

J. J. RALYA.

Devices for Centering Barrel-Heads.

No. 141,816.

Patented August 12, 1873.

Fig. 1.

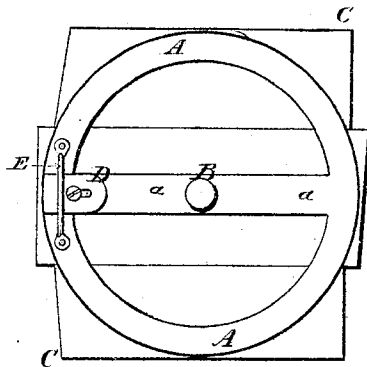


Fig. 2.

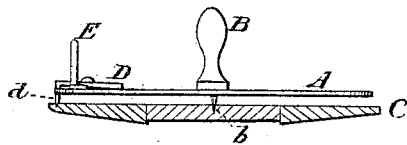


Fig. 3.

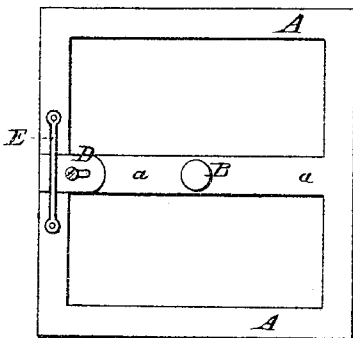
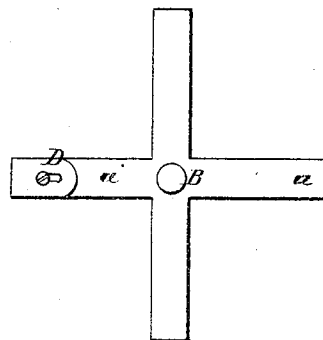


Fig. 4.



Witnesses.

W. H. Poole.
John R. Young

Inventor,

Geo. J. Ralya, by
Orindle and Co. his
attorneys

UNITED STATES PATENT OFFICE.

JOHN J. RALYA, OF CLEVELAND, OHIO.

IMPROVEMENT IN DEVICES FOR CENTERING BARREL-HEADS.

Specification forming part of Letters Patent No. 141,816, dated August 12, 1873; application filed September 26, 1872.

To all whom it may concern:

Be it known that I, JOHN J. RALYA, of Cleveland, in the county of Cuyahoga and in the State of Ohio, have invented certain new and useful Improvements in Devices for Centering Barrel-Heading; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a plan view of the upper side of my device as in use. Fig. 2 is a central section of the same on line *xx* of Fig. 1, and Figs. 3 and 4 show modifications in the construction and shape of the frame.

Letters of like name and kind refer to like parts in each of the figures.

In the construction of barrels by machinery it has heretofore been the custom to join together two or more pieces of board which, unitedly, would possess sufficient dimensions to enable a head to be cut therefrom; and as the mechanism employed rendered it necessary that a suitable center-mark should be placed upon each "head-blank" in order that the latter might be adjusted to position within or upon the head-rounder, such center was located by means of a pair of dividers, which, being spread to a distance equal to about one-half the diameter of the finished head, had one point placed at one side of said blank, and the other point caused to describe a mark at or near the supposed center, said dividers being thus used from each side and end, and the points of intersection of the central marks, or the average center between the same, taken as the center of said blank. This method of operation was not only tedious, but in practice proved to be so defective as to render necessary a margin of from one to three inches upon the blank, which margin was of course wasted in the construction, and added materially to the cost of the finished article of manufacture.

To obviate these objections is the design of my invention, which consists in a templet or pattern having exteriorly, at four or more equidistant points, the dimensions of a barrel-head, provided with a central marking-point,

or its equivalent, and with or without a scriber at one point of its periphery, substantially as and for the purpose hereinafter specified.

In the annexed drawing, A represents a templet or pattern, having, preferably, the exterior form of a circle and a diameter equal to the size of head that is to be constructed. In order to secure lightness the interior portion of the templet is removed, except where a bar, *a*, extends across from side to side. At the center of the templet thus formed is placed a stud, B, which, upon the upper side, has a sufficient size and the necessary shape to form a handle, while upon the lower side of said templet the stud terminates in a small round point, *b*, that has a length of about one-fourth of an inch.

The device thus constructed is placed upon a head-blank, C, and moved until its periphery is entirely within the sides and ends of the same, after which a slight blow with a hammer is given to the upper end of the stud B, and its point *b* forced into the wood beneath, so as to make a mark which will be situated at the average center of said blank. The blank is now ready for the machine, to or within which it may be speedily and accurately adjusted by means of the center-mark.

It will be seen that, while a circular form is most desirable for the templet, such form is not essential, as the operation of the device would be the same were said templet constructed in a square form, or with two arms, like a Greek cross, as shown in Figs. 3 and 4, the principal point being to enable the longitudinal and transverse centers to be determined with certainty and ease. The central stud may also be omitted, if desired, and in place of the same a small central opening provided, through which the point of a scratch-awl may be inserted, for the purpose of scoring upon the wooden blank the necessary center-mark.

For use with some machines it may be found best to mark upon the head-blank a circular line that shall correspond to the exterior of the head to be cut therefrom, for which purpose an adjustable scriber, D, consisting of a slotted bar, having its outer end turned down-

ward and sharpened, is attached to or upon the upper face of the templet A, with its sharpened end *d* extending downward outside the periphery of the same. By slotting the edge of the templet, so as to permit the end *d* of the scriber to be drawn within the line of the same, said scriber can, if desired, be caused to describe a larger or smaller circle than that of said templet.

For use with the scriber I provide a handle, E, which, having a U-shape, spans said part, and also serves as a guard or shield for the same.

As constructed, the device is adjusted to position upon the head-blank, the central stud pressed downward so as to furnish a bearing, around and upon which said device is rotated by means of the handle, while by a slight downward pressure upon the latter the scriber is caused to score a line upon said blank.

The especial advantages possessed by this device are as follows: First, it simplifies the operation of centering barrel-head blanks, so as to not only render comparatively unskilled

labor available, but also to materially reduce the time required and correspondingly lessen the cost; second, from the exactness with which the entering operation is performed, no margin or waste is required in the length or width of the blank, and as a consequence an important saving is effected in the quantity and expense of material.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

The templet A, having at four or more equidistant points the dimensions of a barrel-head, provided with a central marking-point, *b*, and with or without a scriber, D, at one point of its periphery, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 21st day of September, 1872.

JOHN J. RALYA.

Witnesses:

GEO. A. GROOT,
S. BURKE.