A. L. Sweet,

Cutter Head.

No. 113,464. Patented Apr. 4. 1871.

Fig. 1.

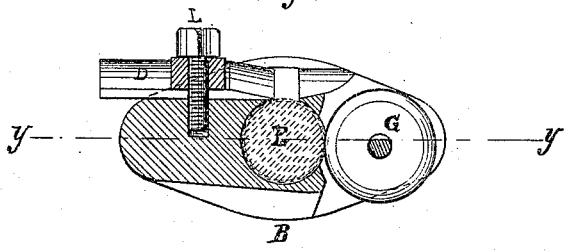


Fig. 2.

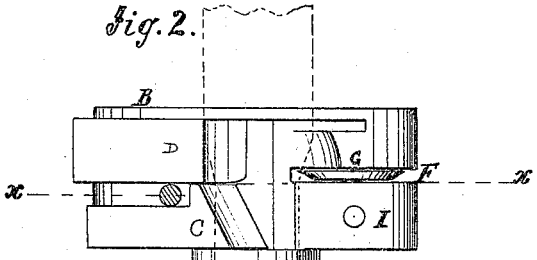


Fig. 4.

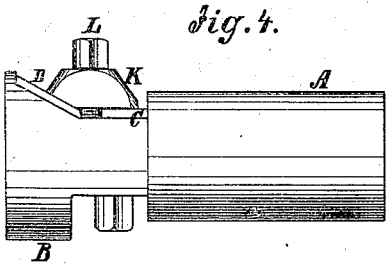


Fig. 5.

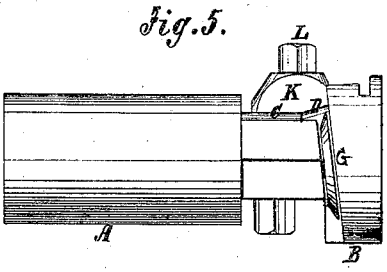
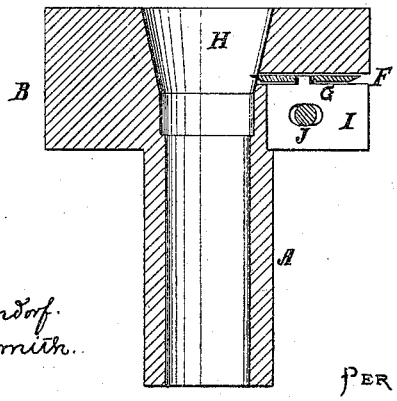


Fig. 3.



Witnesses:
A Bennett Kendorf.
Wm H. C. Smith.

Inventor:
A. L. Sweet.
PER
Attorneys.

United States Patent Office.

ALONZO LOUIS SWEET, OF NORWICH, CONNECTICUT.

Letters Patent No. 113,464, dated April 4, 1871.

IMPROVEMENT IN CUTTER-HEADS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ALONZO LOUIS SWEET, of Norwich, in the county of New London and State of Connecticut, have invented a new and useful Improvement in Cutter-Head; and I do hereby declare that the following is a full, clear, and exact description thereof which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to a new and useful improvement in cutter-heads for cutting or forming round rods of wood for hanging window-curtains and for various other purposes; and

It consists in a revolving feeding-disk or cutter, and mode of holding and adjusting the same, and the manner of forming and holding the shaping-cutters, and in the arrangement and combination of parts, as hereinafter more fully described.

In the accompanying drawing—

Figure 1 represents a horizontal section of the cutter-head taken on the line *x x* of fig. 2.

Figure 2 is a top view.

Figure 3 is a longitudinal section of fig. 1 on the line *y y*.

Figures 4 and 5 are views of the opposite sides of the head, both views showing the mode of holding the shaping-cutters, and the latter the inclined position of the revolving disk-feeder.

Similar letters of reference indicate corresponding parts.

A is the shank of the cutter-head, which fits a hollow spindle which drives the head.

B is the head proper, on which the shaping-knives or cutters are supported.

There are two of these knives or cutters, C and D, confined to the head by a single screw, as seen in figs. 4 and 5.

It will be noticed that the cutter D stands at an angle to clip off the wood and bring the stick to near the required size, while the face or edge of the other cutter stands parallel with the rod and gives the latter its true size and shape and a smooth surface.

E, fig. 2, represents the stick which is being cut. These sticks are usually sawed out square, and are cut into a round shape in passing through the head.

In a slot, F, formed in the head I place the revolving feeding cutter-disk G.

As the stick of wood is introduced into the head through its funnel-shaped mouth H the edge of the feeding-cutter G works on to it as a screw, forming a spiral cut around the stick. This is done by virtue of the angle at which the cutter is placed with regard to the line of motion, as plainly seen in fig. 5. The stick is therefore forced up to the shaping-cutters C D by a continuous screw-thread.

I is a block of metal, having a lug or pivot upon its side, upon which the feeding-disk G revolves.

The block I is held to the head by the screw J, and the disk is made adjustable so as to penetrate the wood more or less by means of the slot-hole in the block through which the screw J passes, (seen in fig. 3.)

It will be seen that the shaping-cutters C D are fastened or held to the head by the thick angular washer K.

The fastening-bolt L passes down between the two cutters, so that the latter are made without slots, which greatly simplifies and cheapens them, while they are held and adjusted quite as effectually and completely as they could be if made with slots in the ordinary manner.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

1. The revolving feeding-disk or cutter G, in combination with a cutter-head, arranged and operating substantially as and for the purposes shown and described.

2. The combination of the feeding-disk G, supporting-block I, cutters C and D, and washer with the head B, arranged and operating substantially as and for the purposes described.

ALONZO L. SWEET.

Witnesses:
W. S. PALMER,
JOHN H. FORD.