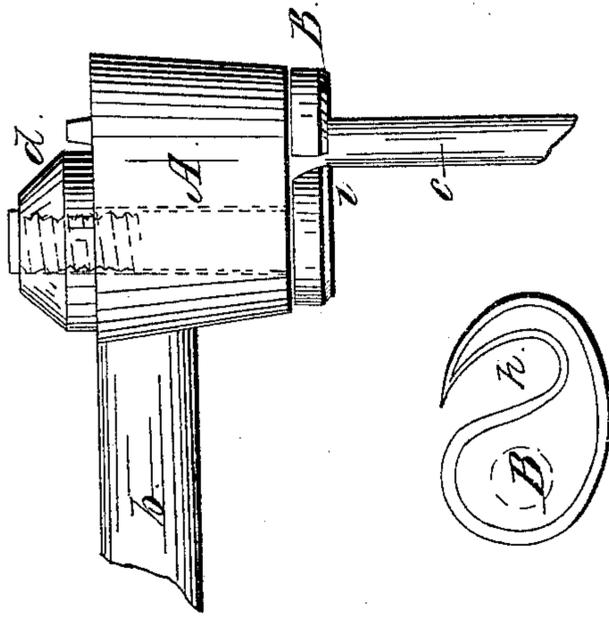


J. B. Fellows,

Bit Stock,

No. 69,086,

Patented Sep. 24, 1867.



Witnesses:

Henry C Houston
Wm F Seaver

Inventor:

J B Fellows
by his Atty
William H Clifford

United States Patent Office

JAMES B. FELLOWS, OF CONCORD, NEW HAMPSHIRE, ASSIGNOR TO C. C. JONES, OF PORTLAND, MAINE.

Letters Patent No. 69,086, dated September 24, 1867.

IMPROVEMENT IN BRACES FOR BORING-BITS.

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, JAMES B. FELLOWS, of Concord, in the county of Merrimack, and State of New Hampshire, have invented a new and improved Bit-Brace; and I hereby declare the following to be a full, clear, and exact description thereof, which will enable others to make and use my invention, reference being made to the accompanying drawings, forming part of this specification, in which—

Figure 1 shows a side elevation of a portion of a bit-stock with my improvement attached.

Figure 2 a bottom view of the hook that embraces the bit.

The object of my invention is to produce a cheap, secure, and convenient method of holding a bit in its socket in the stock, and of releasing the bit when desired.

It consists in the combination of a bolt, having a screw-thread at one end, a hook, and a nut, all arranged as hereinafter set forth.

A shows the lower end of a bit-stock, which is generally made with a head or enlarged part to receive the upper end of the bit. *b* shows a part of the crank of the stock; *c*, the bit. Through the part A is made the perforation indicated by the dotted lines. Through this passes the bolt, the upper end of which has the screw-thread as indicated in the drawing. To the lower end of the bolt thus inserted into the hole in the part A is rigidly attached the hook B. Upon the upper end of the bolt is placed the nut *d*. As the bolt is turned around in its hole, the hook B swings with it, either so as to embrace the bit in the recess or curve *h*, or to throw the hook away longitudinally from the bit. The part of the bit that enters the hole in the stock is, as is well known, generally made square or nearly so, and this square or angular portion is larger in diameter, or through it, than the shank of the bit. This is illustrated by the enlargement seen at *i*. The space or curve *h* is to be made of a size to fit the shank of the bit, as for instance at *e*, and consequently will not pass over the enlarged portion *i*.

The manner in which my invention is employed is as follows: Turn the nut *d* upward on the screw, so that the bolt can drop somewhat, to allow the hook B to drop also a little below the lower end of the part A of the stock. Turn the bolt so as to remove the hook from the hole intended for the reception of the bit; then insert the bit into its place, and turn the hook so that it shall embrace the shank of the bit, as seen in the drawing. Then screw the nut so as to bring the hook B closely up to the under side of the part A. Thus the hook passing up against the enlarged part *i* of the bit, holds the same firmly in its place. The bit can be released by turning the nut *d* upwards, and turning the hook away to one side and from off the bit.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the hook B, bolt and nut *d*, when the bolt is set vertically in the part A of a bit-stock, and the hook B, rigidly attached to the said bolt *d*, is employed to embrace and hold the borer *c* in the part A, or release it therefrom, substantially as herein set forth and described.

JAMES B. FELLOWS.

Witnesses:

JOHN T. MUGRIDGE,

G. S. BLANCHARD.