A. H. Pinney,

Jointing Staves.

No. 5,134. Patented May 29, 1847.

Fig. 2.

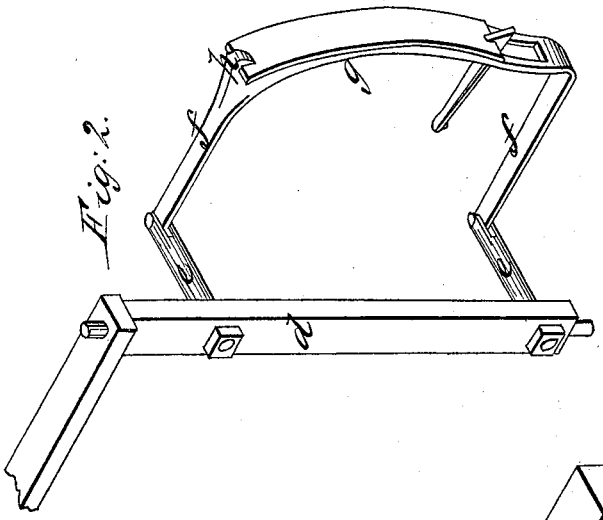
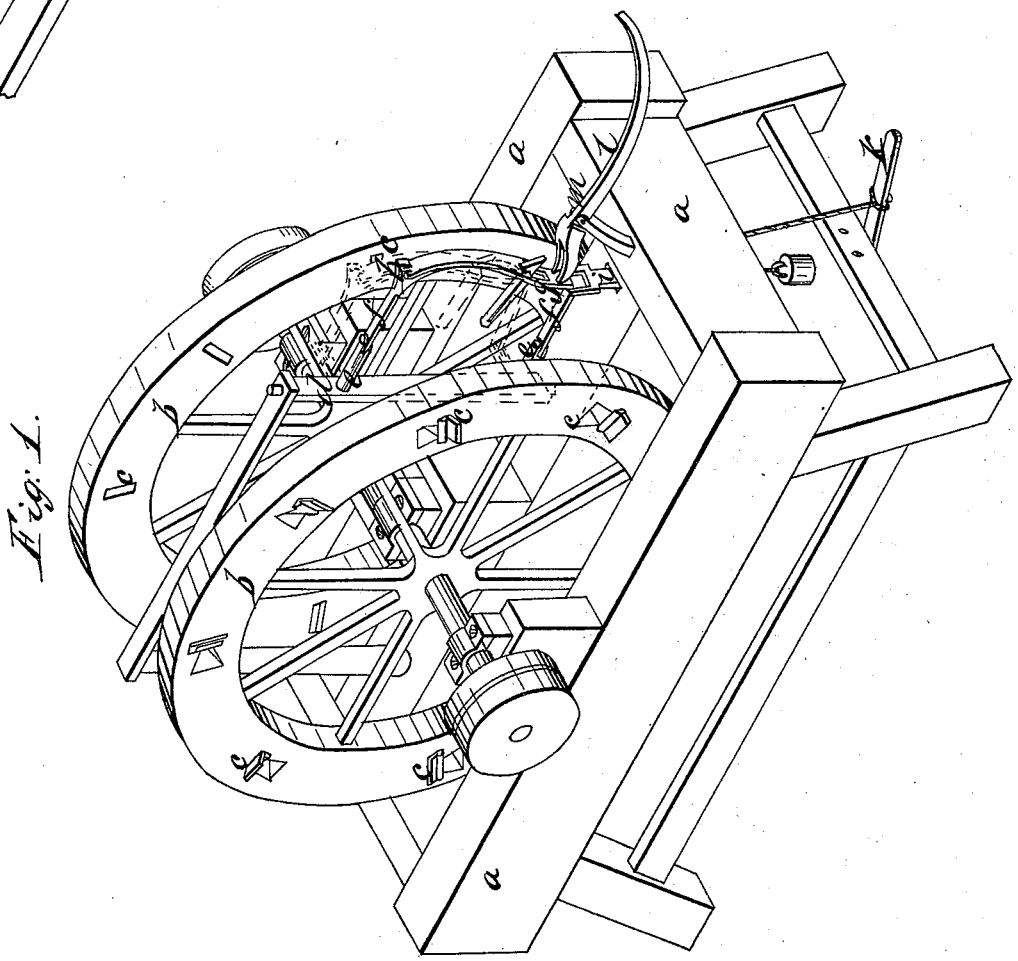


Fig. 1.



UNITED STATES PATENT OFFICE.

A. H. PINNEY, OF COLUMBUS, OHIO.

MACHINERY FOR JOINTING STAVES.

Specification of Letters Patent No. 5,134, dated May 29, 1847.

To all whom it may concern:

Be it known that I, A. H. PINNEY, of Columbus, in the county of Franklin and State of Ohio, have invented new and useful Improvements in Machines for Jointing Staves, and that the following is a full, clear, and exact description of the principle or character which distinguishes it from all other things before known and of the manner of making, constructing, and using the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1, is a general view of the machine. Fig. 2, a view of the frame for holding the stave detached.

The same letters indicate like parts in all the figures.

The nature of my invention consists in the frame for applying a bent stave to two revolving planing wheels so as to joint both edges of the stave before it leaves the frame; and the apparatus for springing in and releasing the stave therefrom.

On a suitable frame (*a*) are formed the bearings of two large wheels (*b*) exactly opposite each other the rims of which are made broad and flat and four plane stocks for a series of plane irons or bits (*c*) that have their cutting edges project from the faces of the wheels inward toward each other. Between these wheels there is an upright shaft (*d*) near the center of the wheels and perpendicular to the plane of their axle, from this shaft two parallel horizontal arms (*e*) project one near each end to which two arms (*f*) are jointed so that they can turn either to the right or left horizontally the outer ends of these last named arms are joined by a stout block (*g*) the outside of which is of a curve suited to the bulge of the cask to be made; at the top of this block there is a hook (*h*) under which the end of the stave to be jointed is caught and at the opposite end below there is a similar hook attached to a spring so that when the lower end of the stave is bent in it is caught and held in its bent position by this lower hook. To perform this operation the arms (*e*) and (*f*) are straightened out in front of the staves, as shown in the figure, and a forked slide (*i*) is raised so as to embrace them and hold them steady. To raise this slide a treadle (*k*) is connected with it so that when the foot is borne upon the treadle the slide shall be raised. This holds the block out directly opposite to a lever (*l*) whose fulcrum is fixed in the main frame at (*m*) and it is for the purpose of bending in the lower end of the stave, thus when the upper end of the stave is caught under the hook (*h*) above named the long arm of the lever (*l*) is raised, and its short arm coming in contact with the lower end of the stave bears it in far enough to be caught by the lower hook and held there. The same method is also employed to disconnect the stave from the block; the lower end is bent in by the lever (*l*) and the hook pushed down when the lever falls back and thus releases the stave. When the stave is bent into place the slide (*i*) is allowed to fall and release the arms; the shaft (*d*) is then turned, moving the arms (*e*) to one side, they being just long enough to reach up to the face of the wheel when at right angles thereto, and then when the other arms (*f*) are brought parallel with the face of the wheel they bring the edge of the stave up to the planes and they by their revolution joint it. This position is shown in red lines in Fig. 1, and in Fig. 2 the parts are also bent into their working place, when one side is jointed the shaft is turned and the other edge of the stave is jointed at the opposite wheel.

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

1. The employment of an apparatus for applying the stave to the rotary jointing wheels, substantially in the manner and for the purpose set forth so that the staves can be easily handled beyond the periphery of the wheels, and thrown accurately into place against them, as above described.

2. I also claim in combination therewith the manner of holding the block and springing in the stave as herein specified.

ABNER H. PINNEY.

Witnesses:
ALEXN. PATTEN,
P. L. HOWLETT.