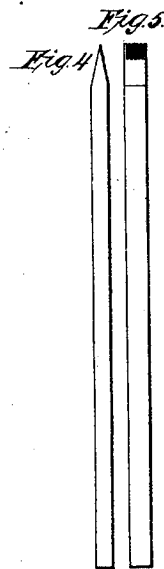
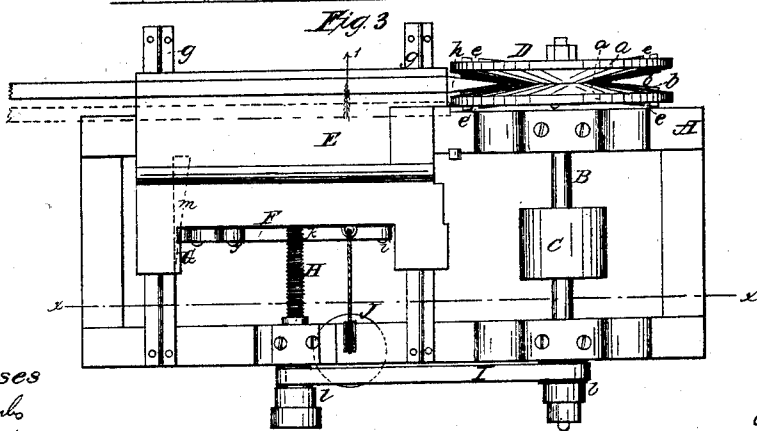
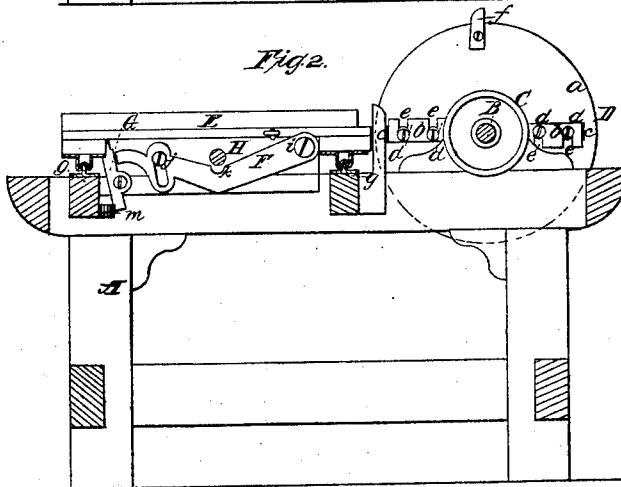
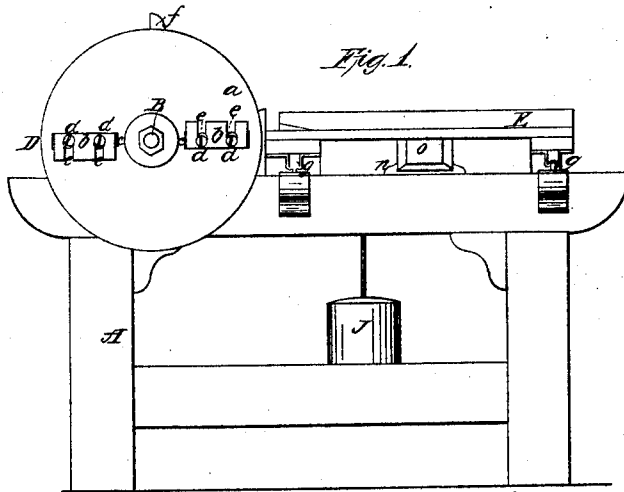


A. A. Wilder,

Making Hoops.

No 38,085,

Patented Mar. 31, 1863.



Witnesses
J. W. Coombs
L. W. Reed

Inventor
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UNITED STATES PATENT OFFICE.

A. A. WILDER, OF DETROIT, MICHIGAN, ASSIGNOR TO RUFUS BROWN,
OF SAME PLACE.

MACHINE FOR POINTING AND CHECKING HOOP-BOLTS.

Specification forming part of Letters Patent No. 38,085, dated March 31, 1863.

To all whom it may concern:

Be it known that I, A. A. WILDER, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Machine for Pointing and Checking Hoop-Bolts; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of my invention; Fig. 2, a side sectional view of the same, taken in the line *x x*, Fig. 3; Fig. 3, a plan or top view of the same; Figs. 4 and 5, detached views of a bolt.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to a new and useful machine for pointing the ends of the timber or bolts from which barrel-hoops are racked or split, and also for checking the ends of the timber or bolt preparatory to "racking" or splitting the same into hoops.

The invention consists in the employment or use of double-beveled rotary cutter-wheel, in connection with a feed-table and checking-knife, all arranged to operate substantially as hereinafter fully shown and described.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the framing of the machine, which may be constructed in any proper manner, and B is a shaft or mandrel, which is placed transversely on the framing A and has a driving-pulley, C, placed upon it, and also a cutter-wheel, D. The cutter-wheel D is formed of two parts, *a a*, each of which is circular, and has its inner side beveled, so as to form a V-shaped groove between them when adjusted together, as shown clearly in Fig. 3.

In each part *a* of the cutter-wheel there are secured two cutters, *b b*, which are of chisel form, and are fitted obliquely in slots *c* and secured in proper position by set-screws *d*, which pass through oblong slots *e* in the cutters and into the parts *a a*, as shown clearly in Fig. 1. The cutting-edges of the cutters *b* project a suitable distance beyond the beveled sides of the parts *a a* of the cutter-wheel D.

To the outer surface of the inner part *a* of

the cutter-wheel D there is attached a knife, *f*, the cutting-edge of which is rounded or curved, and projects beyond the edge of the part *a*, to which it is attached, as shown in Figs. 1 and 2.

On the framing A there are placed transversely two parallel ways, *g g*, on which a feed-table, E, is fitted, and allowed to work or move freely. At the front end of this feed-table there is a V-shaped projection, *h*, which fits into the V-shaped groove between the two parts *a a* of the cutter-wheel D. (See Fig. 3.) This projection *h* is not attached to the feed-table E, but to one of the ways *g*. To the right-hand side or edge of the feed-table E there is attached a bent bar, F, said bar being secured at one end to the table by a screw, *i*, the bar F near its opposite end having a curved slot in it, through which a screw, *j*, passes into the table, said screw serving as a guide. To the right-hand side of the table, and adjoining the free or disengaged end of the bar F, there is attached a button, G, which, when desired and properly adjusted, holds up the disengaged end of said bar F and keeps a nut or half-nut, *k*, at the angle of bar F, engaged with a screw, H, which is placed transversely on the framing A and is rotated by a belt, I, from the mandrel or shaft B, said belt passing around cone-pulleys *l l* on the mandrel B and screw H. (See Fig. 3.) To the front way, *g*, at its inner side, there is attached a beveled bar, *m*. This bar *m* is at the left-hand side of said way.

The operation is as follows: The bolts are cut or sawed out from the log in the usual or any proper way and of suitable size, and they are pointed by placing them on the table E and shoving one end in the beveled space between the two parts *a a* of the wheel D, the projection *h* supporting the end of the bolt, and the cutters *b b* pointing the end of the bolt, as shown in Fig. 4. During this operation of pointing, the feed-table E is stationary, as the half-nut *k* of the bar F is not in contact with the screw H. After the bolts are pointed they are checked at their pointed ends—that is to say, split at suitable distances apart corresponding to the number of the hoops to be racked or split from each bolt. This checking is done by means of the knife *f*, the bolt

being placed on the feed-table E and the latter adjusted to the right to the extent of its movement, which is determined by a stop, *n*, a pendant, *o*, of the table coming in contact with the stop, which is attached to the framing A. When the feed-table is thus adjusted, the bar F is elevated, so that the half-nut *k* will become engaged with the screw H, the bar being retained in that position by the button G, and the table E is fed to the left, as indicated by the arrow 1. The position of the bolt while being checked is indicated in blue in Fig. 3, the knife *f* making a cut at every revolution of the wheel D, and the screw H and half-nut *k* feeding the table and bolt along, so that the several cuts will be parallel with each other. When the last cut is made in the bolt, the half-nut *k* will be freed from the screw H in consequence of the button G being acted upon by the beveled bar *m*, and the table is brought back to its original position by a weight, J, and the bar F adjusted for a succeeding operation. The checks or splits in the bolt may be made at a greater or less distance apart by varying the speed of the wheel D and screw H, which is done by adjusting

the belt I on the cone-pulleys *ll*. A checked bolt is shown in Fig. 5.

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

1. The cutter-wheel D, formed of two parts, *a a*, beveled at their inner sides and provided with the cutters *b b*, in connection with a bolt-support or projection, *h*, fitted in the V-shaped recess between the parts *a a*, all arranged substantially as and for the purpose specified.

2. The feed-table E, with bar F attached, provided with a half-nut, *k*, in combination with the screw H, knife *f* on the cutter-wheel D, and the bevel-bar *m* and button G, or their equivalents, as and for the purpose specified.

3. The combination of the cutter-wheel D with the cutters *b b*, and knife *f* attached, feed-table E, screw H, bar F, provided with the half-nut *k*, the button G, and bevel-bar *m*, all arranged for joint operation as and for the purpose herein set forth.

A. A. WILDER.

Witnesses:

R. P. TOMS,

JOHN FULLER.