

No. 679,406.

Patented July 30, 1901.

A. W. WATSON.
DRILL.

(Application filed May 8, 1901.)

(No Model.)

Fig:1.

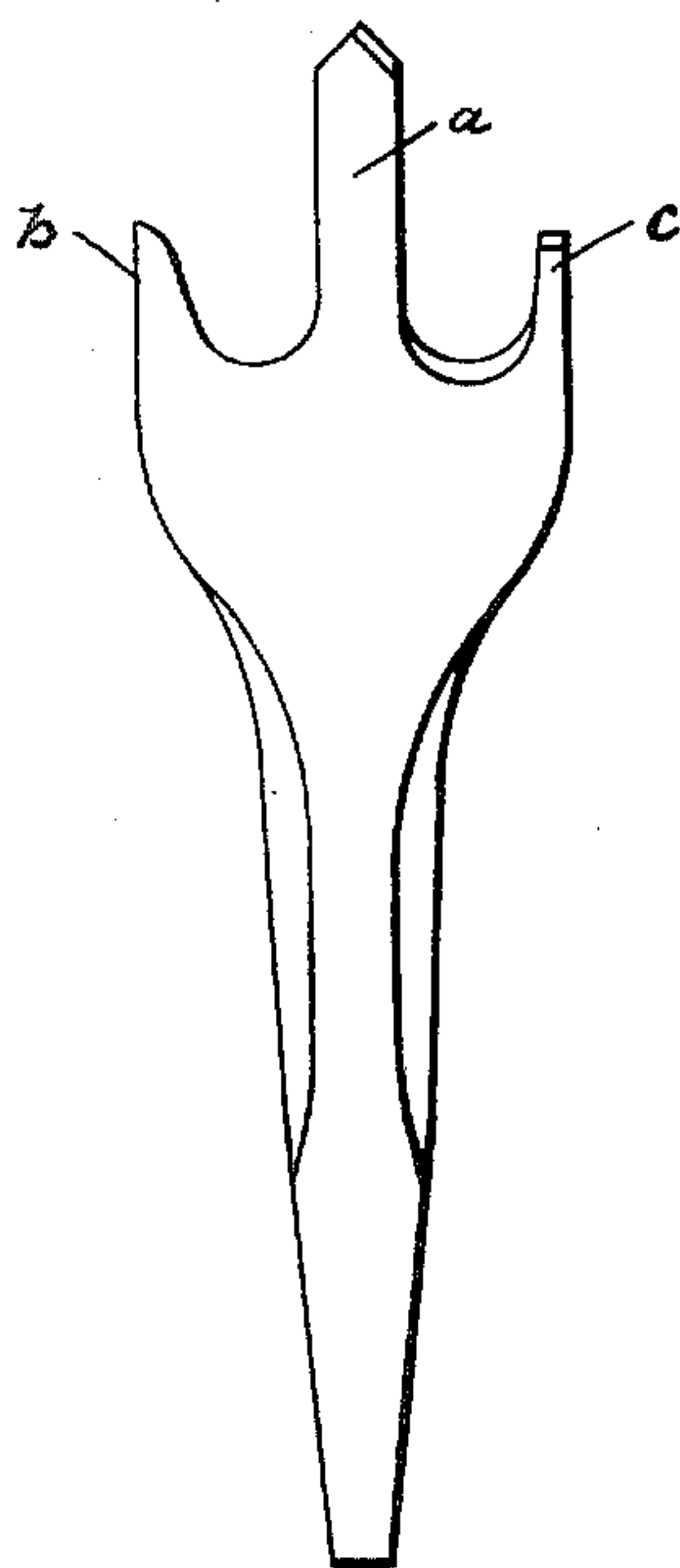


Fig:2.

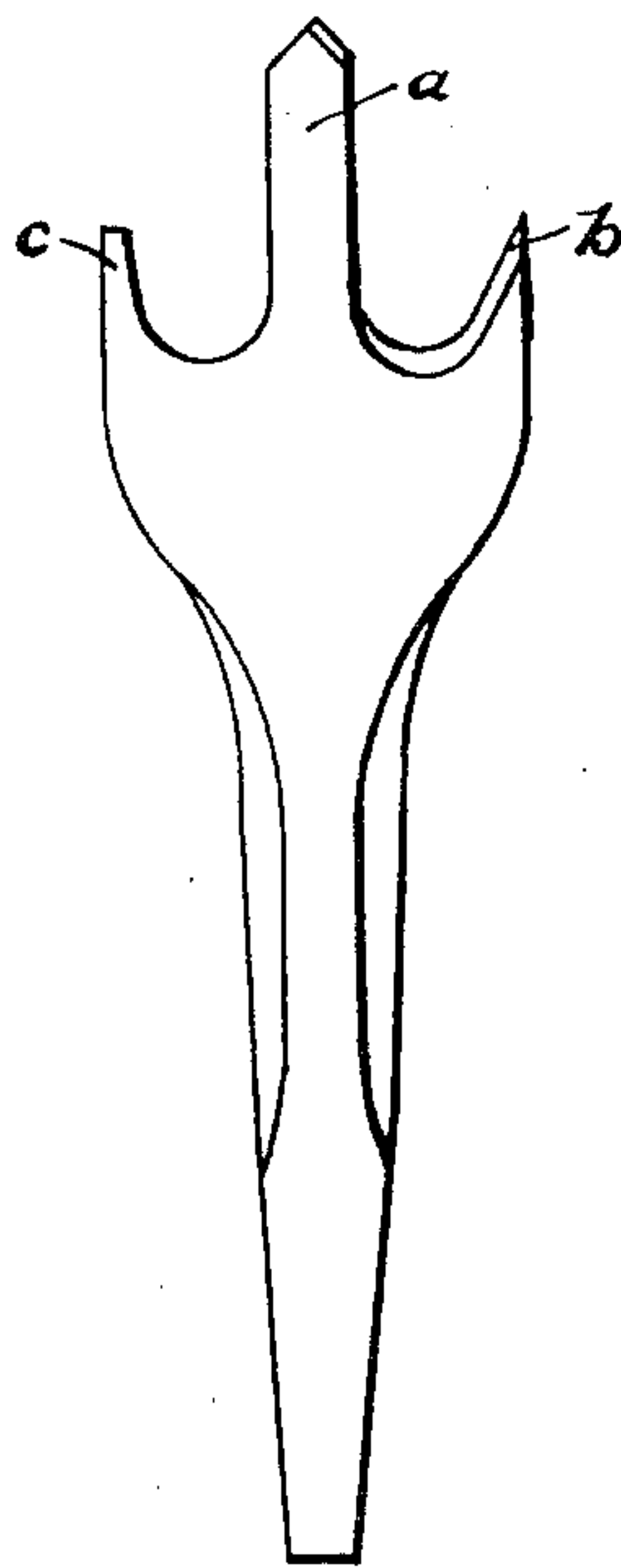


Fig:3.



Witnesses:-

Benjamin Black,
Charles H. Briggs.

Inventor.
Alfred William Watson.
Per:- E. Eaton.
His Attorney.

UNITED STATES PATENT OFFICE.

ALFRED WILLIAM WATSON, OF LEYTON, ENGLAND.

DRILL.

SPECIFICATION forming part of Letters Patent No. 679,406, dated July 30, 1901.

Application filed May 6, 1901. Serial No. 58,979. (No model.)

To all whom it may concern:

Be it known that I, ALFRED WILLIAM WATSON, a subject of the King of Great Britain, and a resident of Leyton, in the county of Essex, England, have invented certain new and useful Improvements in Drills, (for which I have applied for and obtained a patent in Great Britain, No. 15,219, dated January 16, 1901,) of which the following is a full, clear, and exact specification.

This invention relates to improvements in drills, the object being to provide a drill which may be used with the ordinary brace and used for drilling iron, such as iron tanks or the like.

For purposes of illustration I will now refer to the annexed drawings, in which—

Figure 1 is a front elevation, Fig. 2 an elevation of reverse, and Fig. 3 a side elevation.

I provide a drill somewhat similar in construction to those drills in use in working wood, the center portion *a*, however, being shaped at the point similar to the ordinary iron-drill. A small hole is first bored by this drill and a larger one by a point *b*, carried by the drill at the desired radius. Diamet-

rically opposite this point I provide another branch *c*, which has a square end, this part acting as a reamer. By the use of this drill I am enabled to drill holes quicker, cleaner, and more efficiently than by the method usually adopted—namely, by punching.

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

In center-bit drills for working iron, a drill having three projections, the center one being formed similar to an ordinary iron-drill, the second or cutting projection being sharp-pointed, the third or reaming projection being somewhat shorter than the second one and placed diametrically opposite thereto, substantially as described and illustrated herein.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of February, 1901.

ALFRED WILLIAM WATSON.

Witnesses:

JOHN EDWARD NEWTON,
CHARLES W. BRIGGS.