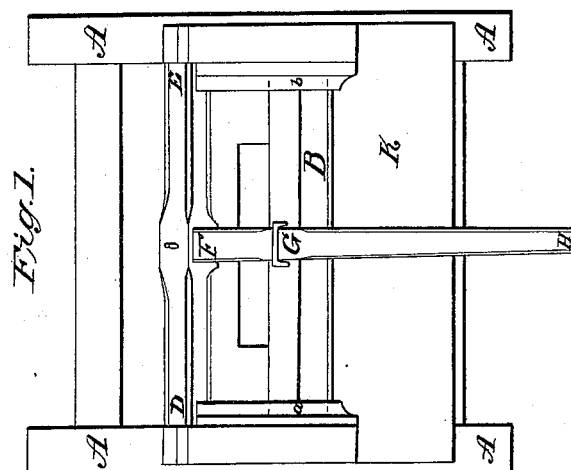
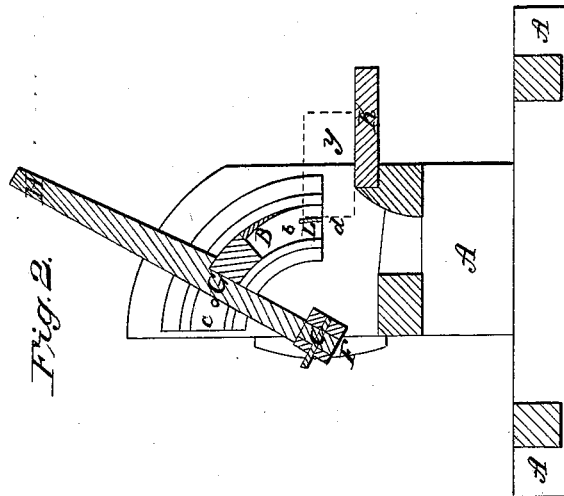


*C. Manning,*  
*Making Staves.*  
*N<sup>o</sup> 1,781.      Patented Sep. 10, 1840.*



# UNITED STATES PATENT OFFICE.

CEPHAS MANNING, OF ACTON, MASSACHUSETTS.

## MACHINE FOR CUTTING STAVES.

Specification of Letters Patent No. 1,781, dated September 10, 1840

*To all whom it may concern:*

Be it known that I, CEPHAS MANNING, of Acton, in the county of Middlesex and State of Massachusetts, have invented new and  
5 useful Improvements in Machinery for Cutting Staves or Such other Articles as May be Successfully Formed by Said Machinery.

The said improvements, the principles, thereof and manner in which I have contemplated the application of the same by which  
10 they may be distinguished from other inventions of a similar nature together with such parts or combinations I claim to be my invention and consider original and new,  
15 I have herein set forth and described. The said description taken in connection with the accompanying drawings herein referred to, forms my specification.

Figures 1 and 2, represent my machine,  
20 the former being a top view, and the latter a vertical section.

A A is the framework suitably arranged.

B is a knife whose transverse section is the arc of a circle or thereabouts, and whose  
25 shape longitudinally shall correspond to the curved form lengthwise of any staves to be cut, or it may be a straight knife for vessels whose shape is pyramidal or conical or a frustrum of a cone, as is the case in  
30 common water pails and such articles.

The extremities of the knife are properly affixed to curved pieces of wood or metal *a*,  
*b*, Figs. 1, 2. These pieces move in curved  
35 grooves *c*, *d* formed in metallic plates attached to the inside of each of the posts of

the frame A A. The curve of these grooves is, technically speaking, a part of the circumference of a circle whose center is the point C, Fig. 2, or axis of the shaft D, E, or whose ending is equal to that of the  
40 barrel for which the stave is to be cut. One end of the lever F G H is attached to the center of the shaft D E. This lever is connected with the knife B in any proper manner. Therefore when the end H of the lever  
45 is pressed down by the hand applied thereto, the knife B will be moved downward through the arc of a circle, so that if a block of wood *y* is interposed a stave may  
50 be cut from the same.

The block is placed on a proper platform K, and as each stave is cut therefrom, the block is pushed against a stop or ledge L, attached to the knife, which stop gages  
55 or regulates the thickness of the succeeding stave.

Having thus described my machinery for cutting staves I shall claim—

Attaching the knife to curved pieces *a*, *b*, moving in grooves *c*, *d*, as represented in  
60 Figs. 1 and 2, as described.

In testimony that the foregoing is a true description of my said invention and improvement I have hereto set my signature  
this nineteenth day of May in the year  
65 eighteen hundred and forty.

CEPHAS MANNING.

Witnesses:

R. H. EDDY,  
J. WRIGHT WARREN, Jr.