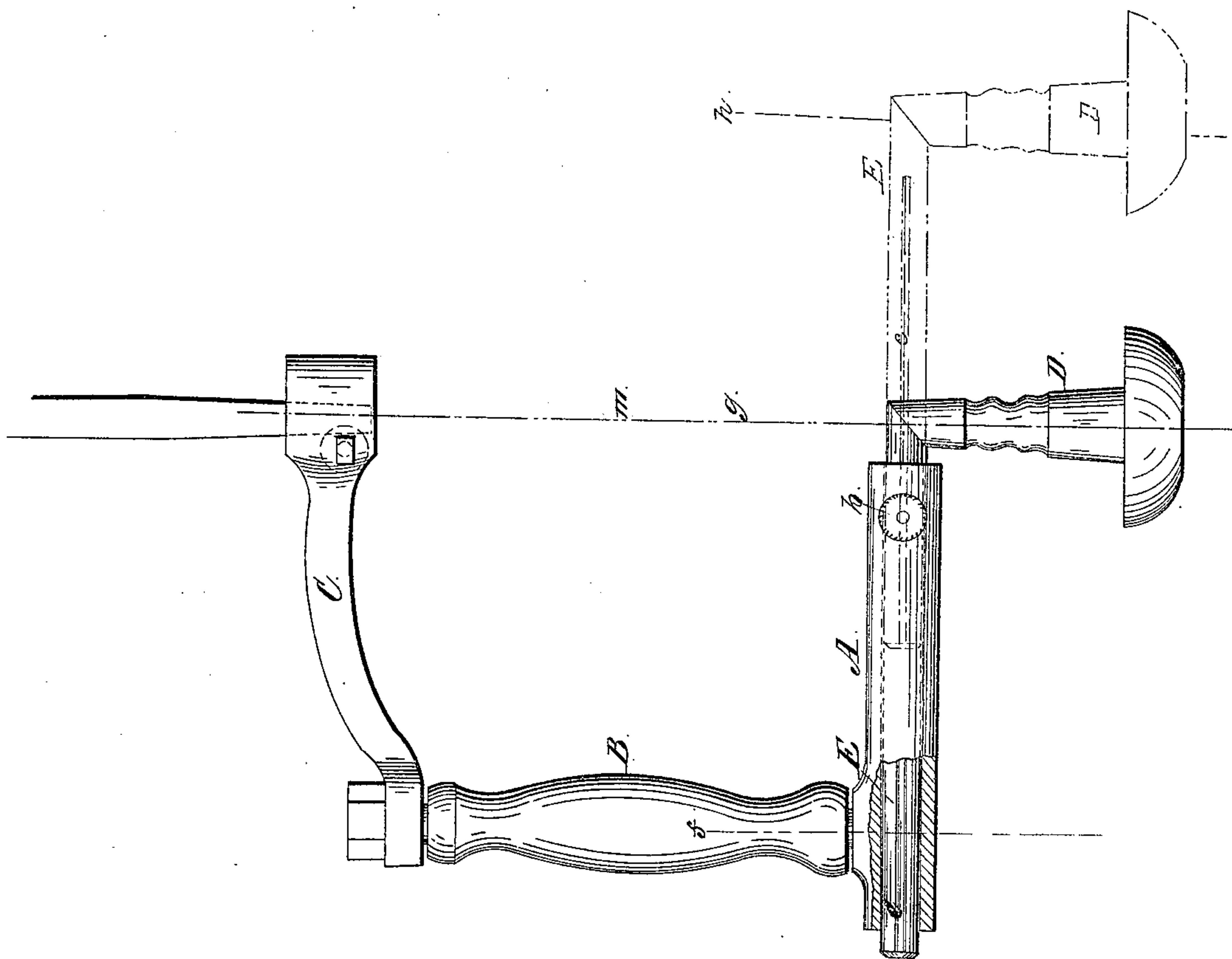


*Patented Dec. 18, 1855.*



# UNITED STATES PATENT OFFICE.

JNO. GOURLAY, OF OGDENSBURG, NEW YORK.

## ADJUSTABLE CRANK-BRACE FOR AUGERS.

Specification of Letters Patent No. 13,943, dated December 18, 1855.

*To all whom it may concern:*

Be it known that I, JOHN GOURLAY, of Ogdensburg, in the county of St. Lawrence and State of New York, have invented a new and useful Combined Single and Double Crank Brace for Augers, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification.

The drawing exhibits a side view and partial section of an auger brace constructed after my invention, the black lines showing it as arranged when used as a single crank brace and the red lines as arranged when used as a double crank brace.

The nature of my invention consists in the peculiar and simple manner, hereinafter specified, of constructing the brace whereby it is rendered capable of serving either as a single or double crank brace.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A, B, C, D, represent an auger brace, very similar in form, externally to the common single crank brace. The part A, is made tubular from end to end, as shown in the drawing, and the part D, which, when the brace is used as a single crank brace, bears against the breast, as usual, is provided with an extension slide E, which stands at right angles to it and slides freely in the tubular part A, and serves for extending it, as shown in the drawing by red lines. This extension slide has a groove *c*, formed in it from one end to the other, in order to receive the end of a set screw *b*, which passes through the upper side of the tubular part A, and securely confines the slide, either when drawn out, for the purpose of extending A, as shown in red lines, or moved in, as shown in black lines. By thus providing the part A, with an extension slide and extending its length by the same, it may be evident that the single crank brace becomes

a double crank brace owing to the axis *m*, indicated by the dotted red line, not changing its position, and the distance from the same being equal from *f*, to *g*, to the distance from *g* to *h*, and the crank between *f*, *g*, consequently turning on the same axis as the crank between *f*, *h*.

It is desirable to have a brace combine both a single and double crank brace so that it may be used for light and heavy work, as necessary, it serving for light work when arranged as shown in black lines and for heavy work when arranged as shown in red. It is also desirable to have it thus constructed in order that it may be used as a single crank brace for the purpose of entering the point of the auger into the metal and thus prepare for the use of the double crank, it, when thus used, admitting of pressure being exerted, by the breast, which cannot be done when used as a double crank brace on account of the necessity of the part D, changing its position at every revolution. To use the brace with the double crank it is only necessary to allow the hands to turn in a similar manner as when operating a common auger handle and to use it with a single crank it is placed against the breast and operated in the same manner as a common brace.

This invention is very simple, cheap and useful as it gives a regular rotary motion to the bit and enables the operator to bore heavy work with great ease, and also avoids the necessity of having two separate braces for light and heavy work.

I am aware of W. P. Barnes' invention, and therefore only claim as my invention and desire to secure by Letters Patent—

The particular method of varying the length of leverage in handles as set forth and described.

JOHN GOURLAY.

Witnesses:

ALBERT CHISMORE,  
ALEXANDER MATHESON.