

D. F. HARTFORD.
Tools for Cutting Out Patterns.

No. 207,866.

Patented Sept. 10, 1878.

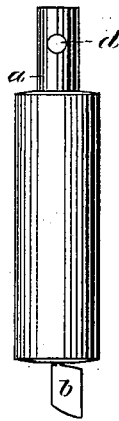


Fig. 1.

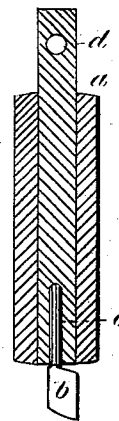


Fig. 2.



Fig. 3.

Inventor:

David F. Hartford
by J. S. Maynard

Witnesses:

Geo. O. Coak
L. H. Glade

UNITED STATES PATENT OFFICE.

DAVID F. HARTFORD, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF HIS RIGHT TO THOMAS T. HARTFORD, OF SAME PLACE.

IMPROVEMENT IN TOOLS FOR CUTTING OUT PATTERNS.

Specification forming part of Letters Patent No. **207,866**, dated September 10, 1878; application filed May 22, 1878.

To all whom it may concern:

Be it known that I, DAVID F. HARTFORD, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Tool for Use in Cutting Out Patterns and the like, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, making a part hereof.

In the drawings, Figure 1 is an elevation, Fig. 2 a longitudinal section, and Fig. 3 a plan of the under side, of a tool adapted for use in lieu of the pencil shown at *f* in Patent No. 201,111, dated March 12, 1878; and when this tool is used the pattern will be cut out, instead of being marked out.

My invention consists in the combination of the stock *a* and the knife *b* by means of a swivel, *c*, the cutting-edge of the knife lying on one side, and not across the axis of the swivel, as is fully shown in the drawings, where *a* is the stock, (in this case of a size and shape adapted for my patented machine, the spring which presses the cutting-edge upon the paper passing through the hole *d*.) *b*, the knife; *c*, the pin of the swivel, pivoted in the stock so as to turn freely therein.

The cutting-edge extends away from the

axis, and consequently, when the tool is moved in the directions required to cut out the pattern or other irregular figure, the cutting-edge is never brought across the line of cut or out of line with the cut; but the pin *c* turns freely in its socket, and allows the cutting-edge to accommodate itself to the corners and angles in the line of cut.

For hand-work the stock *a* will be mounted in or form part of the handle.

I am aware that tools have been made in which the cutting or perforating instrument is a disk constructed to rotate in two planes, cutting each other at right angles, as shown and described in Letters Patent to Robinson, No. 121,198, and to Pusey, No. 128,997. These I disclaim.

What I claim as my invention is—

The tool above described, consisting of the stock *a*, knife-blade *b*, and swivel-pin *c*, the knife-blade being arranged, with relation to the swivel-pin, as shown, with its cutting-edge receding at an obtuse angle from the axis of the swivel-pin, for the purpose set forth.

DAVID F. HARTFORD.

Witnesses:

J. E. MAYNADIER,
GEORGE O. G. COALE.