

(No Model.)

W. LEWIS.
KNOT PICKER FOR BRUSH MAKERS.

No. 470,003.

Patented Mar. 1, 1892.

FIG. 1.

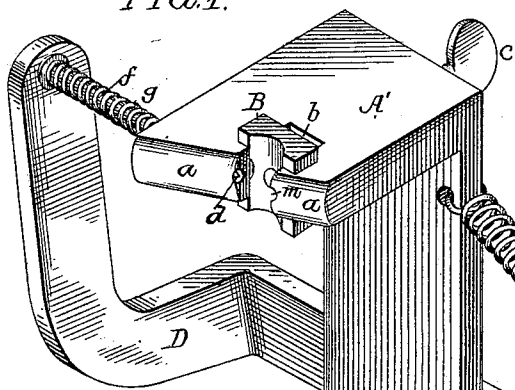


FIG. 2.

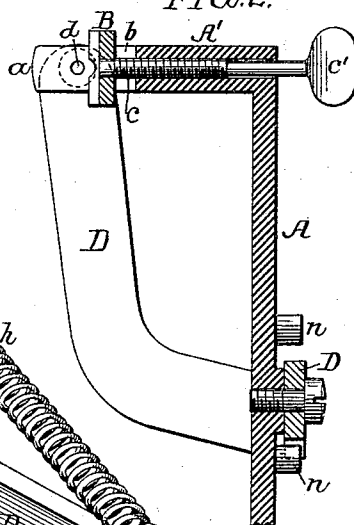


FIG. 3.

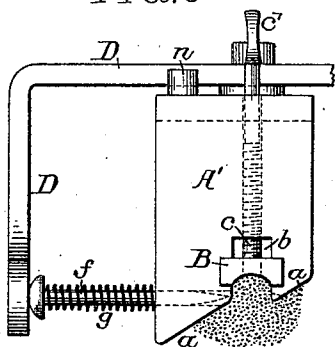


FIG. 5.

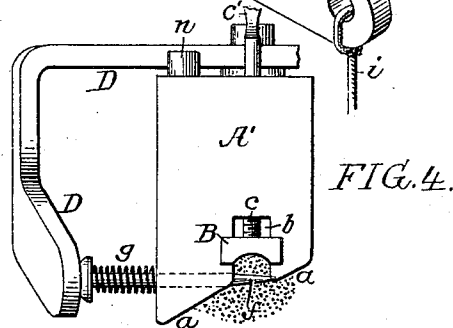
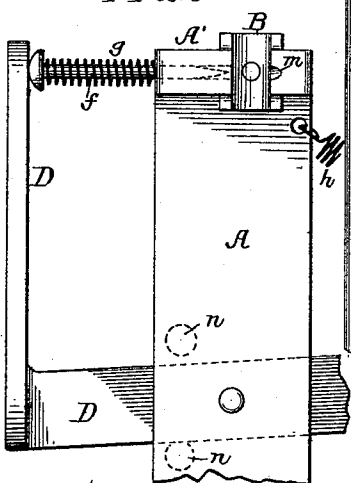
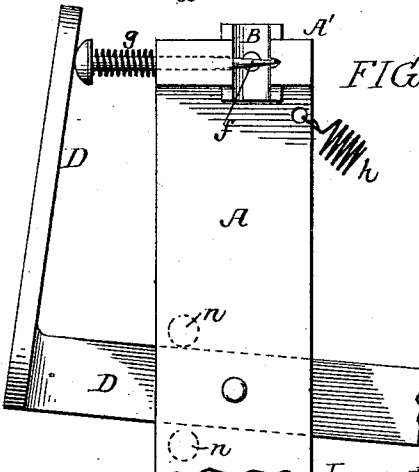


FIG. 4.

FIG. 6.



Witnesses:
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UNITED STATES PATENT OFFICE.

WALTER LEWIS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO GEORGE T. TURNER, OF SAME PLACE.

KNOT-PICKER FOR BRUSH-MAKERS.

SPECIFICATION forming part of Letters Patent No. 470,003, dated March 1, 1892.

Application filed May 21, 1891. Serial No. 393,598. (No model.)

To all whom it may concern:

Be it known that I, WALTER LEWIS, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented an Improved Knot-Picker for Brush-Makers, of which the following is a specification.

The object of my invention is to provide a simple and efficient device known as a "knot-picker" for selecting from a mass of bristles knots or bunches of a given size to be used in the manufacture of brushes. This object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a knot-picker constructed in accordance with my invention. Fig. 2 is a transverse section of part of the same. Figs. 3 and 4 are plan views of the knot-picker, the parts being shown in different positions in the two views; and Figs. 5 and 6 are front views showing the parts respectively in the positions illustrated in Figs. 3 and 4.

My improved knot-picker comprises, essentially, a pocket for the reception of bristles and a separating-pin movable back and forth across the mouth of said pocket, so that when it is moved forward it confines the bristles in the pocket and separates them from the rest of the mass and when withdrawn permits of the ready removal of the knot or bunch of bristles from the pocket for application to the brush and the ready insertion of a fresh mass of bristles to form the next knot or bunch. The pocket is preferably provided with an adjustable base-block, so that its capacity can be varied and knots or bunches of different sizes thereby produced.

In the drawings, A represents a standard adapted to be secured to any suitable bench or other support and bent forward at the upper end so as to form a head A', with beveled front edge *a*, the continuity of which is interrupted by the formation of a recess *b* in the head, as shown in Figs. 1, 3, and 4. In this recess is guided a block B, having, by preference, a curved recess in its face, this block being swiveled to the front end of a set-screw *c*, which is adapted to a threaded opening in the head A' and has at the outer

end a head *c'*, whereby it may be readily manipulated, so as to advance or retract the block B and thereby vary the distance of said block from the outer edge *a* of the head, and thus likewise vary the depth of the pocket formed by the recess *b* and block B for the reception of the bristles which are to constitute the knot or bunch.

In a transverse opening *d* in the head A' is guided a pin *f*, which is acted upon by a spring *g*, tending to retract it, but is also under the influence of the bent and upturned end of a lever D, pivoted to the standard A and acted upon by a spring *h*, tending to retract the upturned end of the lever and thus permit of the retraction of the pin *f* by the spring *g*. To the outer end of the lever D, however, is connected a cord or wire *i*, which leads to any suitable operating device—such as a foot-treadle, knee-lever, or the like—whereby the lever D may be vibrated, so as to cause its upper end to act upon the pin *f* and project the same. The pin *f* occupies such relation to the recess *b* and to the inclined front edge *a* of the head A' that when said pin is retracted, as shown in Figs. 1 and 3, its point is within the opening *d*. Hence when a mass of bristles is held in the hand and is pressed against the face *a* of the head A' a portion of these bristles will enter the pocket formed by the recess *b* and block B, as shown in Fig. 3. When the pin *f* is projected, it crosses the mouth of the pocket, the point of the pin entering a recess *m* in the face of the head at the outer side of the pocket, so that between the pin and the block B, forming the bottom of the pocket, is confined a mass of bristles, which is separated from the bulk of the mass, and when the latter is removed a knot or bunch is confined in the pocket, and this knot or bunch can on the withdrawal of the pin *f* be readily removed by the thumb and finger of the same hand which carries the main mass of bristles, and can be applied to the brush-block in any of the usual ways or by any of the usual forms of machinery. By combining the transverse separating-pin with the head having a recess and an inclined or beveled front face the point of the pin when projected across the pocket for

receiving the bristles is flush with the beveled face of the head beyond the pocket, so that all of the bristles beyond the pin can be readily removed by carrying the mass sidewise. In
 5 other words, when the pin *f* is projected across the mouth of the pocket it forms, in connection with the beveled face of the head, a substantially flush surface without any recess or depression to catch and retain any portion of
 10 the bristles not actually confined in the pocket by the pin.

The adjustment of the block B by means of the set-screw *c* provides for varying the depth of the pocket for receiving the bristles,
 15 so that knots or bunches of any desired size can be readily produced.

Suitable stop-pins *n n* on the back of the standard A serve to limit the movement of the lever D, and thus prevent any undue pro-
 20 jection of the separating-pin *f*.

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

1. The combination, in a knot-picker for brush-makers, of the head having a beveled
 25 front end with recess therein forming a bristle-receiving pocket, and a separating-pin guided transversely so as to be projected across the mouth of said pocket, said pin when pro-

jected forming, in connection with the beveled end of the head, a substantially flush bearing-surface for the mass of bristles outside of the pocket, substantially as specified. 30

2. The combination, in a knot-picker for brush-makers, of the head having a recess with an adjustable block forming the bottom
 35 of the bristle-receiving pocket, and a separating-pin movable transversely across the mouth of the pocket, whereby the mass of bristles in the pocket is confined between the adjustable base-block and the pin and is separated from the mass of bristles beyond the
 40 pocket, substantially as specified.

3. The combination of the head having a recess and transversely-guided separating-pin for closing the mouth of said recess, a spring
 45 acting on said pin to retract the same, and a lever acting on the pin to project it, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of
 50 two subscribing witnesses.

WALTER LEWIS.

Witnesses:

EUGENE ELTERICH,
 HARRY SMITH.