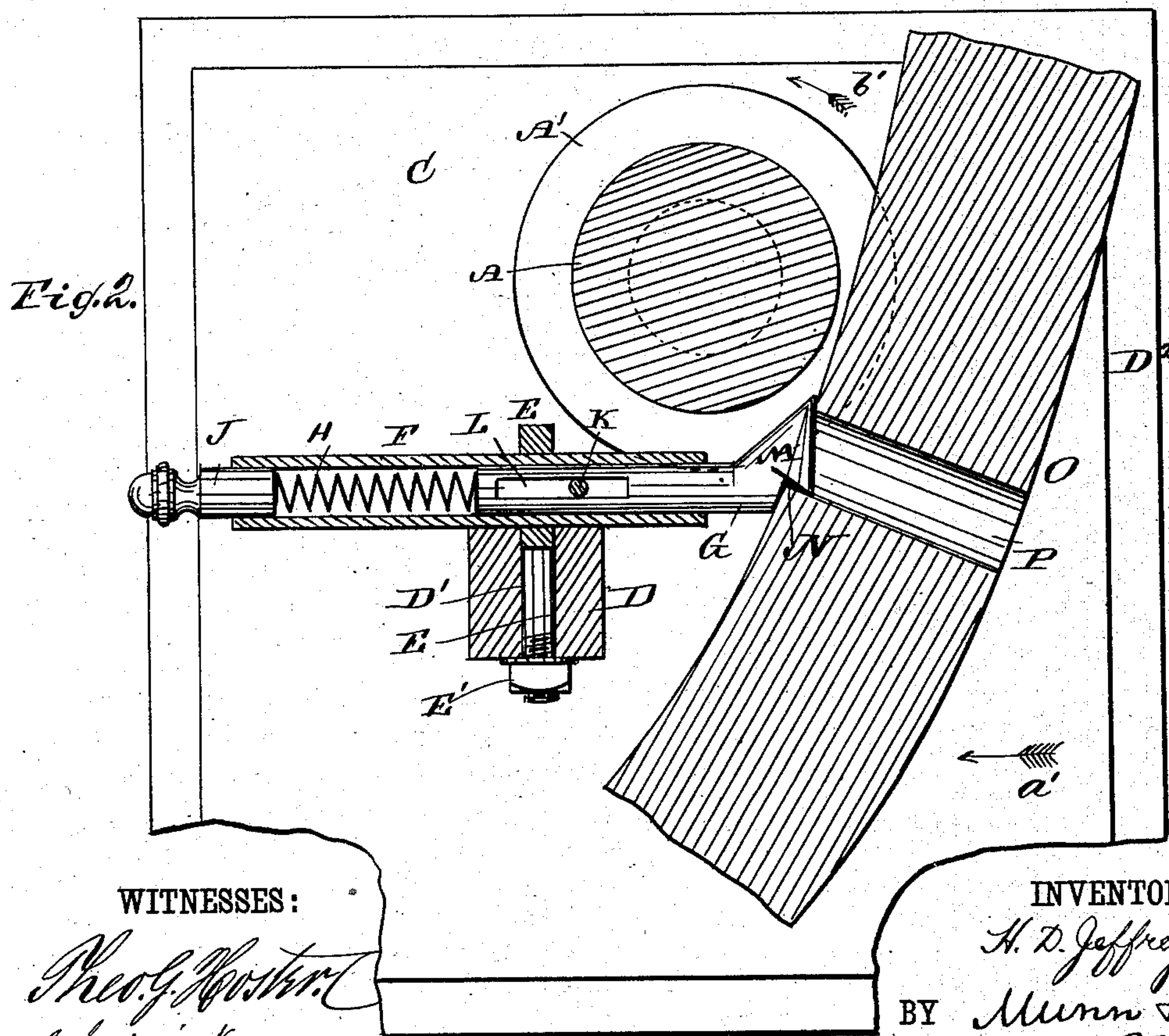
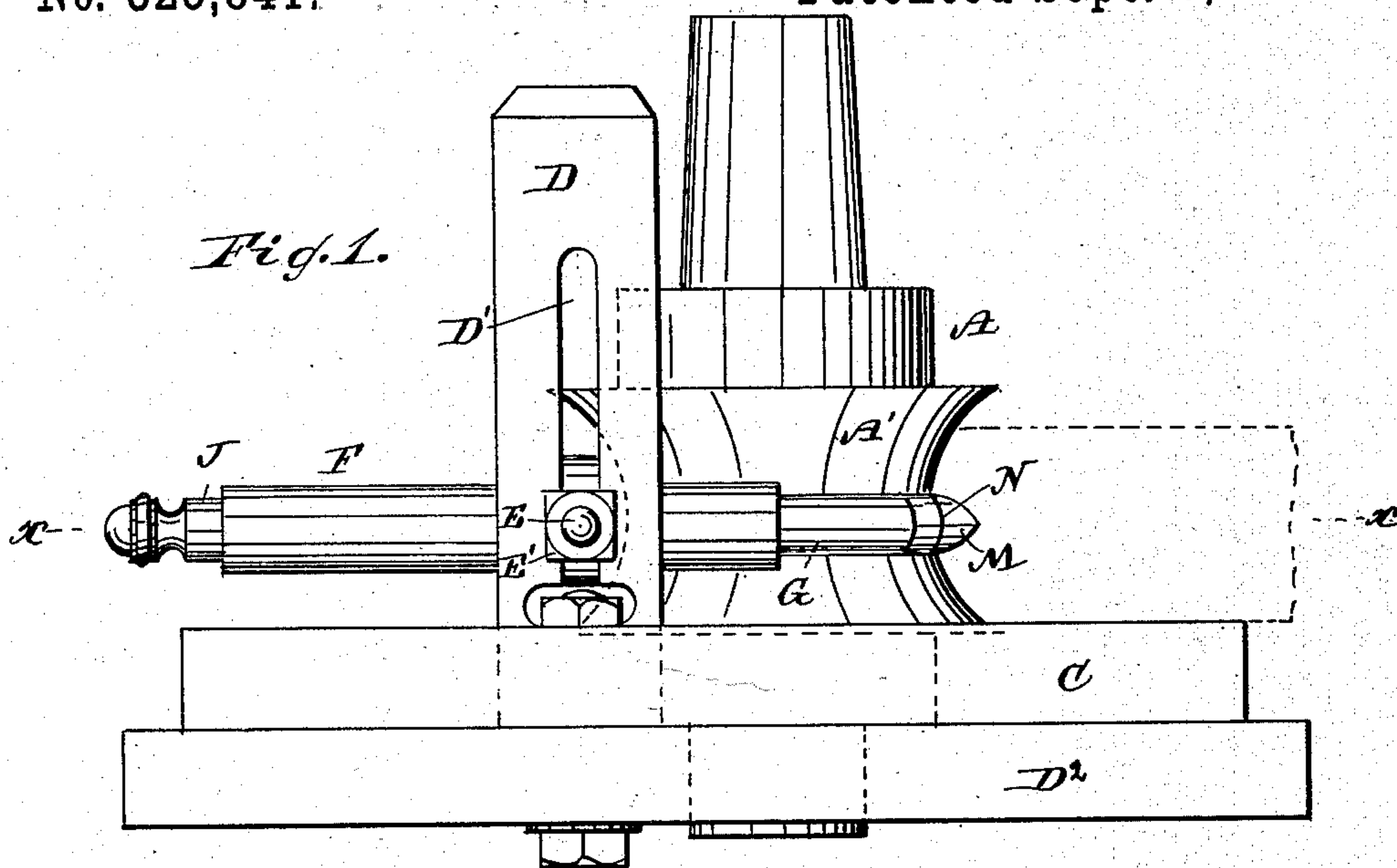


(No Model.)

H. D. JEFFREY.
MACHINE FOR MAKING FELLIES.

No. 325,841.

Patented Sept. 8, 1885.



WITNESSES:

Theo. G. Porter.
C. Sedgwick

INVENTOR:

H. D. Jeffrey

BY

Munn & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

HENRY D. JEFFREY, OF WINONA, MINNESOTA, ASSIGNOR TO HIMSELF, CALVIN A. BIERCE, AND FRANK B. HOLBROOK, ALL OF SAME PLACE.

MACHINE FOR MAKING FELLIES.

SPECIFICATION forming part of Letters Patent No. 325,841, dated September 8, 1885.

Application filed May 8, 1885. (No model.)

To all whom it may concern:

Be it known that I, HENRY D. JEFFREY, of Winona, in the county of Winona and State of Minnesota, have invented a new and Improved Machine for Making Spoke-Tenon Seats on Fellies, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved machine for forming seats on the inner edges of fellies or on any stick around the mortises in the fellies, the tenons on the spokes passing into the parts of the mortises and the end parts of the spokes at the bases of the tenons fitting against the seats.

The invention consists in the combination, with a cutter-head, of a standard and gage-rod held on the standard parallel with the plane in which the cutter-head revolves.

The invention also consists in parts and details and combinations of the same, as will be fully set forth hereinafter.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a side view of my improved machine for making spoke-tenon seats on fellies. Fig. 2 is a sectional plan view of the same on the line *x x*, Fig. 1.

The cutter-head A, which is revolved by any suitable mechanism, has an annular groove, A', the shape of which in cross-section is the same or about the same as the desired shape of the inner edges of the fellies. The cutter-head revolves directly above a false table or platform, C, on the shaper-table D².

A standard, D, having a longitudinal slot, D', projects upward from the false table C near the cutter.

An eyebolt, E, is passed through the slot D', and is held in place by a nut, E', screwed on it.

In the eye of the bolt E a tube, F, is held, in one end of which a sliding pin or bolt, G, is held, which is pressed outward by a spiral spring, H, interposed between the inner end of the sliding bolt or pin G and a button, J, J, in the end of the tube F.

A pin, K, held in the tube F, is passed through a longitudinal slot, L, in the bolt or pin G.

On the outer end of the bolt or pin G a laterally-projecting head, M, is formed, which is tapered and has its inner edge beveled parallel with a tangential line of the cutter-head. The head M is provided with a recess or notch, N, as shown.

The felly-section O has an aperture or mortise, P, for receiving a tenon on the end of a spoke.

The machine is used in the following manner: The felly-section O is placed upon the false table C, the inner edge facing the cutter-head, and the head M passed into the inner end of the aperture or mortise P, the edge of said aperture or mortise being passed into the notch N. Then the felly-section is pushed in the direction of the arrow *a'* until the inner edge comes in contact with the grooved side of the cutter-head, whereby the bolt or pin G is pressed into the tube F and the spring H is compressed. The felly-section is then turned on the false table C in the direction of the arrow *b'*, so as to bring the entire inner edge in contact with the cutter. That part of the inner edge of the felly surrounding the aperture P cannot come in contact with the cutter on account of the head M, which prevents it, and thus that part of the felly is not rounded off and remains square, thus forming a seat for the end of the spoke. The wooden gages or patterns can thus be dispensed with, and accurate and true seats formed rapidly.

According to the width of the felly the eyebolt E must be adjusted higher or lower, so as to bring the head M on the bolt or pin G opposite the middle of the width of the felly. The offset formed by the notch N in the head M prevents slipping of the felly-section on the bolt or pin G.

The above-described device may also be provided for making tenon-seats on sleigh-runners, rockers, &c.

I am aware that a machine for making fellies has been provided with a mandrel having two dish-shaped toothed cutters, and with

gages on opposite sides of these cutters; also, that a cutter-head for molding-machines has been provided with vertical standards, on which slides a cross-piece carrying a spring, 5 to the outer end of which is secured a curved guard; and I do not claim such construction as of my invention.

Having thus described my invention, I claim as new and desire to secure by Letters 10 Patent—

1. The combination, with a cutter-head, of a standard, an eyebolt in the same, and a gage-rod held in the eye, substantially as herein shown and described.

15 2. The combination, with a cutter-head, of a standard, a tube held on the same, a gage-rod in the tube, and a spring interposed between the inner end of the said gage-rod and the closed end of the tube, substantially as 20 herein shown and described.

3. The combination, with a cutter-head having blades for cutting, of the standard D, the tube F, held on the said standard, and the bolt G, held in the said tube and provided at one end with a head, M, substantially as here- 25 in shown and described

4. The combination, with a cutter-head, of the standard D near the cutter-head, the tube F, held on said standard, the bolt G, having one end passed into the said tube; and the 30 head M on the other end, which head has a notch, N, substantially as herein shown and described.

HENRY D. JEFFREY.

Witnesses:

C. A. WILLIAMS,

R. B. HOLBROOK.