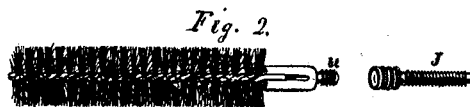
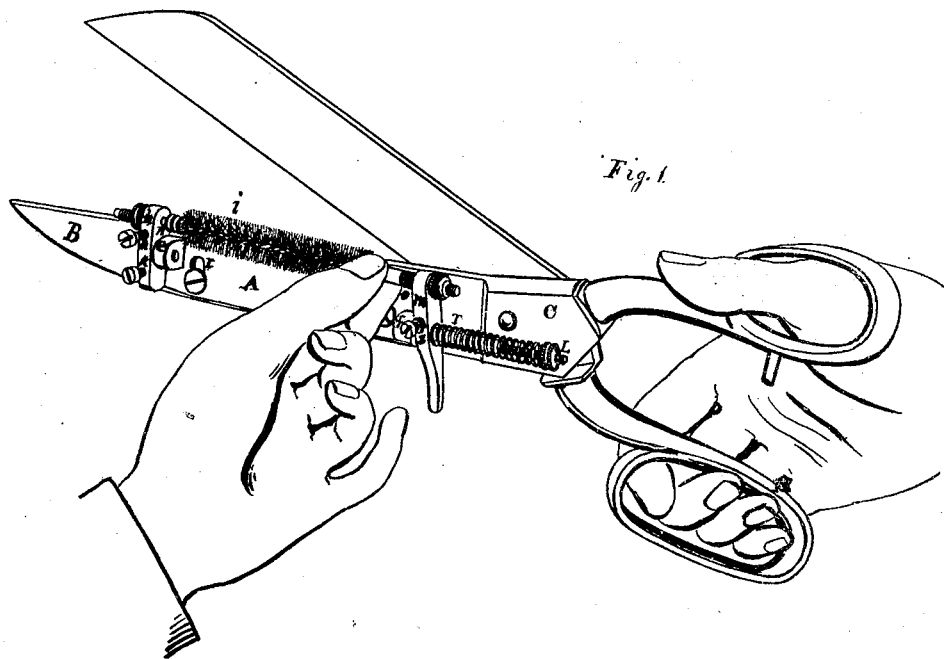
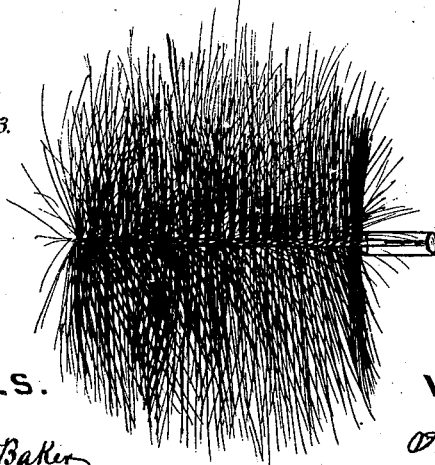


*A. G. Kisley,*  
*Brush Trimmer.*  
*No. 110,073.      Patented Dec. 13, 1870.*



*Fig. 3.*



WITNESSES.

*William Baker*  
*Arthur Gilman*

INVENTOR.

*Arthur G. Kisley*

# United States Patent Office.

ARTHUR G. RISLEY, OF UTICA, NEW YORK.

Letters Patent No. 110,073, dated December 13, 1870.

## IMPROVEMENT IN DEVICES FOR TRIMMING CYLINDRICAL BRUSHES.

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

I, ARTHUR G. RISLEY, of the city of Utica, in the State of New York, have invented a certain device to be attached to a pair of Shears in order to facilitate the Trimming of Cylindrical Brushes, designed to be used on the ends of ram-rods for sponging out guns, and for other uses.

The device and its operation are pretty clearly shown in Figure 1 of the annexed drawing.

It consists in an attachment which is screwed to the lower blade B of the shears through the base-plate A.

From this plate are projected the two studs *e* and *f*.

To the back of the stud *e* is placed the short cross-bar *h*, held to the stud by a screw, having a wrist, on which the bar moves loosely, so that the upper end of the bar, that holds the center *n*, may be adjusted to the required diameter of the brush.

When so adjusted the bar *h* is fixed by the set-screws *k k*.

The whole apparatus may also be raised or lowered by means of the elongated holes *r* in the base-plate, through which the attachment is screwed to the shears.

The center *n*, therefore, when thus adjusted, has its proper distance from the cutting-blades of the shears, and is stationary during the operation.

But the center *o*, holding the opposite end of the brush, is movable, and goes with the upper end of the flexible bar *m* to and from the cut of the shears.

The lever, moving loosely on the wrist-pin *I*, allows the brush *i* to be drawn away from the shears as the brush is turned, and then carried up to them again for another clip. This manipulation of moving and turning the brush is performed by the left-hand

thumb and finger, as shown in the drawing, while the shears are operated by the right hand, as is also shown.

To prevent the vibrating end of the brush coming too near the cut of the shears, and to stop it at the right point for cutting, the stop-screw *S* is inserted in the lever *m*, which, protruding in the rear, meets the blade of the shears at the exact point of the movement for this purpose.

The spiral spring *T*, surrounding the wrist-pin *L*, allows a lateral movement to the vibrating lever *m*, to admit of the alternate insertion and removal of the brush from its centers.

The brush is made in the usual manner preparatory to the trimming, and is shown in Figure 3.

Figure 2 shows the finished brush, and, in connection with the center-pin *J*, shows an alternative and reverse mode of constructing the centers.

*J* answers to the center *o* in fig. 1, and is simply a reversal of the male and female parts of the connection, which is necessary when the spindle *u* of the brush is made to screw into instead of over the end of the ram-rod.

Having thus described my invention,

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

The device I have described, consisting of the base-plate *A*, the stationary center *n*, and the movable center *o*, with its flexible bar *m*, for holding the brush, in combination with the shears, as described, the whole being connected, combined, and operating substantially as herein set forth.

Witnesses:

ARTHUR G. RISLEY.

WILLIAM BAKER,  
DEXTER GILLMORE.