

S. P. RANDOLPH.
Cutter-Head.

No. 165,868.

Patented July 20, 1875.

Fig: 1.

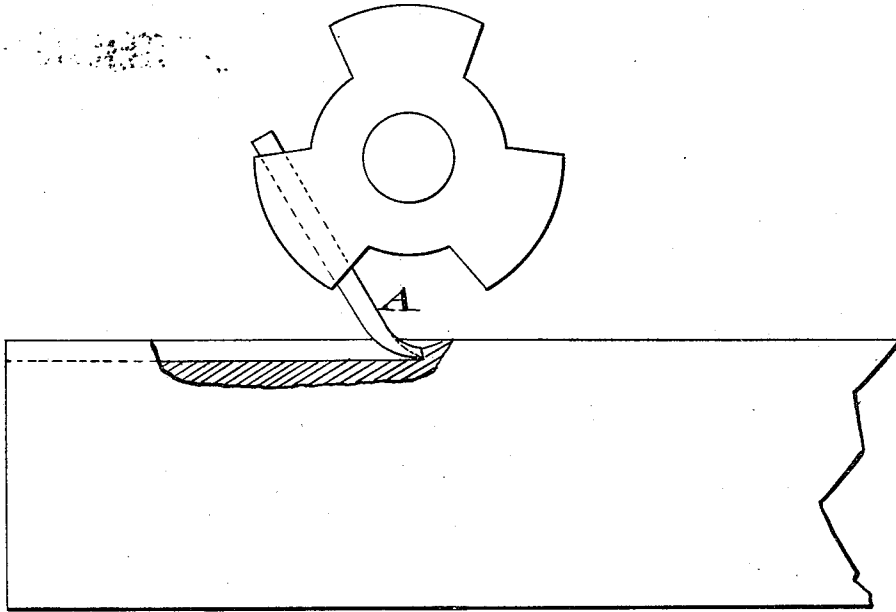


Fig: 2.

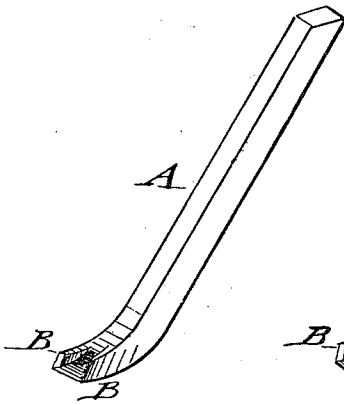


Fig: 3.

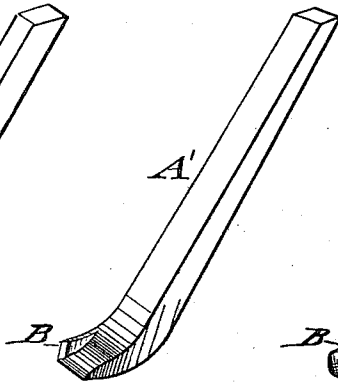


Fig: 4.

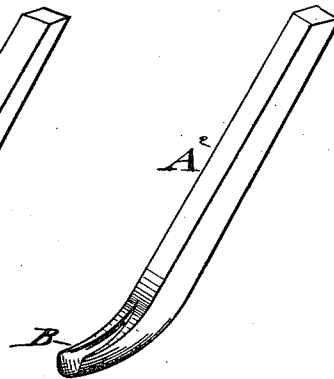
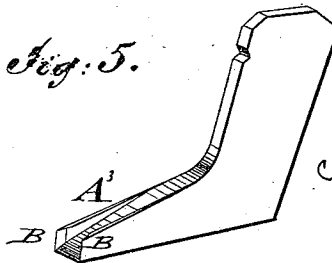


Fig: 5.



WITNESSES:

Chas. Nida
A. F. Tury

INVENTOR:

S. P. Randolph
BY *Munnell*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

SIMON P. RANDOLPH, OF TEHAMA, CALIFORNIA.

IMPROVEMENT IN CUTTER-HEADS.

Specification forming part of Letters Patent No. **165,868**, dated July 20, 1875; application filed March 20, 1875.

To all whom it may concern:

Be it known that I, SIMON P. RANDOLPH, of Tehama, in the county of Tehama and State of California, have invented a new and useful Improvement in Cutter-Heads, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side view of a cutter-head with my improved matching cutter or knife; Fig. 2, a perspective view of the cutter. Figs. 3 and 4 are perspective views of modified shapes of cutters, as used respectively for tonguing and grooving the boards; and Fig. 5 shows the same principle applied to a saw-tooth.

Similar letters of reference indicate corresponding parts.

My invention relates to an improved matching cutter or knife for rabbeting-machines, by which a great amount of work may be accomplished without requiring frequent sharpening for keeping the grooves and tongues in proper size. The knives make a clean cut without splintering the edge, and may be applied to any kind of cutter-head in use without difficulty.

The invention will first be described in connection with drawing, and then pointed out in the claim.

In the drawing illustrating my invention, A represents my improved matching cutter or knife, which is curved at the forward end, and made with two lips, B, for cutting the groove part of the matching boards. The forward curve of the cutter causes the cutting-edge to strike the wood square and avoid

scraping. The shape of the cutting-edge is angular, as in Figs. 2 and 3, or it may be rounded off, as in Fig. 4, according to the form of the tongue and groove desired to be produced. This shape of cutters requires less frequent resharpening, as the cutting-edge, in wearing out, retains the size of the tongue and groove to be cut, while in the old style of cutters the tongue would get larger and the groove smaller with the dulling of the edge. These curved and lip-shaped cutters A A¹ A² A³ cut readily in cross-grained or knotty timber without slivering the edge or choking the machine. The cutters may be run effectively for considerable length of time, cutting at both edges and at the point, and requiring less attendance and skill, when once set in the cutter-head, than the present matching-knives.

The same shape of cutter, having front part curved or inclined toward the point of work with cutting side lips, may be employed for saw-teeth with similar advantage, as shown in Fig. 5.

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

The end-turned matching and flooring cutter A, having on end side lips and angular edge, as shown and described, for the purpose specified.

SIMON P. RANDOLPH.

Witnesses:

W. E. GREENE,
H. P. COWLES.