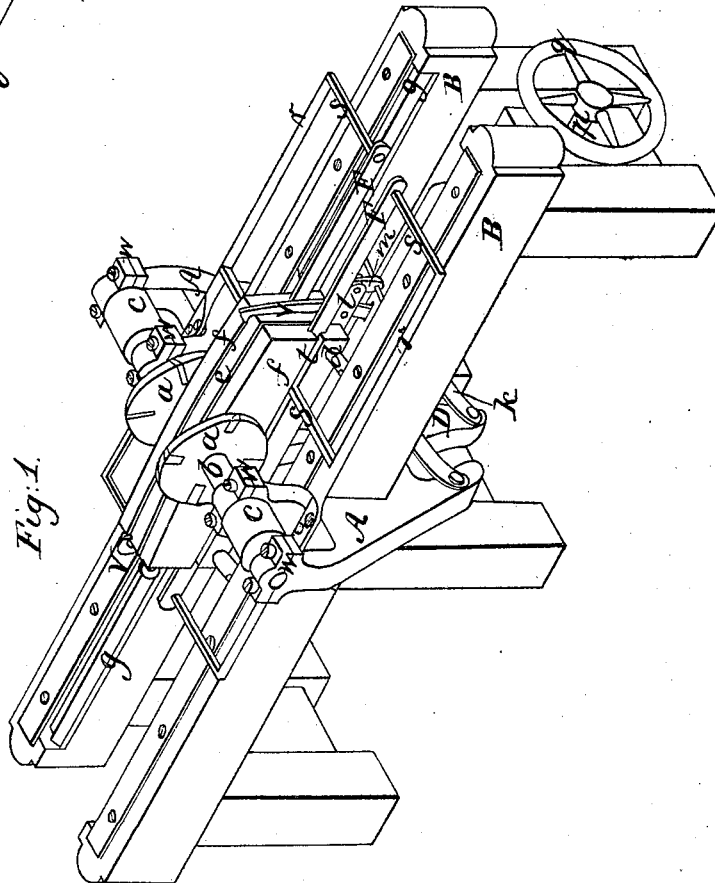
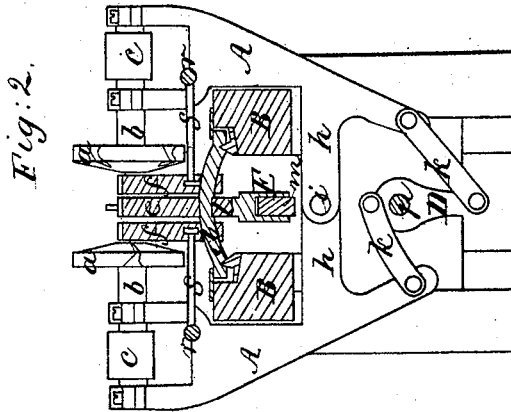
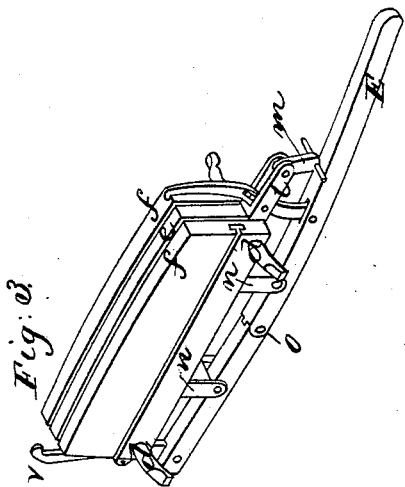


*A.C. Currier & A. Bradway.*  
*Mach. for Beveling Staves.*  
*N<sup>o</sup> 5499.      Patented Apr. 4. 1848.*



# UNITED STATES PATENT OFFICE.

A. C. CURRIER, OF PALMER, AND ABEL BRADWAY, OF MONSON, MASSACHUSETTS.

## MACHINERY FOR JOINTING STAVES.

Specification of Letters Patent No. 5,499, dated April 4, 1848.

*To all whom it may concern:*

Be it known that we, ALANSON C. CURRIER, of Palmer, in the county of Hampden and State of Massachusetts, and ABEL BRADWAY, of Monson, in the county and State aforesaid, have invented a new and Improved Machine for Jointing Staves; and we do hereby declare the following to be a full, clear, and exact description of the construction and operation thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, is a perspective view, Fig. 2, is a vertical transverse section, and Fig. 3, is a perspective view of a portion of the machine detached.

The nature of our invention consists in the adapting rotating jointing cutters to staves of different widths, by securing the cutter wheels in supporting bearings united to each other at a common center; and combining with the same, adjustable rests for supporting the edges of the staves.

Similar letters indicate like parts in all the figures.

*a, a*, are the cutter wheels; *b, b*, are the axles of the same; *w, w*, are the bearing boxes of the axles *b, b*, secured to the upper ends of the adjustable supports *A, A*. *c, c*, are pulleys on the axles *b, b*, by which they are driven. *h, h*, are lateral arms projecting from the supports *A, A*, united to each other and to the cross piece *G*, of the frame, by the joint pin *i*.

*p*, is a shaft running longitudinally under the machine, secured in suitable bearings. The lower ends of the supports *A, A*, are connected to each other and to the shaft *p*, through the medium of the cross-head *D*, and the jointed levers *k, k*, as represented in Fig. 2. *q*, is a hand wheel on the end of the shaft *p*, for operating the supports *A, A*, and bringing the cutter wheels *a, a*, to bear upon the staves.

*B, B*, are the side pieces of the frame of the machine; *g, g*, are ways in the inner sides of *B, B*, on which the carriage (*e, f, f*), slides, on which the staves are secured to be jointed.

The carriage is composed of a central block of timber *e*, permanently secured to the centers of the arched cross pieces *d, d*, and of the adjustable rests *f, f*, placed on each side of *e*, which traverse freely on the arched cross-pieces *d, d*. The arched cross-pieces *d, d*, of the carriage, have notches at

each end that receive the edges of the ways *g, g*, on which they slide. The rests *f, f*, are connected to, and move out and in with the cutter heads as follows: A T shaped groove is formed in the outer side of each rest, in which grooves are inserted the metallic rails *F, F*; *r, r*, are rails—parallel with *F, F*,—the centers of which are made fast to the upper ends of the supports *A, A*, between the bearing boxes *w, w*; *s, s, s*, are arms connecting the rails *F*, and *r*. The rests *f, f*, slide freely lengthwise on the rails *F, F*, and crosswise on the cross-pieces *d, d*, as the cutter heads, with which they are connected, are adjusted to staves of different widths. The staves are secured to the top of the carriage by means of the hook *v, v*, (represented in Fig. 3). *l*, is a rectangular piece of timber secured to the bottom of the carriage center *e*, and projecting from each end of the same. *E*, is a jointed lever directly under *l*, and connected to the same by the joint pieces *n, n*; at *o*, the respective portions of the lever *E*, are united by a joint, which is placed centrally between the joints *n, n*. The hooks *v, v*, have their lower ends jointed to the levers *E*, and pass up through mortises in the projecting ends of *l, l*. The hooks *v, v*, are drawn downward and confine the stave placed upon the carriage by depressing the outer ends of the lever *E*, and are retained in that position by the brace *m*, jointed to the projecting end of *l*.

Power is applied to the cutter wheels, and motion is imparted to the carriage in any convenient or well known manner. The supports may be constructed in such a manner that their length may be varied to suit casks of different sizes, or sets of supports of different lengths may be made use of.

Having thus fully described our improved machine for jointing staves, what we claim therein as new and desire to secure by Letters Patent, is—

The adapting the jointing cutters to staves of various widths by securing the cutter wheels in supporting adjustable bearings united to each other at a common center, and combining with the same, adjustable rests for supporting the edges of the staves, substantially in the manner herein set forth.

ALANSON C. CURRIER.  
ABEL BRADWAY.

Witnesses:

ABEL CALKINS,  
CALVIN M. SHAW.