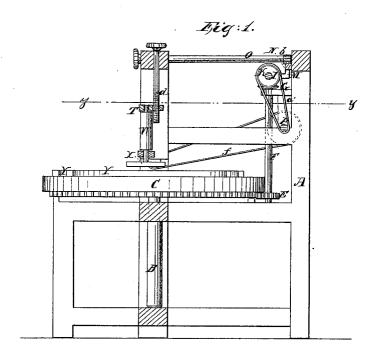
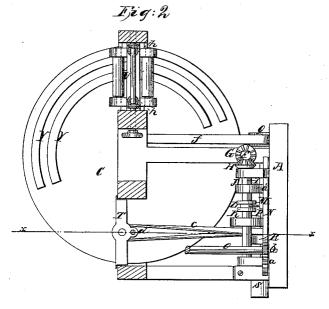
C. H. Denison, Making Fellies.

N 9 14,228.

Patented Feb. 12, 1856.





## UNITED STATES PATENT OFFICE.

C. H. DENISON, OF GREEN RIVERS, VERMONT.

## ROTARY PLANER FOR FELLIES.

Specification of Letters Patent No. 14,228, dated February 12, 1856.

To all whom it may concern:

Be it known that I, C. H. Denison, of Green Rivers, in the county of Windham and State of Vermont, have invented a new 5 and Improved Machine for Planing Fellies; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specifica-10 tion, in which-

Figure 1, is a vertical section of my improvement (x) (x) Fig. 2, showing the plane of section. Fig. 2, is a horizontal section of ditto, (y) (y) Fig. 1, showing the

15 plane of section.

Similar letters of reference indicate corre-

sponding parts in the two figures.

This invention relates to a new and improved machine for planing fellies, for the 20 wheels of carriages and other vehicles, and consists in the combination of a rotating bed and cutters, arranged as will be presently shown and described.

To enable those skilled in the art to make 25 and use my invention, I will proceed to describe its construction and operation.

A, represents a framing constructed in any proper manner to support the working

parts of the machine.

B, represents a vertical shaft fitted in the framing A, said shaft having a horizontal circular bed C, attached to it. To the under side of the bed C, an annular toothed projection D, is attached, said projection being 35 near the periphery of the bed. Into the projection D, a pinion E, gears, said pinion being on the lower end of a vertical shaft F, which has a bevel wheel G, on its upper end. The bevel wheel G, gears into a cor-40 responding wheel H, which is placed at one end of a horizontal shaft I, which has two loose pulleys J, K, upon it, said pulleys having belts (a') pass around them, which belts also pass around the shaft P, one of the belts (a') being a cross belt.

L, is a clutch placed on the shaft I, and moved back and forth thereon by a belt shipper M, which is attached to a horizontal sliding bar N, said bar having a rack 50 (a) on one end in which a pinion  $(\bar{b})$  on the

end of a shaft O, gears.

P, is the driving shaft placed below the

has two pllleys Q, R. upon it, and a driving pulley S, at one end.

T, represents a frame or gate which is fitted in the framing A, so as to be over the bed C, at its edge, and in line or nearly so with its center.

U, represents a frame or gate which is 60 also fitted in the framing A, so as to be over the edge of the bed C, at a point opposite to the frame or gate T, as shown clearly in Fig. 2.

The frame or gate T, has a vertical shaft 65 W, secured in it, to the lower end of which shaft, a cutter bar X, is attached provided with cutters at each end, the cutter bar being attached at its center to the shaft W. A belt (c) passes around the shaft W, and also 70 around the pulley R, on the shaft I. The frame or gate T, may be raised or lowered by a screw shaft (d).

The frame or gate U, has a horizontal cylindrical cutter head (e) within it, said cut- 75 ter head being rotated by a belt (f) which passes around the pulley Q, on the shaft P, and around a pulley (g) on the inner end of the cutter head, see dotted lines Fig. 2. The frame or gate U, may also be raised or 80 lowered by screw rods (h) (h) arranged in any proper manner.

Y, Y, represent fellies attached to the upper surface of the bed C, near its edge, as clearly shown in Fig. 2.

Operation: By turning the shaft O, the bar N, may be moved either to the right or left and the belt shipper M, may be made to connect either of the pulleys J, K, to the shaft I, as desired. The pulleys J, K, are 90 of different sizes and consequently enable a quicker or slower motion to be given the bed C, and also permit the bed to be rotated in reverse directions in consequence of one of them having a cross belt around it. 95 The fellies Y, Y, as the bed C, rotates pass underneath the cutter bar X, and leave their upper surfaces "roughened off" and are smoothed or finished by the cutter head (e) by giving the bed C, a reverse movement, 100 by connecting the pulley K, which has the cross belt around it, with the shaft I, the pulley J, at the same time being disconnected from said shaft.

The above machine has been practically 105 shaft I, and parallel with it. This shaft P, | tested and operates well. It saves a vast

deal of labor, is not expensive to manufacture, nor liable to get out of repair.

I do not claim the cutter head (e) nor the cutter bar X, for both have been previously used, but what I claim as new and desire to secure by Letters Patent, is,

The combination of the rotating bed C,

cutter head (e) and cutter bar X, arranged substantially as shown and described for the purpose specified. C. H. DENISON.

Witnesses:

CLARK BARNEY, STEPHEN SMITH.