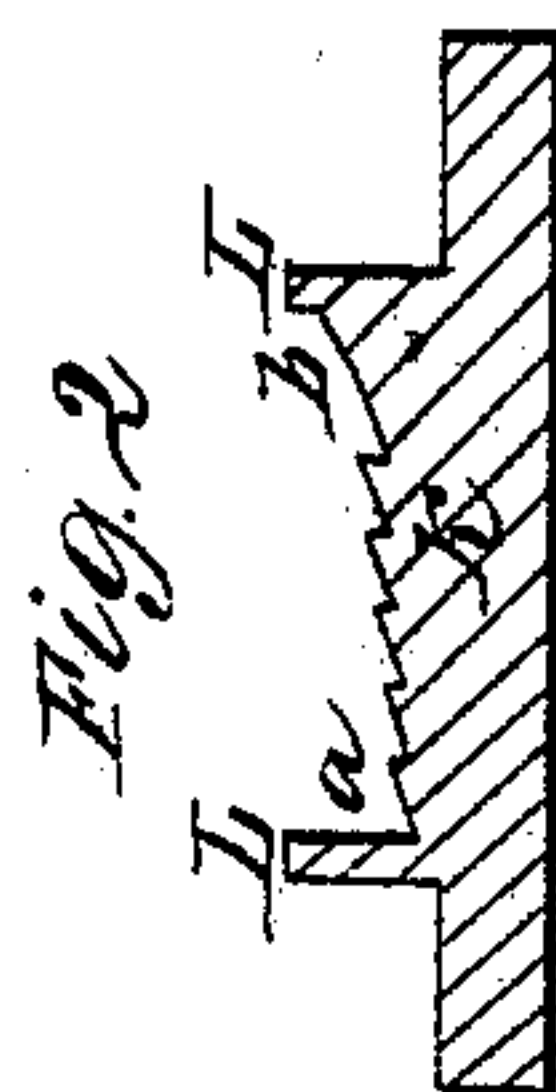
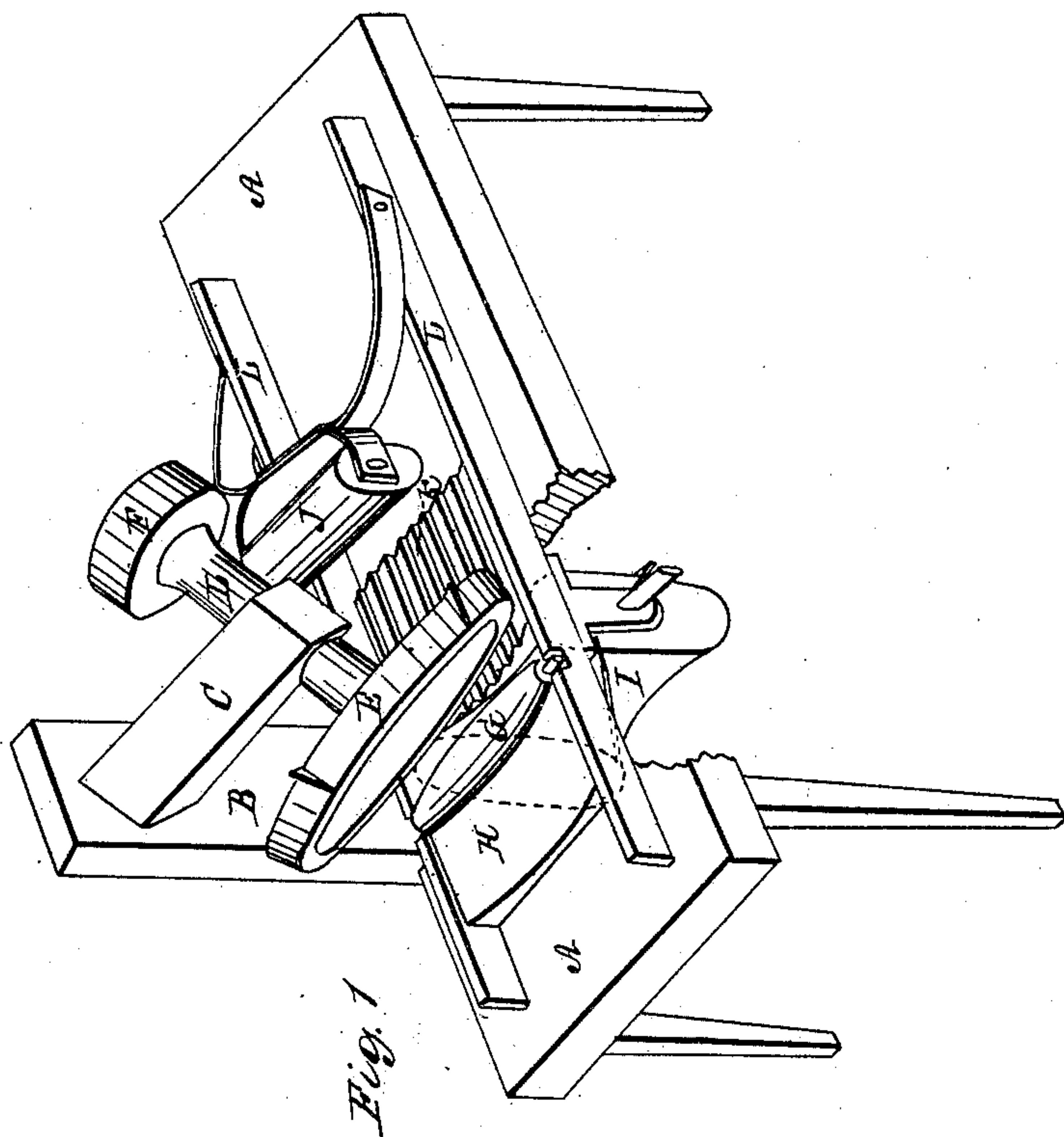


J. D. Elliot,
Dressing Staves.
N^o 10,227. Patented Nov. 15, 1853.



UNITED STATES PATENT OFFICE.

JOSEPH D. ELLIOT, OF LEICESTER, MASSACHUSETTS.

MACHINE FOR DRESSING STAVES.

Specification of Letters Patent No. 10,227, dated November 15, 1853.

To all whom it may concern:

Be it known that I, JOSEPH D. ELLIOT, of Leicester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Machines for Dressing Staves; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part thereof, in which—

Figure 1, represents a perspective view of the machine. Fig. 2, represents a transverse section through the bed.

The nature of my invention relates more particularly to the use of a transversely inclined bed upon which the staves are fed into the cutters, so as to adapt the machine to the dressing, of thick or thin, tapering or wedge shaped, riven staves, with the grain of the wood, without separately adjusting the machine, or assorting of the staves.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

The general construction of the machine is similar to that which I have recently withdrawn from the Patent Office, the distinguishing difference being in the bed.

A, represents the table or bench, to which a standard B, is attached. From said standard B, projects over the table an arm C, for supporting in an inclined position the shaft D, carrying the cutter wheel E, at its lower end, and a drum or pulley F, at its upper end, for a belt, by which it may be driven. This cutter wheel E dresses the concave side of the stave, and may be made adjustable through its shaft. A weighted roller G, is placed as near to the cutting line of the wheel E, as may be, the wheel itself being hung on an inclined shaft for this purpose, to hold the stave against the bed H, and against the lifting cut of the wheel. This roller may be weighted, hung upon springs, or may possess the requisite weight within itself for holding down the stave.

Underneath the bed is a concave cylinder

I, having straight knives arranged transversely across it, which knives dress the convex side of the stave. The bolt or stave is held against the action of the under cutter by a swiveled weighted roller J, on top of the table, which roller may be held down by weights, springs &c., in the well known manner.

K, is a transversely inclined or slightly concave bed, which may have its surface slightly grooved or roughened, so that the stave shall not slip to one side or the other of the bed, after it has been properly placed thereon—the swiveled roller J, aiding to hold it (the stave) firmly against the bed.

The staves are fed in between the guide pieces L, by means of an endless chain of dogs or bars, which being common and well known need not be shown. Or other positive feed motion may be used if found essential.

It is well known that staves are riven from the bolts in radial lines drawn from the center to the circumference of the bolt, or log, and that the stave when undressed is consequently thicker at one edge than the other. They may also taper in the direction of their length, and be winding from end to end. By machines heretofore constructed for dressing such riven staves, the staves had to be assorted into sizes and the cutters adjusted for each varying size. In my machine, if the stave be thick it is fed in on the side *a*, of the bed. If thin on the side *b* of the bed. If thick at one end and thin at the other, it is skewed on the bed so that the thick part shall pass through at *a*, and the thin part at *b*, thus adapting the machine to staves of any form as they come in bulk; dressing them with the grain; and by this arrangement of inclined bed, and swiveled roller, which must adapt itself to the various shapes or forms of the staves, and the manner of feeding them in, I can take a full shaving from convex or outside of the stave, while the deficiency of wood will be on the inside of the barrel when made up, and the grain of the wood is not cut across, which would allow the barrels to leak.

Having thus fully described the nature of my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

5 The combination of the transversely inclined bed with the swiveled roller, for the purpose of adapting the machine to the dressing of riven staves with the grain of the wood, whether thick or thin, tapering,

or inclined, from edge to edge, without any separate adjustment for the various sizes, 10 substantially as described.

J. D. ELLIOT.

Witnesses:

A. B. STOUGHTON,
L. C. DORNE.