

C. P. BLAVIER.  
Rattan-Cutter.

No. 217,855.

Patented July 29, 1879.



FIG. 2.



FIG. 1.

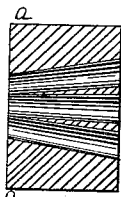


FIG. 4.

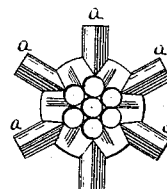


FIG. 3.

WITNESSES.

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*by H. W. Dennis,*  
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# UNITED STATES PATENT OFFICE.

CLOVIS PIÉROTIN BLAVIER, OF PARIS, FRANCE.

## IMPROVEMENT IN RATTAN-CUTTERS.

Specification forming part of Letters Patent No. **217,855**, dated July 29, 1879; application filed March 31, 1879.

*To all whom it may concern:*

Be it known that I, CLOVIS PIÉROTIN BLAVIER, of Paris, in the Republic of France, have invented a new and useful Improvement in Rattan-Cutters, of which the following is a specification.

The invention consists in an improvement in tubular knives used in clusters for cutting or trimming rattan.

Hitherto, in making a cluster of tubular knives from or in a single block or bar of steel, the holes have been bored through the block or bar as near to each other as was practicable, with their axes in parallel lines, and at the end of the block designed for the cutting end the steel left between the holes, as well as the steel around the cluster, has been filed to a cutting-edge. The difficulty with this construction has been that where the holes were far enough apart to leave sufficient strength in the block or bar their diameters have been larger at the cutting ends than throughout the remainder of the tubes, making it necessary to pull each divided strand through a hole having a diameter smaller than its own. I have remedied this difficulty by boring the holes in the block or bar of steel so that their axes diverge, substantially as shown in the accompanying drawings, whereby I am enabled to give to the hole a diameter constantly increasing from the cutting end to the rear end of the tool.

In the drawings, Figure 1 is a front view of a cutter embodying my invention. Fig. 2 is a side elevation. Fig. 3 is a front elevation upon an enlarged scale; and Fig. 4 is a sectional

elevation upon an enlarged scale, showing the divergence of the axes and the increase in the diameter of the tubes.

In making my cutter, the holes are bored from the rear end of the block of steel to the end which is to become the cutting end, and are then tapered, as shown. If the holes do not run into each other so as to give the required cutting-edges to the steel between them, the filing necessary therefor does not leave the holes at their cutting-edges substantially any larger than at any other place. The steel surrounding the cluster is then brought to a cutting-edge by filing; but in practice I leave upon the outside of the finished tool a number of separating-fins or cutting-spurs, which are sharpened at the cutting end of the tool, as shown. These spurs in the drawings are marked *a*. Their purpose is to divide the enamel into strands at the same time that the circular cutters take out and divide the core. They serve also to strengthen the tool; but they form no part of my invention, except when used with a cluster of cutters having the characteristics hereinbefore described.

I claim—

A cluster of tubular tapering cutters with diverging axes, and whose adjacent sides intersect so as to form common cutting-edges, substantially as described, for the purpose specified.

CLOVIS PIÉROTIN BLAVIER.

Witnesses:

ROBT. M. HOOPER,  
ALFRED H. GROVES.