(No Model.)

H. DEWEY.

Planer Tool.

No. 234,545. Patented Nov. 16, 1880.

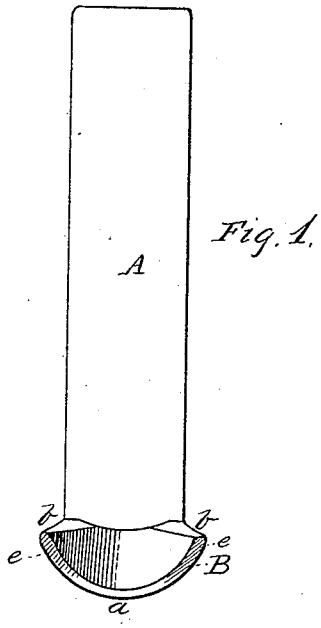


Fig. 1.

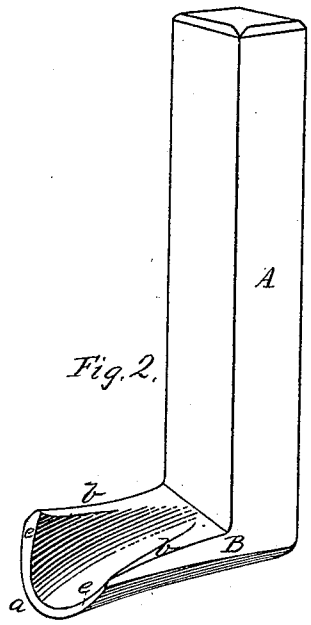


Fig. 2.

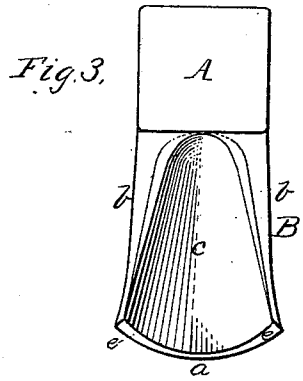


Fig. 3.

Fig. 4.

WITNESSES

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UNITED STATES PATENT OFFICE.

HARLOW DEWEY, OF WESTFIELD, MASSACHUSETTS.

PLANER-TOOL.

SPECIFICATION forming part of Letters Patent No. 234,545, dated November 16, 1880.

Application filed August 21, 1880. (No model.)

To all whom it may concern:

Be it known that I, HARLOW DEWEY, of Westfield, in the county of Hampden and State of Massachusetts, have invented a new and valuable Improvement in Planer-Tools; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a front view of this tool. Fig. 2 is a perspective view of the same. Fig. 3 is a top view, and Fig. 4 is a vertical section in part.

This invention has relation to iron-planing tools; and it consists in the construction and novel arrangement of the concavo-convex bit portion, rounded up on each side and having a right and left shear-edge, the sides being beveled inward, so as to cut each way from the center, all as hereinafter shown and described.

In the accompanying drawings, the letter A designates the shank, and B the bit portion, of this cutting-tool, which is especially designed for cutting iron, and may be used on other metals. The bit or horizontal portion of this tool extends forward from the shank and flares a little outward, so that the cutting-edge *a* is wider than the shank. The sides *b* of the bit portion are at right angles to the shank, or nearly so, but the central line, *c*, of the bit is depressed in front, shelving downward from the shank to the middle of the cutting-edge, as shown in the drawings. This cutting-edge is arc-shaped, being curved in circular or nearly circular form, the curve rising equally on each side of the center, and being beveled upward and backward from the central portion.

The upper surface of the bit is transversely concave, the surface being conical, or nearly so, being full or convex longitudinally toward the cutting-edge, as shown in the sectional view, so as to form a strong edge.

On each side of the central portion of the cutting-edge a shear-edge, *e*, is made by beveling the edge inward, so that the plane of the bevel on each side drops back of the general plane of bevel indicated by the line *x x*, as shown in the drawings. In this manner the capacity of the tool is much increased because of the concave upper face of the bit, and as it is made to have a shear-cut each way from the center, it will cut right and left.

This tool cuts out the chips, and will cut a swell in proportion to the circle of the bit, and it is designed to save much labor in reducing iron surfaces.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

The improved planer-tool described, constructed with a forward bit portion, flaring and rounded up on each side, concave on its upper surface, and having its cutting-edge *a* beveled inward to form right and left shear-edges *e* on each side, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HARLOW DEWEY.

Witnesses:

HENRY FULLER,

WILLIAM F. ALTEMAS.