

(No Model.)

A. BRUNER.  
SPOKE TENON CUTTER.

No. 481,469.

Patented Aug. 23, 1892.

FIG. 1.

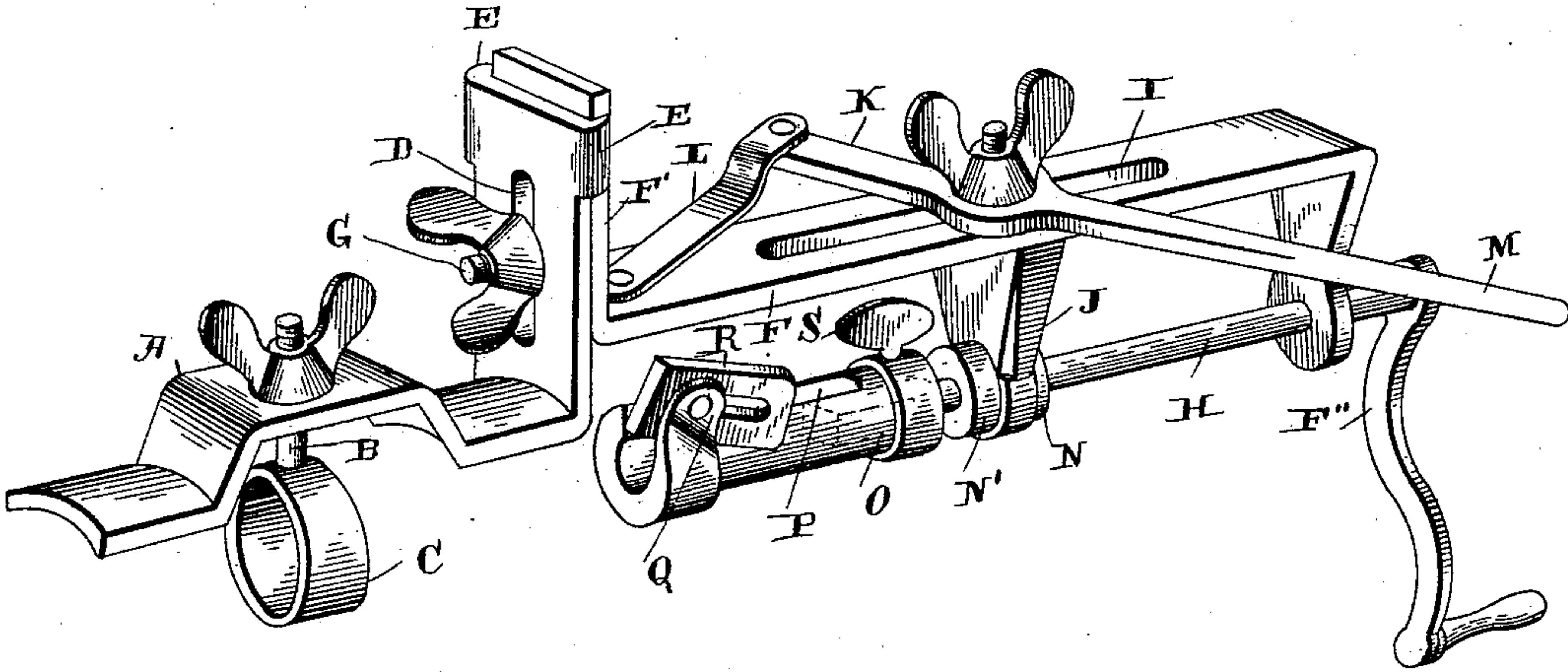
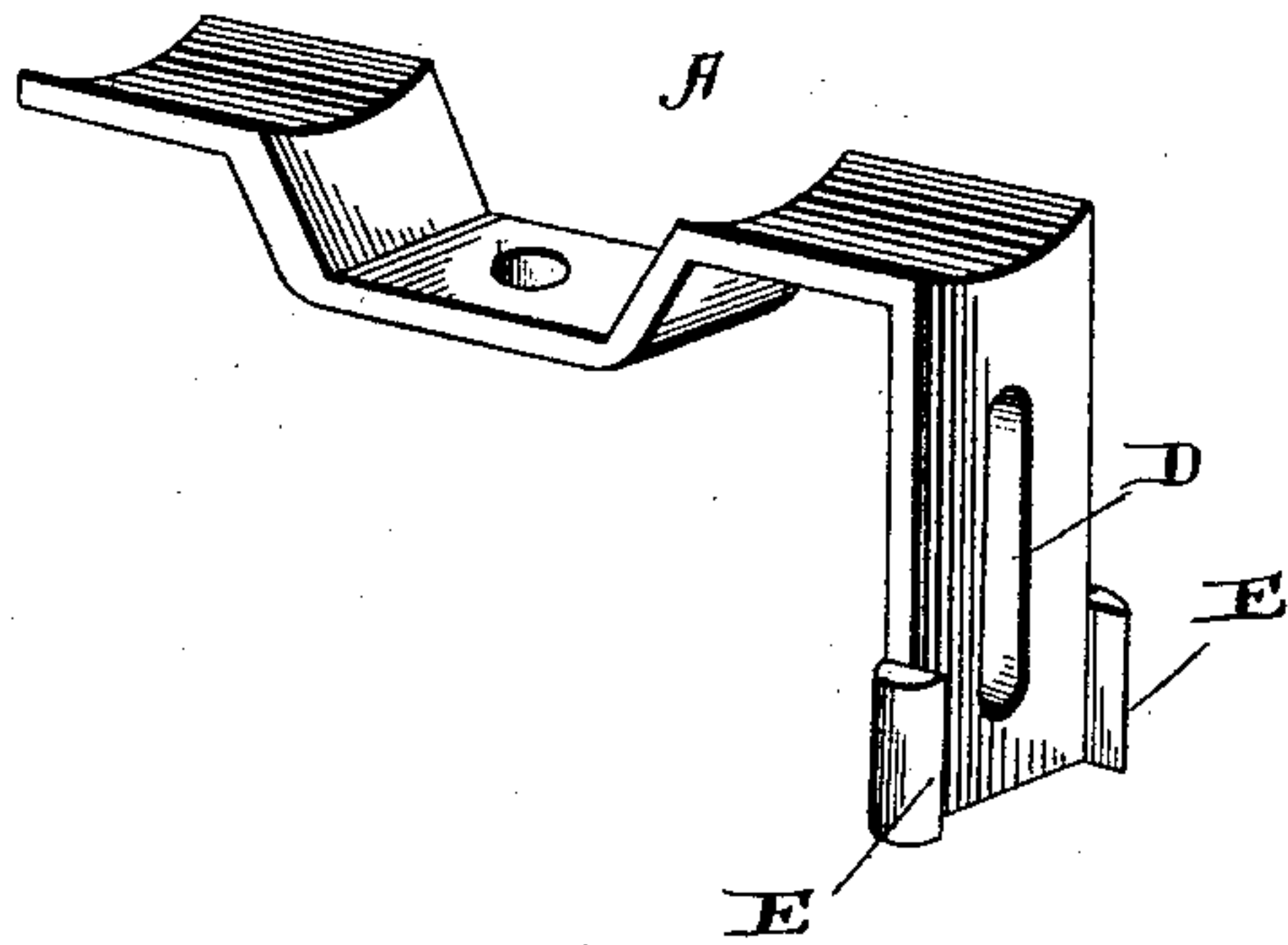


FIG. 2.



WITNESSES

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*per*  
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# UNITED STATES PATENT OFFICE.

ABSALOM BRUNER, OF ARKOE, MISSOURI.

## SPOKE-TENON CUTTER.

SPECIFICATION forming part of Letters Patent No. 481,469, dated August 23, 1892.

Application filed October 7, 1891. Serial No. 408,000. (No model.)

*To all whom it may concern:*

Be it known that I, ABSALOM BRUNER, of Arkoe, in the county of Nodaway and State of Missouri, have invented certain new and useful Improvements in Spoke-Tenon Cutters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in spoke-tenon cutters; and it consists in certain novel features of construction and in the combination and arrangement of parts, which will be fully described hereinafter, and more particularly referred to in the annexed claim.

The object of my invention is to construct a cheap and convenient means for cutting spoke-tenons, by the use of which all spokes on the same wheel will have tenons of equal size. This work is accomplished by a machine which is clamped to the spoke during the operation of cutting, thus holding the machine in one position and preventing any uneven or irregular cutting which so often occurs in hand-tools ordinarily used for this purpose.

Referring to the accompanying drawings, Figure 1 is a perspective view of my improved machine. Fig. 2 is a detached view of the portion which is clamped to the spoke.

Before the machine is brought into use the spokes are all placed in the hub of the wheel in the position they will occupy when the wheel is completed. The spokes being thus secured, their outer ends are extended in a rigid manner, ready for the tenons to be cut thereon.

A represents a plate, which is clamped to the spoke and which is constructed with a concave lower face to fit the curvature of the spoke. This plate is bent outward between its ends, as shown, and provided with a vertical opening, through which passes the bolt B, having ring C on its lower end. The spoke is passed through this ring and is drawn up against the plate A and clamped thereto by the said ring and bolt. The inner end of the plate A is turned outward and provided with

slot D, and formed on its vertical edges are the flanges E.

F represents a plate having an outwardly-turned end F', which is slotted, as shown, and which is clamped to the corresponding end of the plate A, between the flanges E, by clamping-bolt G. This plate F extends outward in a line with plate A, and has its outer end bent to form a bearing for the outer end of shaft H. A slot I is formed in the said plate, and adapted to move therein is the journal-post J, which forms a bearing for the inner end of the said shaft. The end of the said post is extended through the plate F, and loosely mounted on the said extended end is the lever K, the outer end of which is pivoted to the arm L, which is pivoted at its inner end to the upper side of the plate F. The opposite end of the lever K is formed into a handle M for moving the said lever back and forth, moving with it the post J through the slot I.

The shaft H is provided with two shoulders N N' on its inner end on opposite sides of the post J, so that when the latter is moved the shaft is also moved correspondingly.

Mounted on the inner end of the shaft H is the hollow head O, constructed with a slot P and a projection Q at one side of the said slot. Secured at an angle to this projection is the slotted adjustable knife R, which may be so adjusted as to cut a tenon of any desired size. The inner end of the shaft H is squared and the end of the head O constructed with a correspondingly square recess, into which the said square end of the shaft fits. The head is adjustably secured by the set-screw S, and this adjustment is useful in regulating the length of the tenon it is desired to cut. The tenon as it is cut enters the hollow head O, and the end of the shaft H acts as a stop and prevents the knife from running any farther on the spoke.

In operation the plate A is clamped to the spoke near its outer end, as before described. The cutter-head O being thus in line with the spoke, it is run up so as to engage therewith by means of the post J and lever K. The shaft is then revolved by means of the crank F'', and as the cutter-head is being pressed against the spoke by the lever K as the shaft



is revolved the knife cuts inward, yielding to the pressure on the lever, and thus the tenon is formed.

5 The machine is very simple and easily operated and its work is of a superior quality, owing to the fact that after it has once been clamped to the spoke it is impossible for the cutter-head to get out of adjustment, thus insuring an even and regular tenon on every  
10 spoke.

Spokes of different sizes may be cut with equal facility by simply adjusting the plates A in relation to each other by means of their slotted meeting ends until the center of the  
15 spoke has been brought in a line with the center of the cutter-head.

Having thus described my invention, I claim—

20 The combination of a longitudinally-slotted support, a projecting bearing formed by turning the rear end of the support outward, a

clamp-section formed by turning the inner end of the support in the reverse direction, a movable post having a head which projects through the slot of the support, a shaft carrying a cutter-head journaled in the said post and outturned bearing, being adapted to move with the former, a lever secured between its ends to the projecting head of the post, a link secured at one end to the outer end of the lever and its opposite end to the slotted support, a spoke-grasping member, and a projection thereon which is adapted to be secured to the said clamp-section on the slotted support, substantially as shown and described. 25 30 35

In testimony whereof I affix my signature in presence of two witnesses.

ABSALOM BRUNER.

Witnesses:

WARREN L. JOHNSON,  
W. G. TURNER.