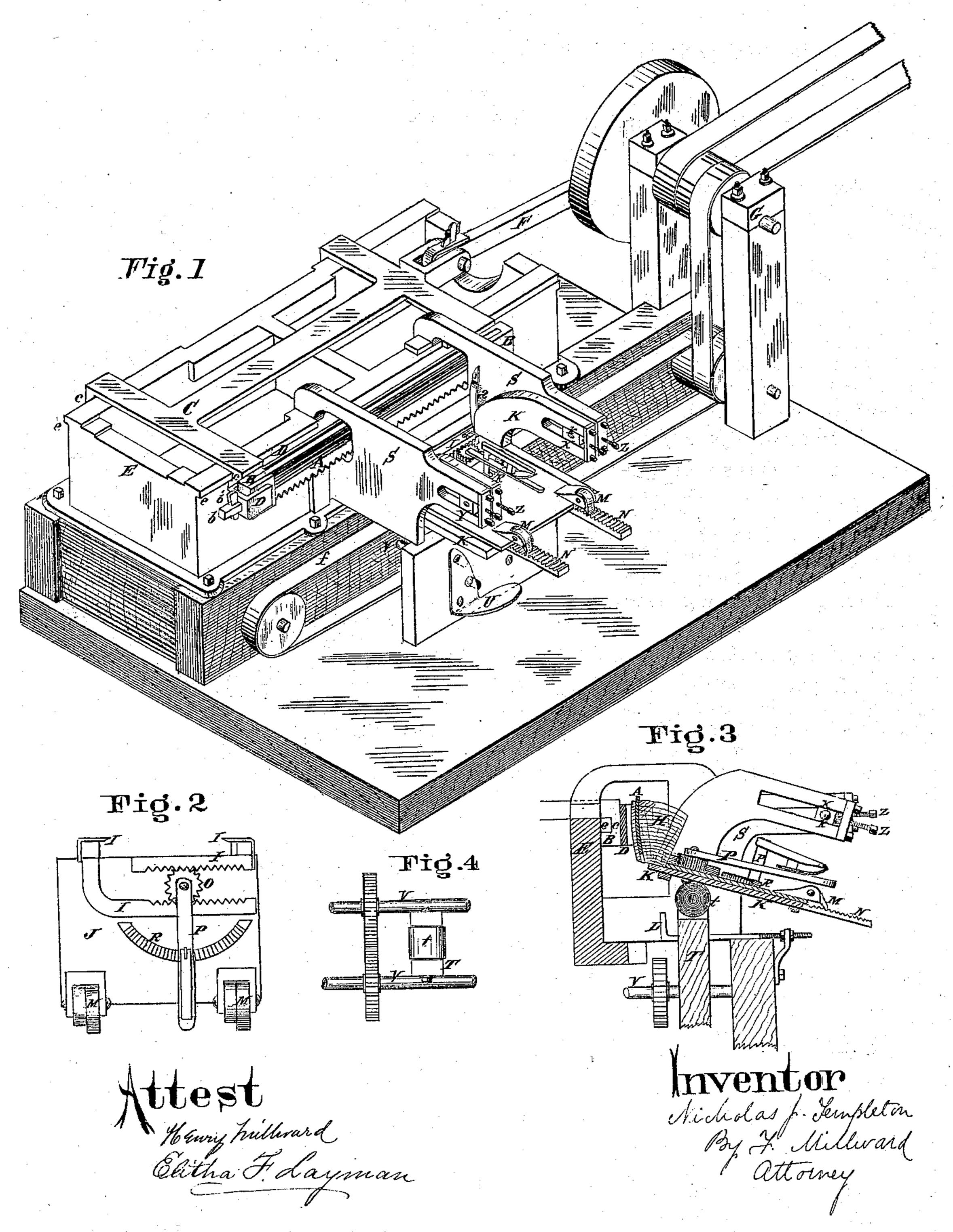
# N. J. TEMPLETON.

Improvement in Machines for Sawing Staves.

No. 125,768.

Patented April 16, 1872.



## UNITED STATES PATENT OFFICE.

NICHOLAS J. TEMPLETON, OF CINCINNATI, OHIO, ASSIGNOR TO HIMSELF AND HENRY C. EZEKIEL.

### IMPROVEMENT IN MACHINES FOR SAWING STAVES.

Specification forming part of Letters Patent No. 125,768, dated April 16, 1872.

To all whom it may concern:

Be it known that I, NICHOLAS J. TEMPLE-TON, of Cincinnati, Hamilton county, State of Ohio, have invented certain new and useful Improvements in Stave-Sawing Machines; and I do hereby declare the following to be a sufficiently full, clear, and exact description thereof to enable one skilled in the art to which my invention appertains to make and use it, reference being had to the accompanying drawing making part of this specification.

#### Nature and Objects of Invention.

My invention consists, first, in a peculiar device for securing and straining or stretching the saw; second, in the peculiar construction and operation of a swinging table, upon which the work is supported and fed to the saw; third, in a peculiar device for feeding the stuff and gauging or regulating the thickness of the staves.

#### Description of the Accompanying Drawing.

Figure 1 is an isometric perspective view of a stave-machine embodying my invention. Fig. 2 exhibits a plan of the device for securing the block to be sawed and the pawls for feeding the slide. Fig. 3 is a vertical section through the saw and swinging table. Fig. 4 is a plan of the device for operating the swinging table.

#### General Description.

A is the saw, the cross-section of which corresponds with the required curve of the stave, the saw being changed when any change is required in the curvature of the stave. The two ends of the saw are secured to the blocks B B', one block being fastened to the sliding head C and the other adjustably secured by the projection b, key b', and hook-ended stiffening-bar D, which extends the whole length of the saw and is fastened to the sliding head C at both ends. By simply driving in the key b' against the support afforded by the bar D the saw may be stretched or strained to the required tension. The frame C, to which the saw is secured, is constructed of a wide form, extending the full width of the bed E, the bed being provided with planed ears e e', to receive the sliding lugs C of the frame. This frame is driven by the pitman F, operated by driv-

ing-shaft G. The block H to be sawed is secured by the clamping-dogs I I attached to the sliding table or plate J, and rests upon the face of the swinging frame K in the manner shown. The block is fed to the saw for the proper thickness of stave by means of the gauges L, which are adjustable, as shown, so that the thickness of stave can be varied at will. The block is prevented from sliding back by the pawls M and racks N. The dogs I I, which secure the block, are fitted to slide across the plate J, and are operated by a pinion, O, simultaneously, the pinion being revolved by the lever P and retained in any position by means of the spring-bolt p and notched segment R. The swinging frame K is pivoted to the projections S at k, and is operated to feed the stuff to the saw by the post T, which is provided with an anti-friction roller, t, on the end, and slides vertically in suitable ways. This post is elevated by means of the revolving shafts V, which, when the treadle U is depressed, are made to press against the post and feed it upward, the shafts being geared to revolve in opposite directions and driven by a suitable connection with the shaft G. One of the shafts V is journaled in the treadle U, which is pivoted to the frame of the machine, the treadle being also, at the upper end, supported on the frame by a bolt, W, which travels in a curved slot. The depression of the treadle serves to crowd the shaft to which it is attached toward the post T, and thus create sufficient friction to feed it upward. The frame K is attached to the projection S in such a way that the distance between the center on which it revolves and the saw A can be changed at will to determine the curvature of the stave. This adjustment is effected by the sliding blocks X in the swinging frame K and sliding journal-blocks Y in the projections S. These blocks are adjusted by means of setscrews Z. A flat spring, a, against which the swinging frame K presses, prevents the saw in its motion from oscillating the frame K. An endless belt, f, carries off the sawed staves.

#### Claims.

1. In connection with the sliding saw-frame C, the stiffening-bar D, blocks B B' b, and key b', as described, and for the purpose specified.

2. In combination with the elevating-post T, the swinging frame K k, when constructed with sliding heads or blocks X and Y, for adjustability, as described, and for the purpose specified.

3. The sliding table J, pawls M, racks N, and stationary gauges L in the described combination, as and for the purpose described.

In testimony of which invention I hereunto set my hand.

N. J. TEMPLETON.

Witnesses:

J. L. WARTMANN, E. F. LAYMAN.