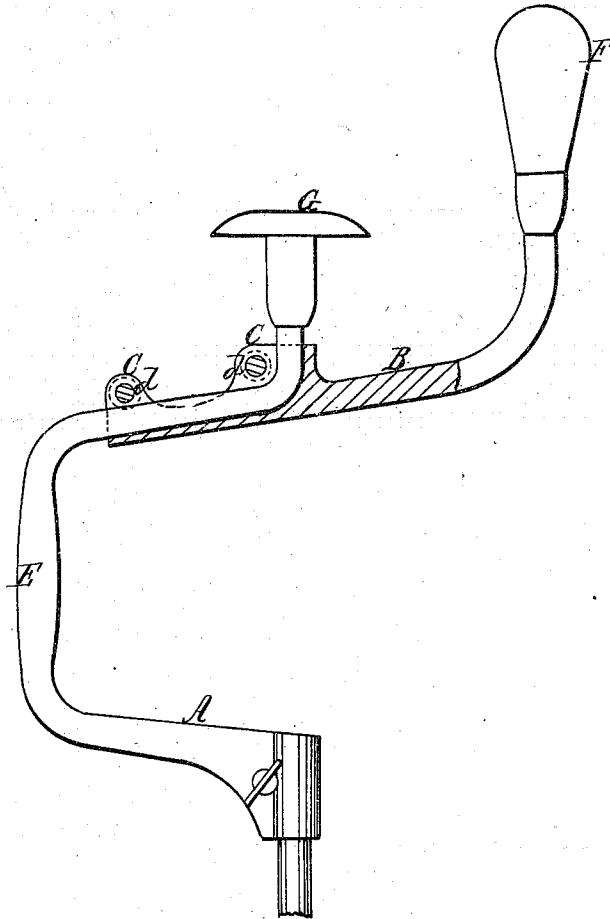


J. S. Fray.

Bit Stock.

N^o 89,925.

Patented May 11, 1869.



Witnesses;
A. W. Almqvist
Wm. Morgan

Inventor;
J. S. Fray

Attorneys

United States Patent Office.

JOHN S. FRAY, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO
HIMSELF AND HORACE PIGG, OF SAME PLACE.

Letters Patent No. 89,925, dated May 11. 1869.

IMPROVEMENT IN ATTACHMENT TO BORING-BRACE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN S. FRAY, of Bridgeport, in the county of Fairfield, and State of Connecticut, have invented a new and useful Improvement in Attachment to Boring-Braces; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to a new and useful attachment to braces for boring with bits, augers, &c., and consists in the construction of a curved bar, removably attached to the ordinary boring-brace, whereby the leverage on the auger is extended in the opposite direction of the brace-handle, so that a screw-auger may be turned by both hands, and the power exerted on the auger is greatly increased thereby.

The drawing represents a brace with my attachment, the latter being broken away or shown partly in section, in order to show the method of attachment.

A is the common boring-brace.

B is the attachment.

This piece is cast of brass, or made of brass or other suitable metal, with ears, or projecting lugs C C, and with a groove to correspond with the size and form of the upper portion of the brace, so that the brace may drop into it, as seen in the drawing.

The attachment is fastened in this position by screws *d d*, passing through the ears C C, over the brace, as seen.

By removing the screws, it will be seen that B may be detached, and the brace A be left for the uses for which such braces are intended, that is, for boring in the ordinary manner with bits or small auger-bits.

In boring with screw-augers of larger size, as in ship-building, planking piers, framing, and other simi-

lar purposes, more power is required than can be exerted on the common brace with one hand.

In operating with such augers, the handle of the brace E is seized with one hand, and the handle F of the attachment with the other, and the auger is revolved thereby.

The head of the brace G, in this operation, is of no account, as the screw draws the auger into the wood; consequently a double power is brought to bear in turning the auger, and the auger will be turned with a continuous motion, thus greatly expediting the operation of boring.

I am aware that augers have been turned before in a manner similar to this, but each auger has to be provided with this double crank (or wimble) by welding on to the shank of the auger.

I am also aware of the patent granted to John Gourlay, December 18, 1855; but in this case the brace must be specially prepared to receive the attachment, and when the latter is not applied the brace is inoperative; whereas my attachment is applicable to the ordinary brace, so that the same may be complete, with or without the attachment.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The attachment B, provided with the longitudinal groove, the lugs, or ears C C, and the set-screws *d*, arranged and operating as described, whereby it is adapted to be applied to a common boring-brace, as herein set forth, for the purpose specified.

The above specification of my invention signed by me, this 18th day of January, 1869.

JOHN S. FRAY.

Witnesses:

FRANK BLOCKLEY,
ALEX. F. ROBERTS,