W. McNEAL.

Shoulder-Plate for Spoke Finishing Machine.

No. 197,046. Patented Nov. 13, 1877.

*Fig. 1.*

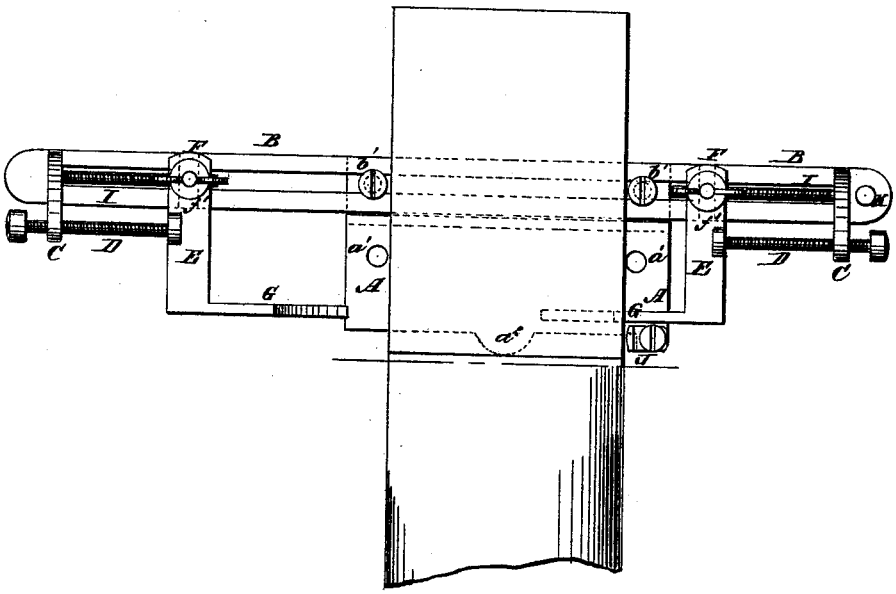


*Fig. 2*

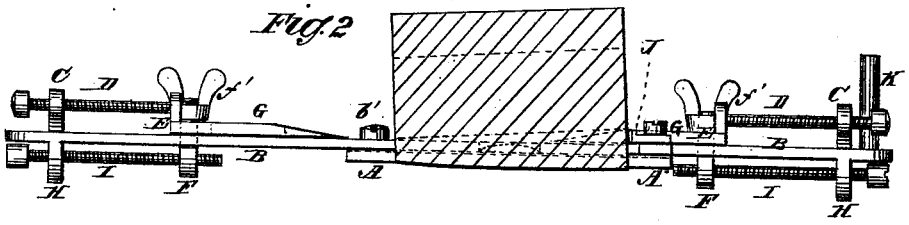
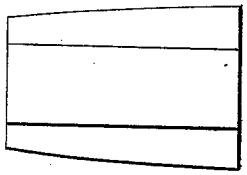


*Fig. 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM McNEAL, OF STOCKTON, NEW JERSEY.

## IMPROVEMENT IN SHOULDER-PLATES FOR SPOKE-FINISHING MACHINES.

Specification forming part of Letters Patent No. **197,046**, dated November 13, 1877; application filed October 12, 1877.

*To all whom it may concern:*

Be it known that I, WILLIAM McNEAL, of Stockton, in the county of Hunterdon and State of New Jersey, have invented a new and useful Improvement in Shoulder-Plates for Spoke-Finishing Machines, of which the following is a specification:

Figure 1 is a plan view of my improved device. Fig. 2 is an edge view of the same, and Fig. 3 a face view of the tenon end of a spoke.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved device for attachment to spoke-finishing machines, to cause the spokes to be finished broader upon the outer edge than upon the inner edge, and which shall be simple in construction and convenient in use.

The invention consists in the combination of the stationary plate, the slotted sliding plate, the adjustable bars, provided with the tapered arms, the adjusting-screws, and the stop-screws with each other, to adapt the device to be applied to a spoke-finishing machine, as hereinafter fully described.

A is a plate which has holes $a^1$ formed in it to receive the screws or bolts by which it is secured to the finishing-machine. Along one edge of the plate A is formed an offset to receive the plate B, which is slotted longitudinally to receive the screws or bolts $b'$, that secure it in place upon the plate A.

Upon the end parts of the slotted plate B are formed arms C, through the ends of which are formed screw-holes to receive the hand-screws D. The forward ends of the screws D are swiveled to the bars E or to lugs formed upon said bars, so that they may be moved out and in by turning the said screws D.

The bars E rest and slide upon the slotted plate B, to which they are secured by the eye-bolt F passing through the slot of the plate B, through holes in the inner ends of the bars E, and having hand-nuts $f'$ screwed upon their ends. Upon the inner sides of the outer ends of the bars E are formed arms G, the upper sides of which are inclined or tapered, as shown in Figs. 1 and 2.

Upon the other side of the end parts of the slotted plate B are formed lugs H, through which are formed screw-holes to receive the hand-screws I, the forward ends of which pass through the eyes of the eyebolts F, which thus serve as guides to keep the said screws in position.

The screws I are designed to serve as adjustable stops to strike against the edges of the plate A, and thus limit the movement of the plate B and its attachments.

To one corner of the plate A is attached a stop, J, for the edge of the spoke-tenon to strike against, so that all the spokes may be held in exactly the same position, and may thus be made exactly alike.

Upon the edge of the plate A is formed a rounded projection, $a^2$, for the shoulder of the spoke-tenon to rest against.

In using the device, the flat side of a spoke-tenon is laid upon the plates A B, with its shoulder against the projection $a^2$ and its edge against the gage or stop J. The plate B is then moved, by means of a handle, K, attached to its end, in such a direction as will bring one of the tapered arms G beneath the rear edge of spoke-tenon, which will bring the spoke into such position that its outer edge will be made thicker than its inner edge by the operation of the finishing-machine. The spoke is then turned, and the plate B is moved to bring its other arm G beneath the rear edge of the spoke-tenon, and the other side of the spoke is finished.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the stationary plate A, the slotted sliding plate B, the adjustable bars E, provided with the tapered arms G, the adjusting-screws D, and the stop-screws I with each other, to adapt the device to be applied to a spoke-finishing machine, substantially as herein shown and described.

WILLIAM McNEAL.

Witnesses:

FREDERIC BLOOM,

CHARLES M. JOHNSON.