J. T. MATTHEWS.

BIT STOCK.

No. 191,540. Patented June 5, 1877.

Fig. 1.

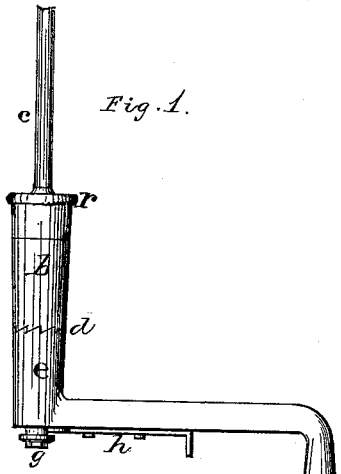


Fig. 2.

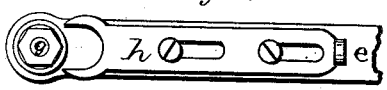
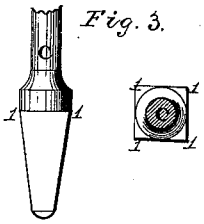


Fig. 3.



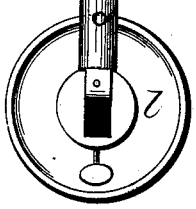


Fig. 4.

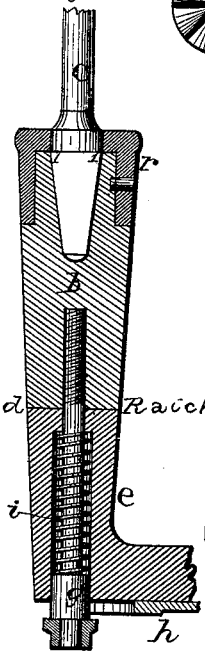


Fig. 5.

Fig. 6.

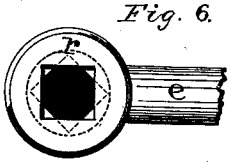
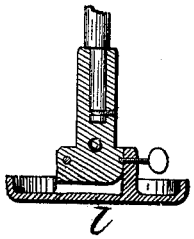


Fig. 7.



WITNESSES:

J. Wm. Garner

R. M. Barr.

INVENTOR:

Jas T. Matthews

per

F. A. Lehmann

Atty.

UNITED STATES PATENT OFFICE.

JAMES T. MATTHEWS, OF NEW BERNE, NORTH CAROLINA.

IMPROVEMENT IN BIT-STOCKS.

Specification forming part of Letters Patent No. **191,540**, dated June 5, 1877; application filed March 29, 1877.

To all whom it may concern:

Be it known that I, JAS. T. MATTHEWS, of New Berne, in the county of Craven and State of North Carolina, have invented certain new and useful Improvements in Bit-Stocks; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in bit-stocks; and it consists in the application of a ratchet to the brace, whereby the operator is enabled to bore holes in places where a brace could not otherwise be used. It further consists in pivoting the head of the brace, so that the brace can be laid down upon a flat surface, and made to bore a parallel hole therewith. It also consists in the device for holding the bit in the brace, all of which will be more fully described hereinafter.

The accompanying drawings represent my invention.

a represents the brace, of the usual form; and *c*, the bit. The lower part *b* of the brace, instead of being formed with the upper part in one solid piece, is made in a separate piece by itself, and has the ratchet-teeth *d* formed in its upper edge, to mesh with corresponding teeth on the lower end of the brace. Passing down through the part *e* of the brace into the top of the part *b*, is the headed bolt *g*. Around the upper part of this bolt is placed a spring, *i*, which keeps it constantly pressed upward, thereby keeping the teeth *d* on the two parts *b e* always together. Between the top of the part *e* and the head of the bolt there is just sufficient space left for the bolt to be drawn downward far enough to let the teeth clear themselves, and thus allow the part *b* to be turned freely backward. When it is desired to lock the two parts *b e* rigidly together, so that the part *b* cannot be turned backward, the slotted slide *h* is moved forward so that its bifurcated end shall straddle over the neck of the bolt, and fill the space between the top of the part *e* and the head of the bolt. The bolt being prevented from playing back and forth, the part *b* is locked as rigidly in position as though it were a solid part of the brace. By means of this ratchet, holes can be bored in places where the brace could not otherwise be used at all. In order to place the brace on a flat surface and bore a hole parallel therewith, the head *l* of the brace is pivoted thereto as well as swiveled, so that it can be thrown straight back through a quarter of a circle. By thus turning the head back the top part *o* of the brace can be put on a level with the bit, and a hole bored parallel with any flat surface on which it is placed. In the lower end of the part *b* is made the usual socket to receive the head of the bit, and upon this socketed end is swiveled the lock *r*, which has a square hole through its bottom, and turns partially around. The bit has the shoulders 1 formed on two or more of its corners, which shoulders pass up into the socket in the part *b*, and just through the bottom of the lock. As the lock can be turned so that the corners of the hole through its bottom shall be at an angle to the corners of the socket, the sides of the hole catch under the shoulders 1 of the bit, and thus prevent it from coming out of the socket. This lock is both simple and effective.

Having thus described my invention, I claim—

1. The brace *a*, provided with the ratchet *d* at its lower end, and a head, *l*, that is adapted to be opened outward, substantially as shown.

2. The bit-stock *a*, provided with the part *b*, that is made separate therefrom, and operated by means of the ratchet-teeth *d*, in combination with the bolt *g*, spring *i*, and a locking device, substantially as specified.

3. The slide *h*, in combination with the bolt *g* and part *b*, substantially as specified.

4. A brace, *a*, provided with a pivoted or hinged head, *l*, substantially as shown.

In testimony that I claim the foregoing I have hereunto set my hand this 20th day of March, 1877.

JAS. T. MATTHEWS.

Witnesses:

S. M. CARPENTER,

GEO. A. LATHAM.