(Model.)

J. BOYLE.

CUTTER HEAD.

No. 302,380. Patented July 22, 1884.

Fig. 1.

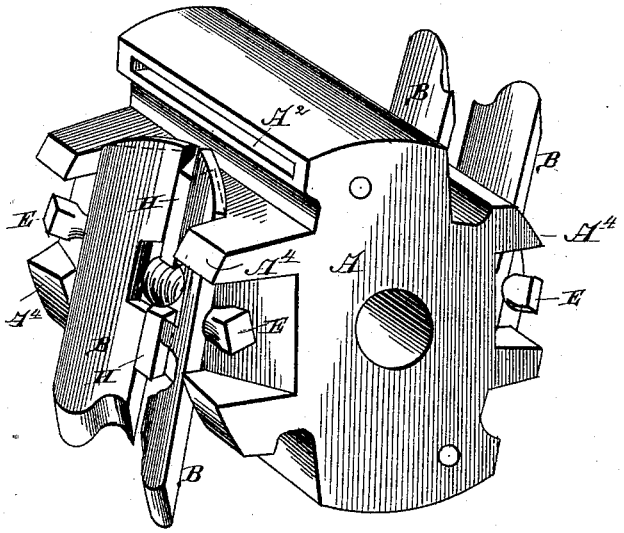


Fig. 2.

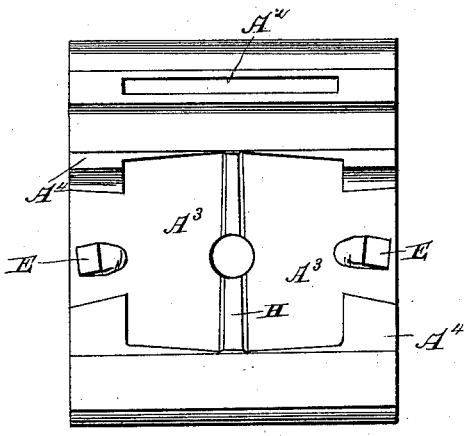


Fig. 3.

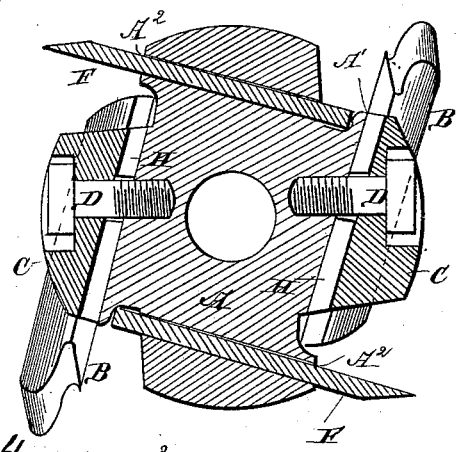
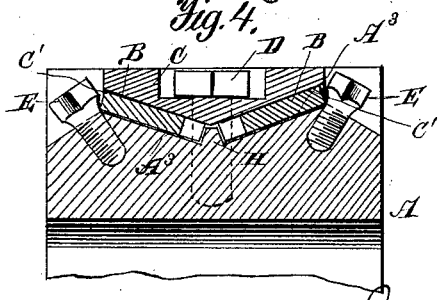


Fig. 4.



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JOSEPH BOYLE, OF OSWEGO, NEW YORK.

CUTTER-HEAD.

SPECIFICATION forming part of Letters Patent No. 302,380, dated July 22, 1884.

Application filed February 16, 1884. (Model.)

To all whom it may concern:

Be it known that I, JOSEPH BOYLE, of the city of Oswego, in the county of Oswego and State of New York, have invented a new and useful improvement in an article of machinery known as a "Sticker-Head," of which the following is a specification.

My invention relates to an improvement in cutter-heads; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claims.

The object of my invention is to provide a cutter-head that is adapted to have the cutting-knives secured thereupon at such an angle that their outer edges will be higher than their inner edges, whereby when the cutter-head is rotated the cutting-edges of the knives will gradually come in contact with the wood, and thus shear the work smoothly and evenly. Heretofore the knives have been placed upon the cutter-head parallel with the longitudinal axis thereof, in such a manner as to cut the wood at right angles. This manner of working the knives causes them to scrape the wood instead of cleanly cutting it, and produces imperfect work. This defect it is the purpose of my invention to avoid.

In the accompanying drawings, Figure 1 is a perspective of a cutter-head that embodies my invention, the clamping plate and screw being removed and a portion of the edge of one of the cutting-tools being broken away, so as to disclose the separating-flange. Fig. 2 is a side elevation of the same with the cutting-tools and clamping plate and screw removed. Fig. 3 is a vertical cross-section. Fig. 4 is a vertical longitudinal section.

A represents a cutter-head that is provided with peripheral seats A' A^2. The seats A' are of the ordinary construction, and are designed to secure the grooving-tools F. The seats A^2 are located intermediate between the seats A', and have inclined bearing-faces A^3, forming an obtuse angle, as shown. Between these inclined faces are formed flanges H, which serve to separate the beading-knives B at their inner lower edges, their outer upper edges resting against bearing-lugs A^4. Securing-plates C, that have inclined bearing-faces C', are placed upon the upper sides of the beading-knives, which plates C are secured to the cutter-head by means of set-screws D. The heads of these screws sink into circular recesses C^2, that are formed in the plates, so as not to project beyond the plates and strike against and mar the wood when the cutter-head is rotated.

The knives B may be adjusted longitudinally between the bearing-faces of the cutter-head and the securing-plates by loosening the screws D, as will be very readily understood. In order to clamp the beading-knives at their outer upper edges when correctly adjusted, I provide set-screws E, the heads of which bear upon the outer edges of the beading-knives, as shown.

If preferred, three sets of beading-knives may be employed and only one grooving-knife, instead of two of each, as here shown, or any other such variation as experience gained in the operation of the cutter-head may suggest.

Having thus described my invention, I claim—

1. A cutter-head having peripheral seats that are provided with bearing-faces for the reception of the cutting-knives, said bearing-faces extending at or nearly at a right angle to the longitudinal axis of the cutter-head, and being inclined transversely at an angle thereto, and flanges formed in the seats between the bearing-faces, so as to separate the knives at their lower edges, substantially as described.

2. The combination of a cutter-head having peripheral seats that are provided with bearing-faces for the reception of the cutting-knives, said bearing-faces extending at or nearly at a right angle to the longitudinal axis of the cutter-head, and being inclined transversely at an angle thereto, and flanges formed in the seats between the bearing-faces, so as to separate the knives at their lower edges, with screws having enlarged heads, said screws entering the cutter-head and clamping the outer edges of the cutting-knives, substantially as described.

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