(No Model.)

H. S. BOYNTON.

CUTTER HEAD.

No. 294,006. Patented Feb. 26, 1884.

Fig. 1.

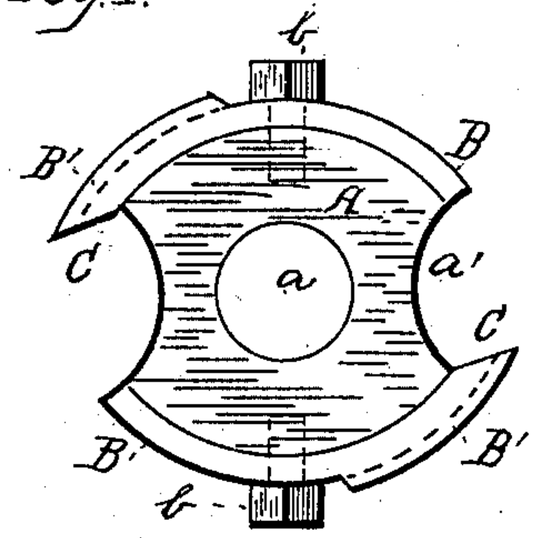


Fig 2.

Fig. 3.

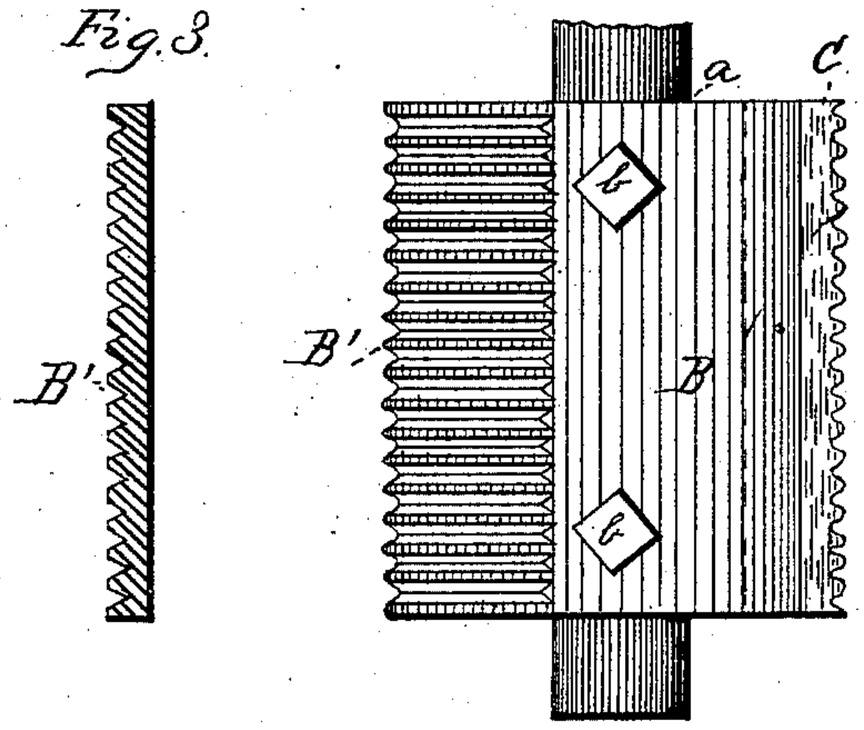
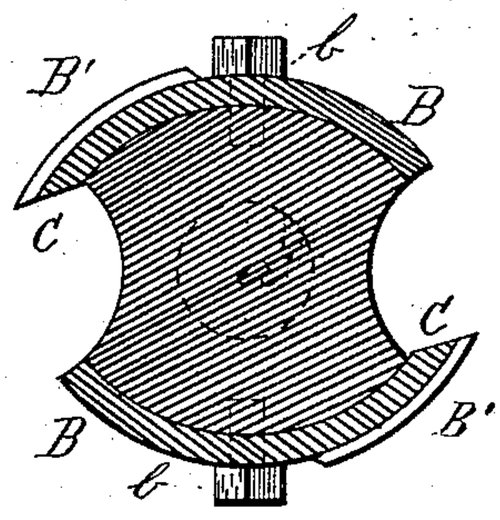


Fig. 4.



WITNESSES

W. A. Jones

C. J. Maskin

H. S. Boynton

INVENTOR

By W. T. Fitzgerald

Attorney

UNITED STATES PATENT OFFICE.

HORACE S. BOYNTON, OF OSHKOSH, WISCONSIN.

CUTTER-HEAD.

SPECIFICATION forming part of Letters Patent No. 294,006, dated February 26, 1884.

Application filed November 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, H. S. BOYNTON, a citizen of the United States, residing at Oshkosh, in the county of Winnebago and State of Wisconsin, have invented certain new and useful Improvements in Planer-Knives; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of this improvement is to produce a cutter or planer-knife that will cut smoothly across the grain, and also give better results in ordinary planing.

The invention consists in the peculiar features of construction, as will be hereinafter fully explained and specifically claimed, reference being had to the drawings herewith filed as part hereof, in which the same letters of reference denote the same parts throughout the several views.

Figure 1 is an end elevation, showing the knife attached to a corresponding cutter-head. Fig. 2 is top view of the same. Fig. 3 is a tranverse section of the planer-knife or cutter detached from the cutter-head. Fig. 4 is a vertical section.

A is the cutter-head, having convexed seats, to which the knives B B′ conform and are affixed by means of the screws *b*. The knife-plates have extra thickness in the front parts, where they are provided with a number of small V-shaped recesses and elevations on the outside, as shown at B′. By beveling the knife-plates from the inside, as shown at C, Figs. 1 and 4, a serrated cutting-edge will be obtained, as shown at C and B′, Fig. 2. The knife-plates may be slotted, in order that they may be moved forward for the purpose of equalizing their wear and regulating their projection over the concaves *a′* in the sides of the cutter-head A, which form clearances for the cuttings. The cutter-head A revolves on shaft or journals *a*, one of which should be sufficiently extended beyond the journal-box to receive and carry the usual pulley for driving the cutter-head. The knives B B′ may be made of any length desired, or several may be attached to the same sides of the cutter-head, and any breadth of cutting-edges thus obtained.

By reason of the serrations being on the outside of the knife-plates, instead of the inside, and the knife-edges being formed by the inward curve and outward bevel of the plates, keen, sharp cutting-edges will thereby be given to the serrations thus formed in the edge of the plates, which will engage with the lumber in a more perfect line, and the result will be a smoother finished surface than can be given to the lumber in the ordinary way.

Having explained the construction and operation of my improvement, what I claim as new, and desire to secure by Letters Patent, is as follows:

The curved plates having elevations on the outside, beveled to serrated cutting-edges from the inside, and curved to conform to cutter-head having convexed knife-seats, in combination with the latter, all constructed substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

HORACE S. BOYNTON.

Witnesses:
R. H. SAWYER,
A. H. READ.