(No Model.)

E. M. JEWETT.

MACHINE FOR JOINTING COMPRESSED BENT STAVES.

No. 335,074. Patented Jan. 26, 1886.

Fig. 1.

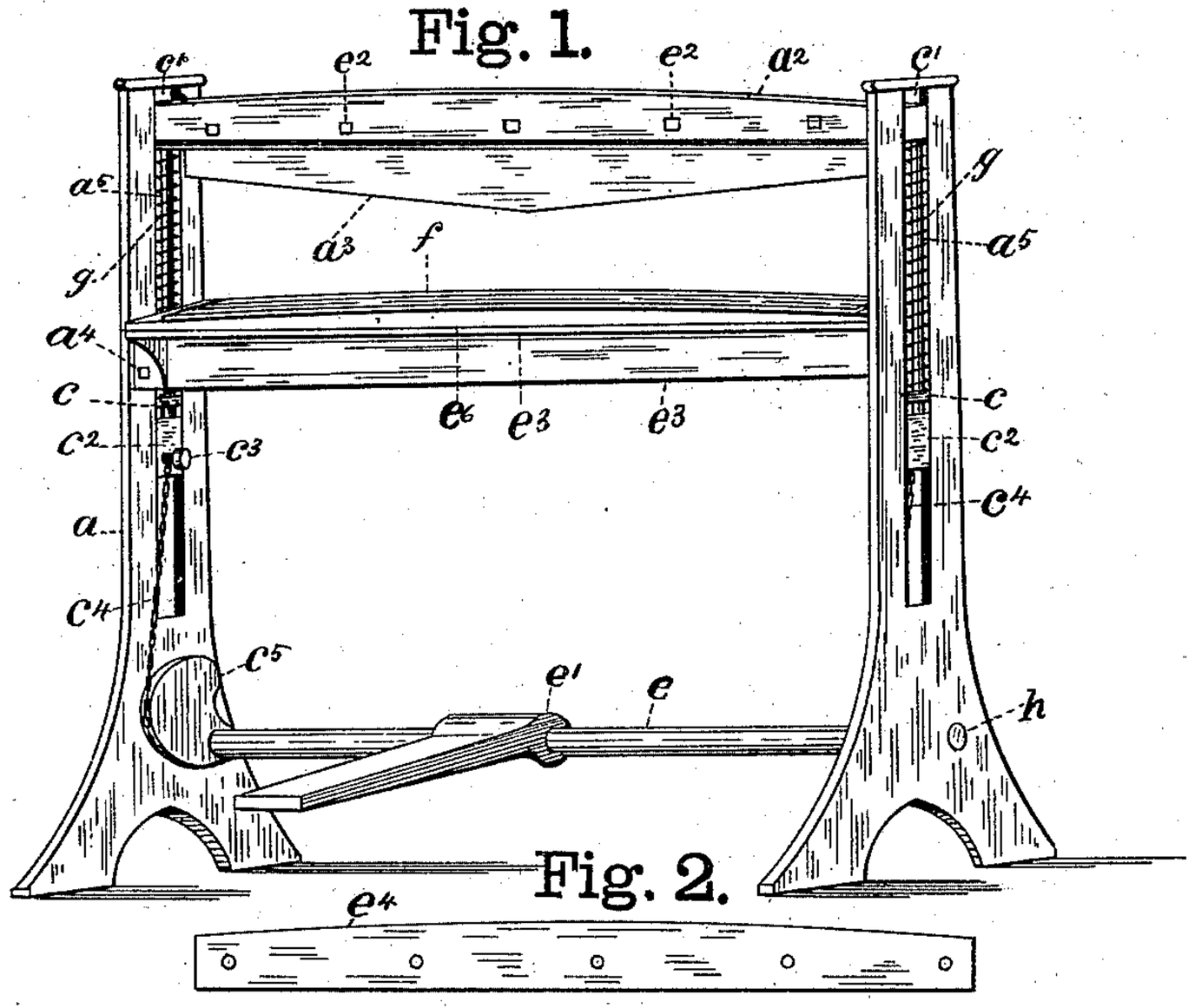


Fig. 2.

Fig. 2a

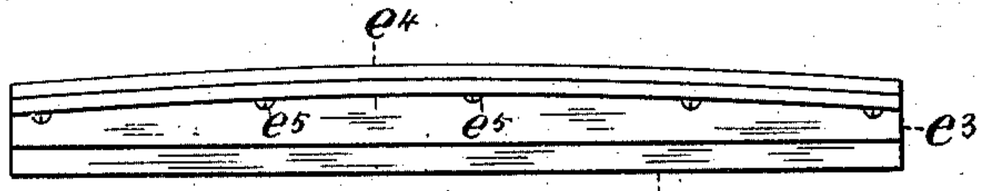


Fig. 3.

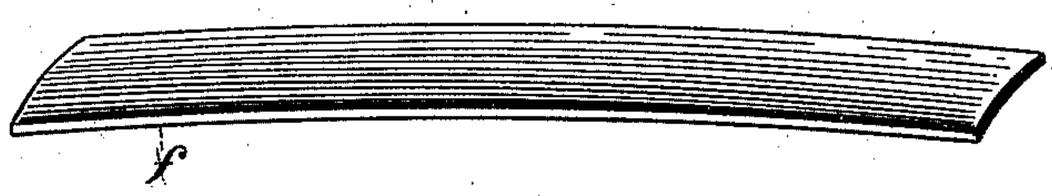


Fig. 4.

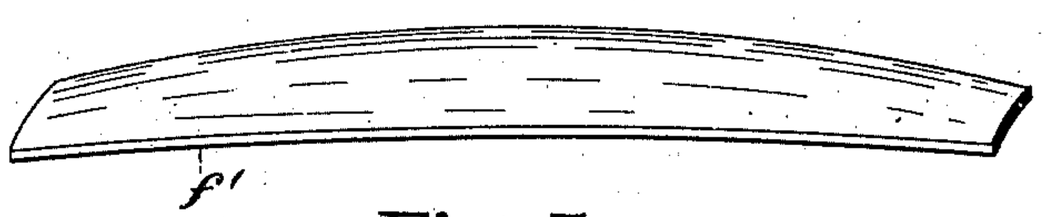
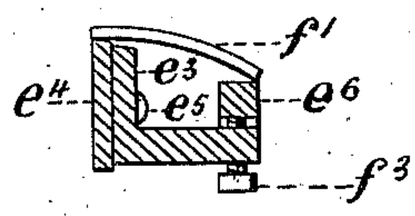


Fig. 5.



Witnesses.

Jennie M. Caldwell.

Chas. Cheney

Inventor.

Edward M. Jewett.

By Jones & Sawyer

Atty.

UNITED STATES PATENT OFFICE.

EDWARD M. JEWETT, OF BUFFALO, NEW YORK, ASSIGNOR TO HIMSELF AND EDWARD MICHAEL, OF SAME PLACE.

MACHINE FOR JOINTING COMPRESSED BENT STAVES.

SPECIFICATION forming part of Letters Patent No. 335,074, dated January 26, 1886.

Application filed June 18, 1885. Serial No. 169,028. (No model.)

To all whom it may concern:

Be it known that I, EDWARD M. JEWETT, a citizen of the United States, residing in Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Machines for Jointing Compressed Bent Staves, of which the following is a specification.

The object of this invention is to provide the means for jointing staves that have been compressed and formed into the required shape to form a barrel before being cut or jointed, so that they will all fit together truly when put into a barrel, all of which will be fully and clearly hereinafter shown, described, and claimed, by reference to the accompanying drawings, in which—

Figure 1 is a perspective view of a suitable stave-jointer for illustrating my invention. Fig. 2 is a side elevation of the stave-rest. Fig. 2^a is a top view of the rest and bed upon which the stave is jointed. Fig. 3 is a perspective view of a stave after it has been compressed into shape preparatory to being jointed. Fig. 4 is a stave formed and jointed; and Fig. 5 represents a cross-section through the stave-rest and bed, showing also an end view of a stave.

The side frames, *a*, of the machine are made of cast-iron, and put together by bolts in the usual way.

a^2 is the cross-head, arranged in slides or openings *c'*, so as to be capable of moving up and down in said openings. The cutter a^3 is made in the usual way, and secured to the cross-head by bolts c^2. It is curved so as to give the proper bilge to the stave. To the cross-head are secured two vertical rods, a^5. They pass through holes in the cross-pieces *c*, and rest on the sliding blocks c^2. On each of these rods a^5 is a spiral spring, *g*, each of which rests on the stationary cross-pieces *c*.

To each block c^2 is attached a pin, c^3, having a chain, c^4, connected therewith and to a cam, c^5, (one on each side of the machine.) The cams c^5 are rigidly secured to a shaft, *e*, mounted in bearings *h* in the sides of the machine.

To the shaft *e* is rigidly fastened a foot-step, *e'*.

The bed of the machine, e^3, is secured to the frame by bolts a^4, in any well-known way.

e^4 represents the rest or lower cutter, on which the stave rests while being cut. (See Figs. 2^a and 5.) It is secured in place to the bed by bolts e^5. This rest is curved in a horizontal direction, or on its side, as shown in Fig. 2^a, so as to give the required bilge to the stave and correspond with the curve of the cutter a^3. It is also curved on the top, so as to exactly fit the under side of the stave. (See Fig. 2.)

To the bed e^3 is a vertically-adjustable bar, e^6, upon which one side of the stave rests while being cut. The object in making it adjustable is to provide the means for adjusting the angle at which the stave is cut, as will be seen, whereby the cut may be adjusted for barrels of different sizes or of different diameters. It is made adjustable by the bolts f^3.

In operating my invention a stave, *f*, is placed on the rest and bed of the machine. (See Figs. 1 and 5.) It will be noticed that this stave has already been compressed into the shape it would occupy when placed in a barrel. A pressure upon the foot-step will turn the shaft *e* and cams c^5, thereby winding the chain c^4 around the cams and forcing the cutter down onto the stave and jointing it. By removing the pressure from the foot-step the springs *g* bring the cutter up to its normal position. It will be seen that by the shape of the cams c^5, which increase in diameter from the shaft to the point of the cam, the cutter will be drawn down with an increasing velocity, thereby insuring a smoother cut toward the ends of the staves, and that, as the rest is curved upward so as to fit the curve of the stave while being cut, the stave will be jointed exactly true, so that when put into a barrel all the joints will fit true and close, whereas a bent stave cut on a straight rest would not be jointed exactly true.

I am aware of Patents Nos. 314,648, 197,394, and 262,770, and do not claim the inventions covered therein.

I claim as my invention—

In a machine for jointing staves, the combination of a stave-rest having a cutting-edge, a bar curved to conform to the edge of the stave, a top curved transversely and longitudinally to correspond with the hollow side of a compressed bent stave, an adjusting-bar, e^6, and a cutter having cutting-edge curved to conform with the stave-rest, substantially as described.

E. M. JEWETT.

Witnesses:

JENNIE M. CALDWELL,

JAMES SANGSTER.

Correction in Letters Patent No. 335,074.

It is hereby certified that Letters Patent No. 335,074, granted January 26, 1886, upon the application of Edward M. Jewett, of Buffalo, New York, for an improvement in "Machines for Jointing Compressed Bent Staves," was erroneously issued to "Edward M. Jewett, the inventor, and Edward Michael;" that said Letters Patent should have been issued to *Edward W. Jewett and Edward Michael*, said Edward W. Jewett and Edward Michael being assignees of the entire interest; and that the proper corrections have been made in the files and records of the case in the Patent Office and should be read in the Letters Patent that the same may conform thereto.

Signed, countersigned, and sealed this 23d day of February, A. D. 1886.

[SEAL.]

H. L. MULDROW,
Acting Secretary of the Interior.

Countersigned:

M. V. MONTGOMERY,
Commissioner of Patents.