J. H. WHITAKER.

CUTTER-HEADS.

No. 181,230. Patented Aug. 15, 1876.

fig. 2.

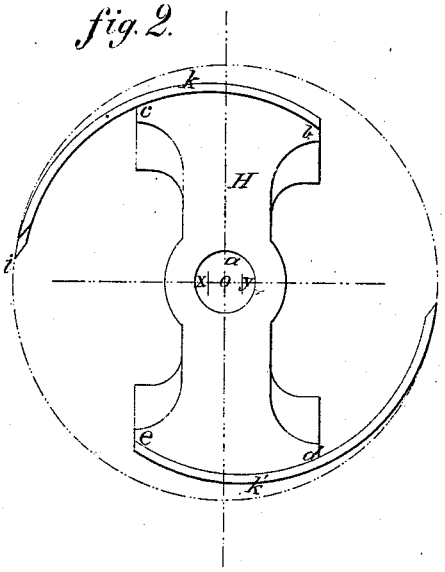


fig. 1.

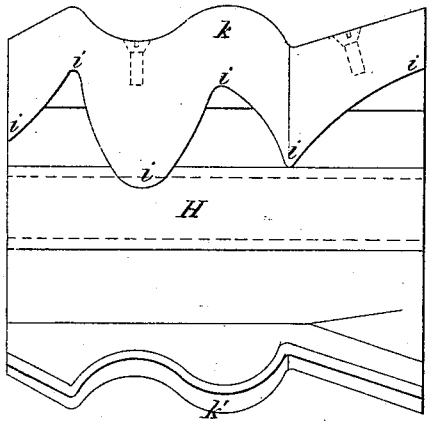
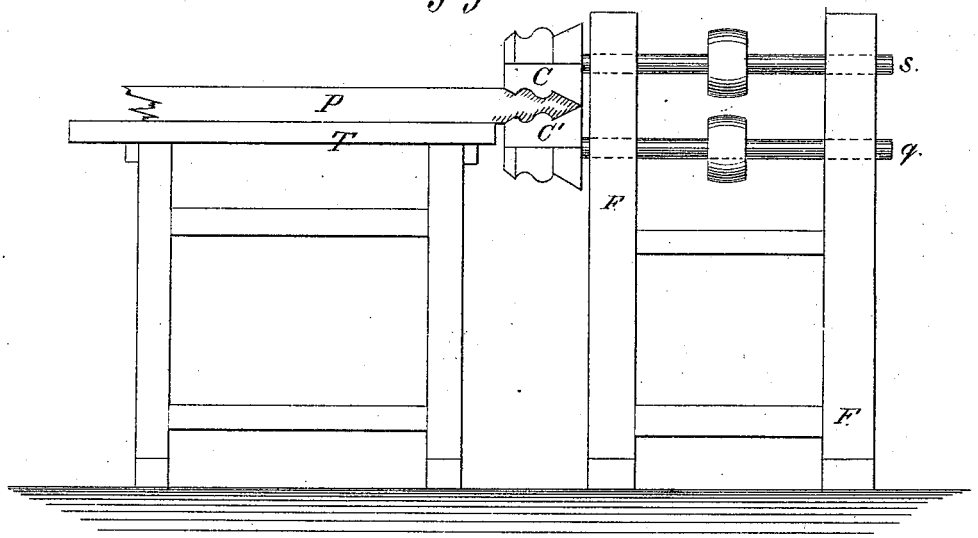


fig. 3.



Witnesses.
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John Buhms.

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UNITED STATES PATENT OFFICE.

JOHN H. WHITAKER, OF DAVENPORT, IOWA.

IMPROVEMENT IN CUTTER-HEADS.

Specification forming part of Letters Patent No. **181,230**, dated August 15, 1876; application filed September 9, 1875.

To all whom it may concern:

Be it known that I, JOHN H. WHITAKER, of Davenport, in the county of Scott and State of Iowa, have invented an Improvement in Cutter-Heads, of which the following is a specification:

My invention consists in the combination of a cutter-head with a series of circular knives fastened to the head eccentrically, the whole to be attached to a machine for pointing fence-pickets.

In the annexed drawing, Figure 1 represents a side view of the cutter-head with the knives fastened to it; Fig. 2, an end view of the cutter-head, showing the mode of fastening the cutters eccentrically to the center of rotation; Fig. 3, an illustration of the way of applying these cutters to the revolving arbors of a machine for cutting the points to pickets.

H represents a cast-iron cutter-head with a hole, *a*, through its center, through which passes a revolving shaft. The two outer surfaces *b c* and *d e* form arcs of circles, the centers of which are set eccentrically from the center of revolution in such a manner that for the surface *b c* the center is located at X, and for the surface *d e*, Fig. 2, the center is located at *y*.

In the drawing this eccentricity has been exaggerated, in order to make this point very clear, as the eccentricity in practice will be from one-eighth of an inch to three-sixteenths of an inch.

The knives *k* and *k'* have the same centers for their curvature as the respective surfaces *b c* and *d e*, upon which they are fastened by means of iron screws. The profiles of cross-sections of these two knives *k* and *k'* are of exactly the same shape as the points required to be cut on the wooden pickets.

In Fig. 1 is shown the cutting-edge *i i i i* of the knife, so as to make the edge cut on a bevel over the whole surface, and thus give the necessary draw to the cut, in order to prevent cross-grained wood from splitting. By means of the small eccentricities *o x* and *o y*, any required grinding or sharpening of the knives *k* and *k'* will not alter perceptibly the form of the cut.

In Fig. 3 I have represented, in a crude manner, the mode of applying these cutters. F F is intended for the frame of a tenon-machine. *s* and *q* are two revolving shafts on the outer ends of which are fastened the two cutters *c* and *c'*. T is a sliding table upon which rest the pickets P to be pointed.

What I claim as my invention, and desire to secure by Letters Patent, is—

The cutter-head H, with its eccentric surfaces *b c* and *d e*, in combination with the circular knives *k k'*, and the bevel cutting-edge *i i*, substantially as and for the purpose set forth.

JOHN H. WHITAKER.

Witnesses:

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