(No Model.)

J. W. TOMPKINS.

REAMER.

No. 479,682. Patented July 26, 1892.

Fig. 1.

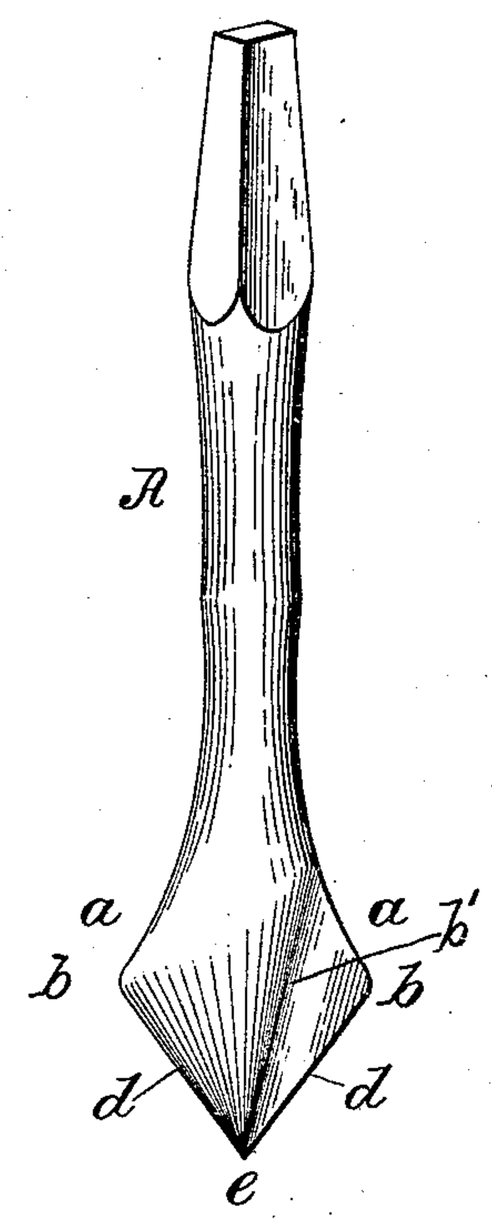
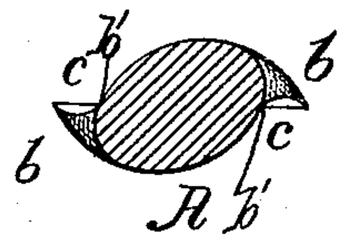


Fig. 2.



Attest:
Geo. T. Smallwood.
George Hughes

Inventor:
Jordan W. Tompkins,
By Paine & Lord,
Attys.

UNITED STATES PATENT OFFICE.

JORDAN W. TOMPKINS, OF AMESBURY, MASSACHUSETTS.

REAMER.

SPECIFICATION forming part of Letters Patent No. 479,682, dated July 26, 1892.

Application filed December 17, 1891. Serial No. 415,379. (No model.)

To all whom it may concern:

Be it known that I, JORDAN W. TOMPKINS, a subject of the Queen of England, residing at Amesbury, in the county of Essex and State Massachusetts, have invented certain new and useful Improvements in Reamers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to an improved reamer; and it has for its object to facilitate the sharpening of the same, to increase its cutting capacity, and to cause it to wear uniformly.

To these ends the invention consists in providing the bit of the reamer with radial wings or lips having concavo-convex surfaces with oppositely-facing inclined or converging cutting-edges tapering to a common central point forming the point of the bit, all substantially as hereinafter more fully disclosed, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of my improved reamer. Fig. 2 is a cross-section thereof, taken through the bit.

In the embodiment of my invention I form or provide the bit *a* of the reamer A with two wings or lips *b*, standing radially to the stem of the bit. These wings or extensions are concavo-convex in cross-section, as at *c*, with their concavities presented in opposite directions and having inclined or converging cutting-edges *d*, tapering to a common central point or apex, as at *e*, forming the end or point of the bit. The convexities or backs of the lips or wings taper to the point *e* of the bit and round outward from and begin along the bases or inner edges of their concavities, respectively, in oblique or inclined lines, as at *b'*, diverging from each other upon opposite sides of the bit outward and upward and converging or meeting at the point *e* of the bit. The inclined or converging cutting-edges *d* being on the concave sides of the wings or lips also face in opposite directions to enable them to cut in the direction of the rotation of the reamer in making the countersink. Thus the cutting-edges of the wings or lips of the bit as they wear away are enabled to be sharpened with very little grinding or treatment, having, by reason of their concavo-convex surfaces, extended tapering-edge portions and are caused to cut equally with both edges and to wear uniformly.

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

The reamer having its bit formed with concavo-convex wings or lips, with their convexities tapering to the point of the bit and rounded outward from and beginning at the inner edges or bases of their concavities, respectively, along oblique or inclined lines diverging from each other upon opposite sides of the bit outward and upward and converging or meeting at the point of the bit, said concavities being presented in opposite directions and having inclined cutting-edges tapering to the point of the bit, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JORDAN W. TOMPKINS.

Witnesses:
FRANK R. WHITCHER,
EMELUS S. GANIEN.