F. NORRIS.

Knob Patch Cutters.

No. 152,674. Patented June 30, 1874.

Fig: 2

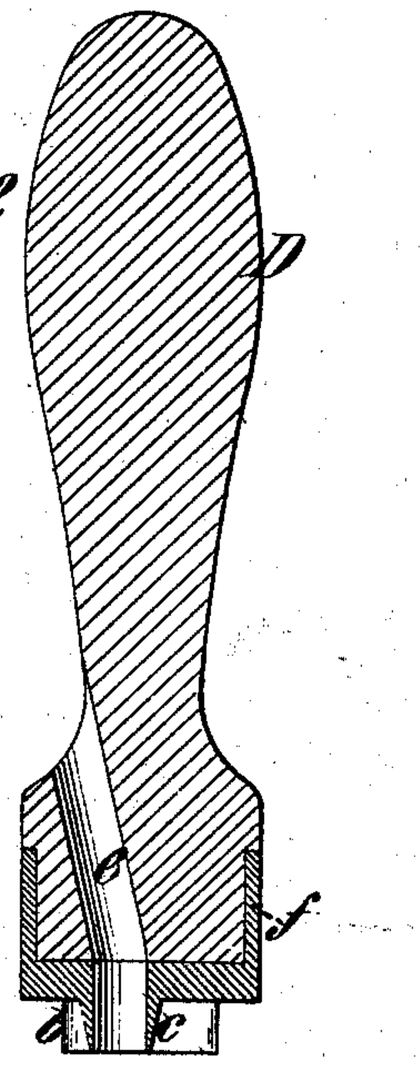


Fig: 1

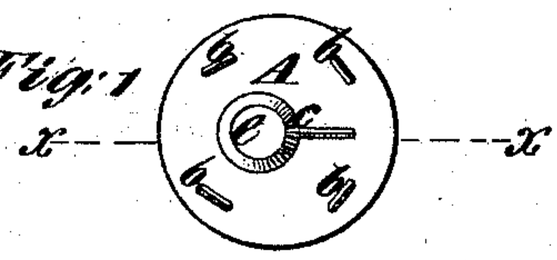
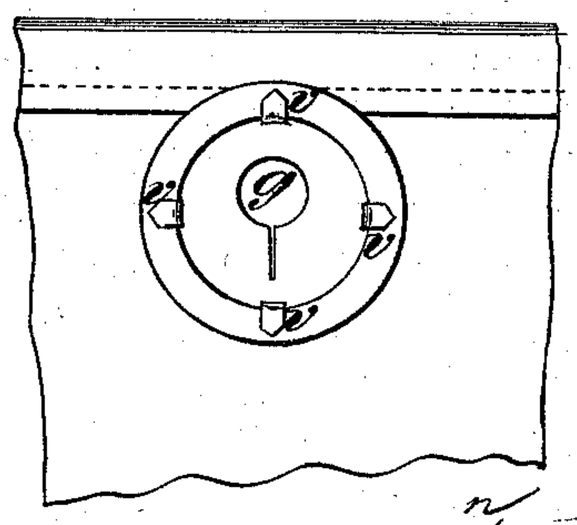


Fig: 3



Witnesses:
Michael Ryan
Fred. Haynes

Inventor
Frederick Norris
by his Attorneys
Brown & Allen

UNITED STATES PATENT OFFICE.

FREDERICK NORRIS, OF WAPPINGER'S FALLS, NEW YORK.

IMPROVEMENT IN KNOB-PATCH CUTTERS.

Specification forming part of Letters Patent No. **152,674**, dated June 30, 1874; application filed March 3, 1874.

To all whom it may concern:

Be it known that I, FREDERICK NORRIS, of Wappinger's Falls, in the county of Dutchess and State of New York, have invented an Improved Knob-Patch Cutter, of which the following is a specification:

The knob-patches of carriage-tops are frequently strengthened by a ring consisting of two pieces, to one of which are attached pins, which, passing through apertures punctured around the knob-hole, are, on the other side of the material, clinched down upon the other portion of the ring.

My invention consists in a punch of peculiar construction for the simultaneous punching of the knob-hole and of the holes for the pins of such strengthening-ring.

In the drawing, Figure 1 is a face view of the stock, with the cutters and knob-hole punch fixed therein. Fig. 2 is a section taken through the stock and longitudinally through the handle in the line *x x*, Fig. 1. Fig. 3 represents a knob-patch with strengthening-ring, to facilitate the manufacture of which knob-patch my invention is designed.

A is a metal stock, the face of which corresponds, or nearly corresponds, in size and shape, with that portion of the strengthening-ring to which the pins are attached, and having a ring, *f*, for attaching it to the handle D. C is the punch, secured in the face of the stock, and of the form required to make the knob-hole shown at *g*, Fig. 3. *e* is the aperture in the punch and handle into and through which are forced, in punching, the pieces of material punched out. *b* are the cutters, also secured in the face of the stock, and of the requisite form for cutting the holes for the pins *v v* of the strengthening-ring shown in Fig. 3. The knob-punch *c* and the cutters *b b* are arranged in the same relation to each other and to the center of the face of the stock, Fig. 2, that the knob-hole *g* and the holes for the pins *v* bear to each other and to the center of the strengthening-ring of the knob-patch, Fig. 3. A circle of the size of the face of the stock being marked at the desired point upon the material to be punched and cut, the operator, gaging by the outline of the stock, applies the knob-patch cutter so that the outline of the face of the cutter corresponds to the outline of the circle, and, applying the requisite pressure, the knob-hole and punctures are produced not merely in the desired position relative to each other, but also relatively to the marking, which result the operator could not, with ease and certainty, attain, unless the stock were constructed in such a form and the punch and cutters in such a relation to the center thereof that the outline of the stock serves as a guide or gage.

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

The stock A, provided with the punch *c* and cutters *b*, all arranged substantially as shown, for the purpose described.

FRED. NORRIS.

Witnesses:

MICHAEL RYAN,

VERNON H. HARRIS.