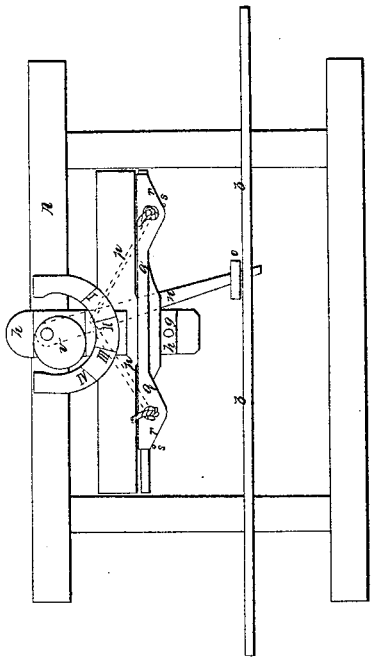
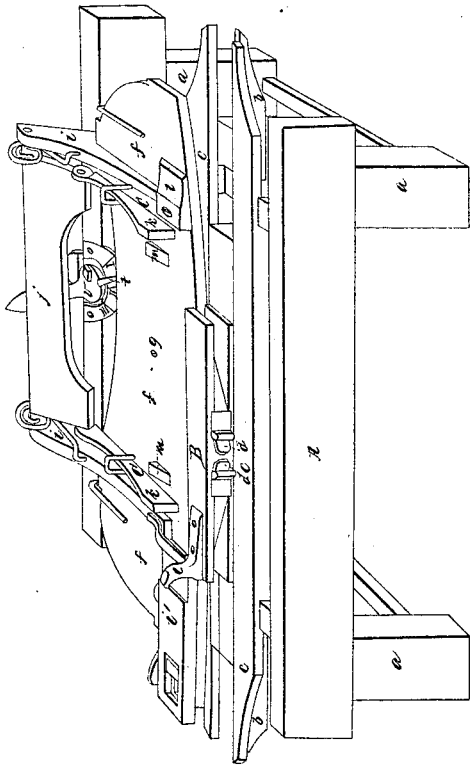
S. Jobes,

Jointing Stares,

No. 6,685, Patented Aug. 28, 1849.





UNITED STATES PATENT OFFICE.

SAMUEL JOBES, OF MOUNDSVILLE, VIRGINIA.

MACHINERY FOR JOINTING STAVES.

Specification of Letters Patent No. 6,685, dated August 28, 1849.

To all whom it may concern:

Be it known that I, SAMUEL JOBES, of Moundsville, in the county of Marshall and State of Virginia, have invented a new and Improved Machine for Jointing Staves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 represents a perspective view of my machine, and Fig. 2 a plan of the same with the upper portions removed to show the arrangement for working the carriage.

The nature of my invention consists in giving an oscillating motion to the stave carriage while the stave upon it is acted upon by a double-ironed plane, in such manner that while the proper level is given to the stave, it at the same operation receives the proper taper in each direction from its center.

In the drawing A is the frame of the machine supported at a suitable distance above the ground on legs *a*, *a*, *a*, and forming a bench to which the other members of the machine are attached. The plane-stock B, is supported on a rail *b*, which extends longitudinally across the bench, and is guided in a straight line by guide-rails *c*, *c*, on each side. The friction of the plane stock against these is reduced by friction wheels attached to it. The stock is furnished with two irons *d*, *d*, so placed as to cut in opposite directions, and has a handle *e* by which it is operated. The stave is secured to an oscillating carriage C, this consists of a flat plate *f* which oscillates on a pivot *g*, attached to a bar *h* sliding transversely in mortices in the frame of the machine, to the top of this plate two standards *i*, *i*, are attached, which are pierced at their upper extremities to receive the pivots of a swinging bar *j*, suspended from them by its upper edge; two parallel bars *k*, *k*, of equal length are hinged to the lower part of this swing bar against which the stave to be jointed is pushed. The stave is prevented from moving endwise in one direction by a stop *l*, secured to the flat plate, and in the opposite direction by an adjustable stop *l'* sliding on the plate which also clamps it to the carriage. The proper bevel is obtained by the use of two or more blocks *m*, secured to the plate *f* and which raise the edge furtherest from the plane stock. In order to give the right taper to produce a proper bulge in the barrel or keg, an oscillating motion is given to the carriage while the plane iron is acting on the stave this is obtained from the plane stock by the following arrangement: A bar *n*, is hinged to the back of the frame A, to which a vibrating motion is given by passing its front extremity through a mortice in an upright *o*, depending from the plane-stock; this bar is connected by cords or links *p*, *p*, with a plate *q*, beneath the carriage which thus receives a reciprocating motion in a direction parallel with that of the plane stock; the sliding plate is furnished with two inclined planes *r*, *r*, which act upon pins *s*, *s*, projecting from the under side of the plate *f*. As then the plane stock is propelled from one end of the frame to the other, the sliding plate accompanies it and acting on the pins *s*, *s*, alternately forces each extremity of the stave edgewise against the plane stock; and as this motion is progressive during the action of the plane irons a curved edge will be given to the stave. The plane stock is furnished with two irons *d*, *d*, to act alternately in opposite directions on each half of the stave, always cutting with the grain and thus producing a smooth joint. When for example the right plane iron has arrived at the end of its course, the left one is at the middle of the stave and ready to act in turn upon the other half. The width of the stave is gaged by adjusting the oscillating carriage at a greater or less distance from the plane stock by moving the bar *h*, in which the pivot *g*, is secured; this is effected by means of an eccentric *v*, acting in a socket sunk in the bar *h*, and operated by a handle attached to it; as this handle is vibrated, the eccentric forces the bar, and with it the carriage, either from or toward the plane stock. The carriage is set to joint a stave of any required width by an index *t*, attached to the eccentric which traverses an arc graduated according to the different widths required. The equal width of the two extremities of the stave is guaranteed by means of the parallel bars which being of equal length and jointed to the lower edge of the swing bar at equal distances from its axis hold the stave parel-

lel to the edge of the carriage until it is clamped by the sliding stop.

What I claim as my invention and desire to secure by Letters Patent is—

Combining an oscillating stave carriage (C) with a reciprocating plane (B) in such manner that the former shall be operated by the latter substantially in the manner herein set forth.

SAML. JOBES.

Witnesses:
W. H. OLDHAM,
WM. R. MCDONALD.