

No. 707,859.

Patented Aug. 26, 1902.

R. A. MILLS.
HAND TENONING MACHINE.

(Application filed Nov. 15, 1900. Renewed Apr. 18, 1902.)

(No Model.)

Fig 1

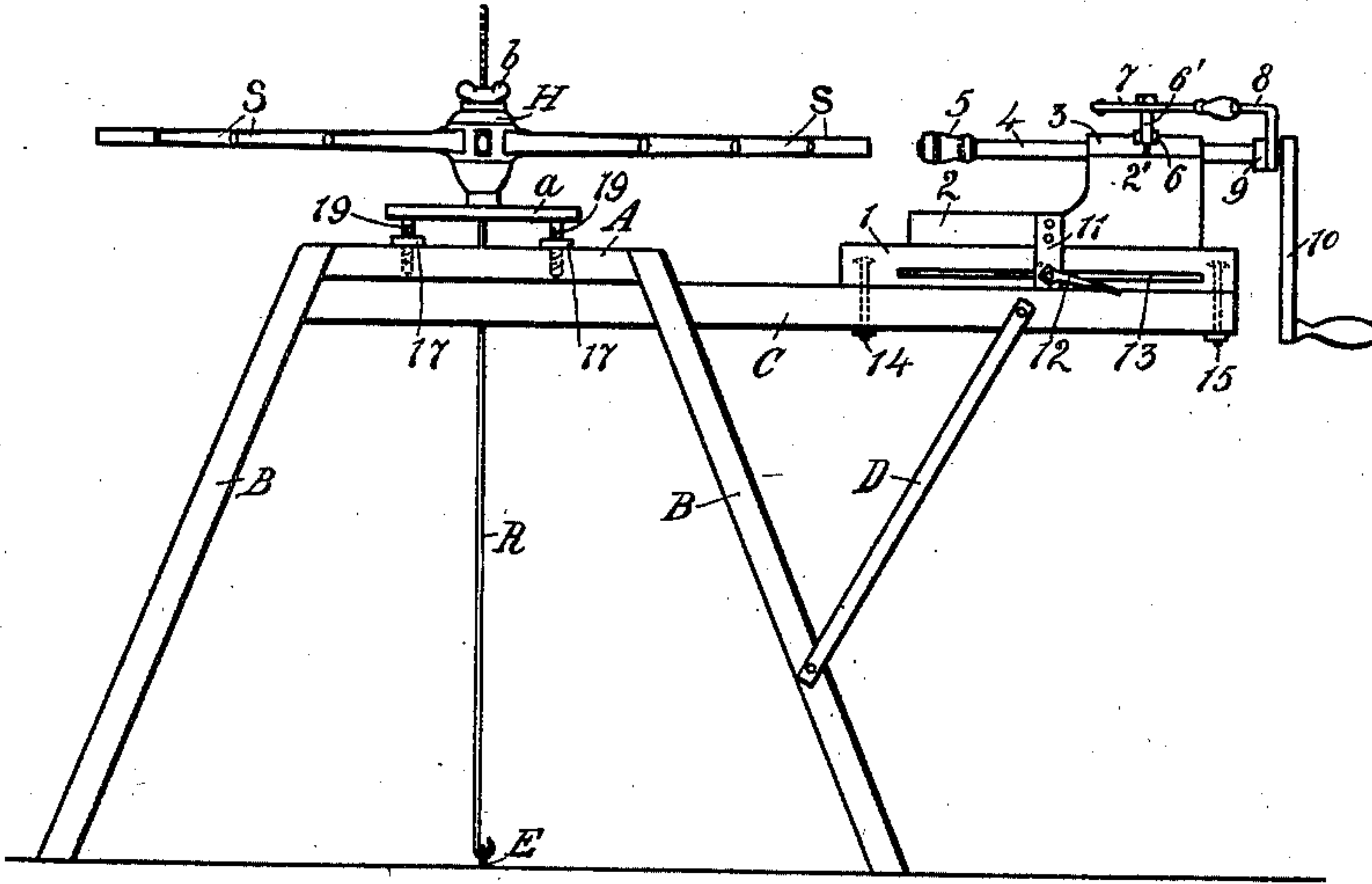
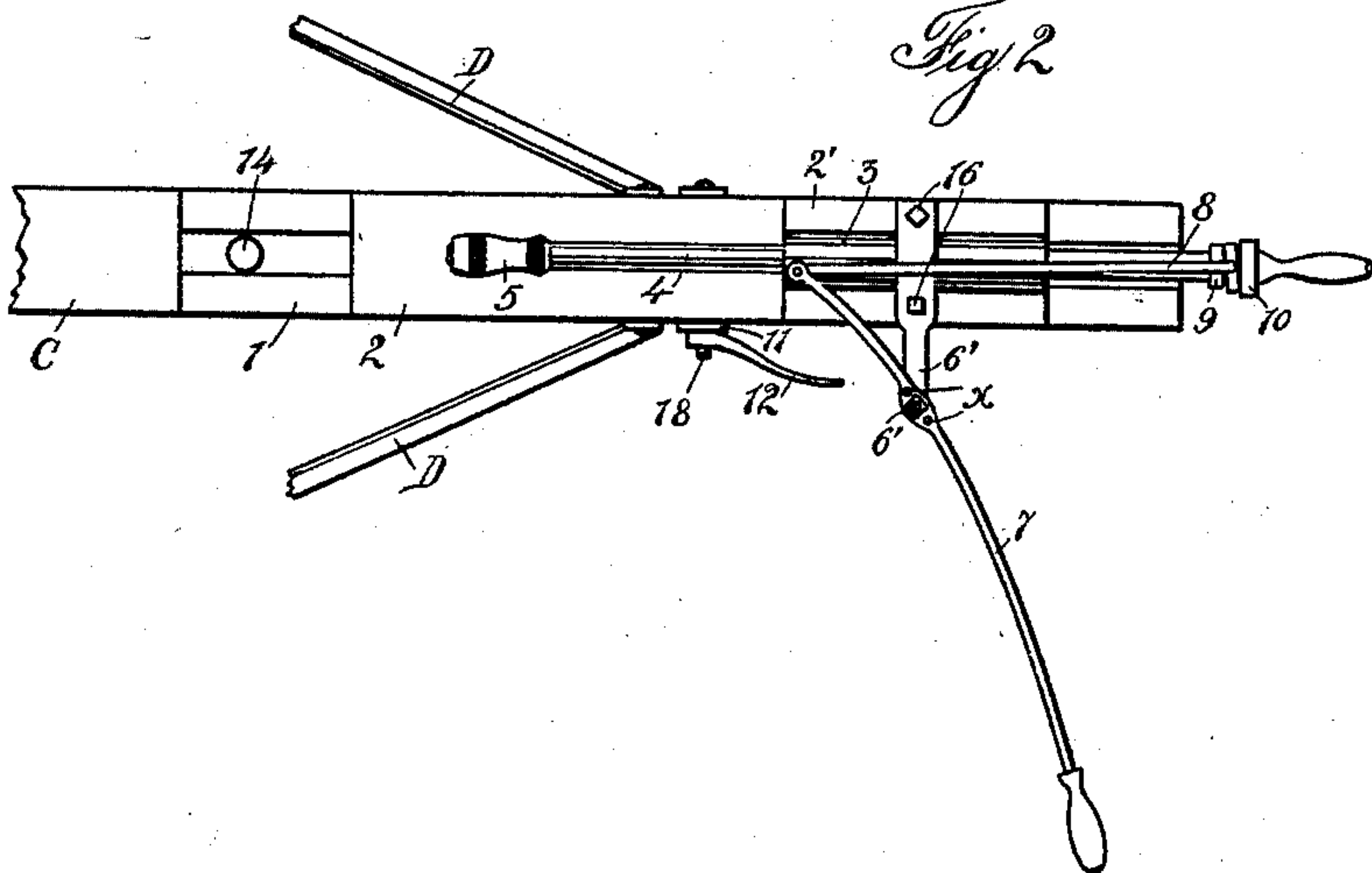


Fig 2



WITNESSES:

C. F. Patterson.
Ray J. Davenport.

INVENTOR

Roland A. Mills.

Gro. W. Lues.

ATTORNEY.

UNITED STATES PATENT OFFICE.

ROLAND A. MILLS, OF OSCEOLA, NEBRASKA.

HAND TENONING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 707,859, dated August 26, 1902.

Application filed November 15, 1900. Renewed April 18, 1902. Serial No. 103,631. (No model.)

To all whom it may concern:

Be it known that I, ROLAND A. MILLS, residing at Osceola, in the county of Polk and State of Nebraska, have invented certain
5 useful Improvements in Hand Tenoning-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to
10 make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to a novel improvement in hand tenoning-machines, the object
15 of my invention being to provide a tenoning-machine operated by manual power and so arranged that the ends of the spokes may be provided with a suitable tenon, which will be described more fully hereinafter.

20 In the accompanying drawings I have shown in Figure 1 a side elevation of a machine embodying my invention, while Fig. 2 shows a top view thereof with portions broken away.

25 My invention embodies the usual table A, below which is secured a bar C, from which table extend four legs, the whole forming a standard, upon the holder *a* of which is held the hub H of a suitable wheel, the spokes S
30 of which are to be provided with suitable tenons. The usual rod R, used to secure the hub H by means of a thumb-screw *b*, is used, the rod R being movably secured to an ordinary eye E, preferably secured to the floor
35 below the standard. The holder *a*, which may be in the form of a disk or be square, rests upon preferably three screws 19, which are loosely held within openings of the table A and supported by means of the nuts 17, so
40 that this holder *a* may be raised or lowered to bring the spokes S in alinement with the tenon-cutter 5. Secured to the projecting support C, which is further secured by the brace-bars D D, is a base 1, preferably rec-
45 tangular and provided with an extending slot 13, the base being secured to the support by means of the bolts 14 and 15. Slidably held upon the base 1 is a head 2, this head being provided with two depending ears 11,
50 which ears support a bolt 18, as shown in Fig.

2, upon which threads a suitable handle 12, so that this head 2 may be locked to the base at any suitable point, securing the head 2 slidably and adjustably to the base. The head 2 above is provided with a suitable bearing, 55 within which is loosely—that is, slidably and revolubly—held a shaft 4, to one end of which is secured a suitable cutter-head 5, and to the other end of which is secured an operating-handle 10, this shaft 4 further being 60 provided with a collar 9, between which and the handle 10 is loosely held a striding bar 8, as is shown. This striding bar 8 in turn is movably secured to a pivoted lever 7, which lever is mounted upon a bracket 6', secured 65 to the head 2, so that as this lever 7 is swung in an arc the shaft 4 may be fed toward or away from the spokes S.

It will be noticed that the lever 7 has a number of openings *x* within the same, so 70 that the leverage may be regulated.

Now the operation of my device would be as follows: The tireless wheel would be properly adjusted upon the table A, so as to bring the spokes S into true alinement with the 75 cutter 5. One spoke would then be brought immediately in front of the cutter, when the hub of the wheel would be locked by means of the thumb-screw *b*. The operator would then begin revolving the crank 10 and draw- 80 ing the lever 7 toward him would feed the cutter upon the spoke until the proper depth, which is regulated by the cutter-head, had been traversed, when the cutter again would be carried backward, a new spoke presented, 85 and the operation repeated. Where the spokes are short, the head 2 is adjusted, by means of the handle 12, in carrying the head 2 forward, and when the spokes are long the head 2 is carried backward. 90

Having thus described my said invention, what I claim as new, and desire to secure by United States Letters Patent, is—

The combination with the table A, provided with the supporting-legs B, of the projecting 95 bar C secured below said table A, the adjustable holder *a* secured to said table A, the base 1 secured to said bar C provided with the extending slot 13, the head 2 slidably secured to said base 1, the depending ears 11 100

secured to said head 2, the bolt 18 passing
through said ears and said base, the handle
12 threading upon said bolt 18, the shaft 4
revolubly and slidably held within said head
5 2, the operating-handle 10 secured to said
shaft 4, the collar 9 secured to said shaft 4,
the striding bar 8 secured between said col-
lar 9 and handle 10, and the pivoted lever 7,

said striding bar being secured to said lever,
as and for the purpose set forth. 10

Signed in presence of two witnesses.

ROLAND A. MILLS.

Witnesses:

M. A. MILLS,

FRED E. SNIDER.