

(No Model.)

F. J. COLVIN.
BIT STOCK.

No. 518,938.

Patented May 1, 1894.

Fig. 1.

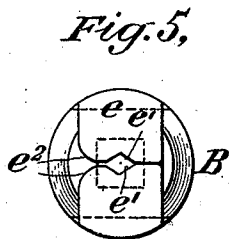
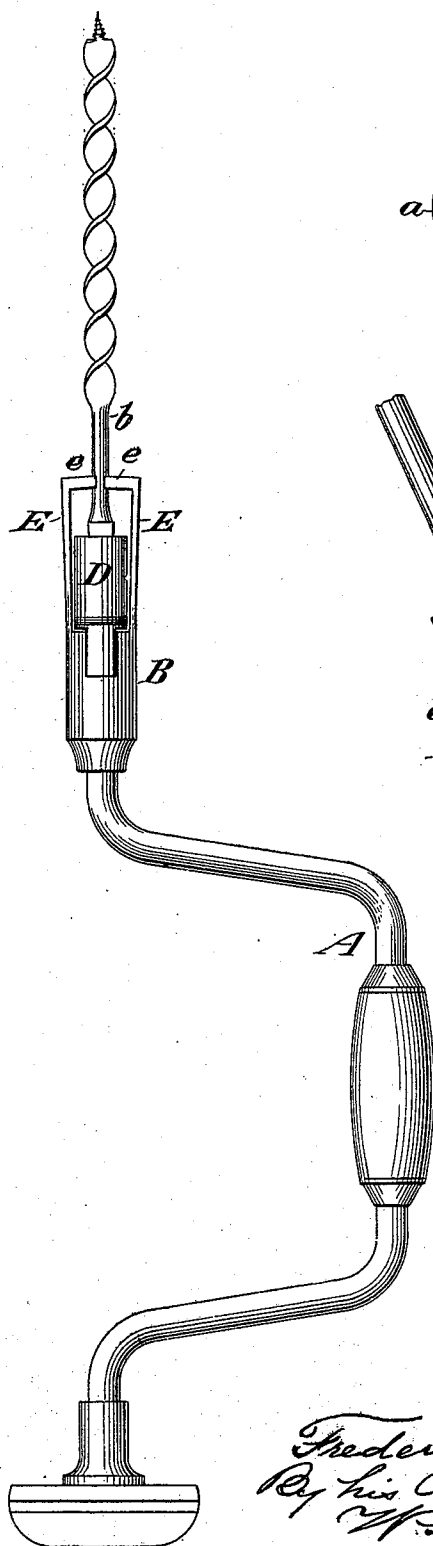


Fig. 2.

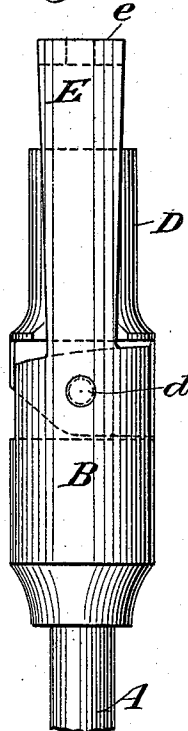


Fig. 4.

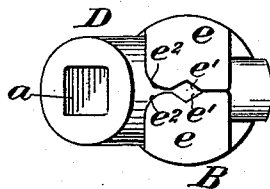
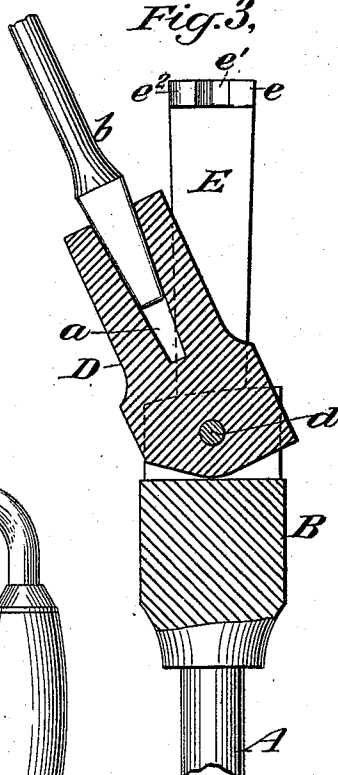


Fig. 3.



Witnesses:-

R. H. Kayser
J. de la Mar

Inventor:-

Frederick J. Colvin
By his Att'y
W. L. Bennett

UNITED STATES PATENT OFFICE.

FREDERICK J. COLVIN, OF HAMDEN, CONNECTICUT.

BIT-STOCK.

SPECIFICATION forming part of Letters Patent No. 518,938, dated May 1, 1894.

Application filed October 14, 1893. Serial No. 488,119. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK J. COLVIN, a citizen of the United States, and a resident of Hamden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Bit-Stocks, of which the following is a specification.

According to my invention, I provide a bit-stock with a head portion to which is pivoted a socketed block into which the head of the bit extends, and provide also resilient jaws constructed to engage the shank portion of the bit, and to be expansible in a direction parallel with the axis of the pivot of the block, or, in other words, in a direction at right angles to the direction in which the block swings, in order that the bit may be readily inserted into and removed from the pivoted block.

In the accompanying drawings, Figure 1 is a side view of a bit stock embodying my invention with a bit in position. Fig. 2, is an elevation of the head at right angles to that shown in Fig. 1, and on an enlarged scale. Fig. 3, is a section of the head showing the socket block, tilted, to a position to receive the bit. Fig. 4, is a plan view showing the socket block in its open or tilted position and Fig. 5, is a plan view showing the block closed.

Referring by letter to the drawings A, designates the main portion of a bit stock having the head B, thereon.

D, is the swinging block having the socket *a* to receive the head of the bit *b*, this block D, is adapted to swing laterally with relation to the head B, and it is therefore connected to said head by means of a pivot *d*, which passes transversely through the head and through the inner portion of the block as shown.

E, indicates resilient jaws extending from the head B, and adapted to engage the shank portion of a bit *b*, as shown in Fig. 1. These jaws E, may be integral with the head B, as shown in the drawings, or they may be independent pieces secured to the head in any desired manner. The jaws E, have their ends turned inward, as at *e*, and these inward turned ends have notches *e'*, to engage around the bit shank.

To facilitate the entrance of the bit between the jaws, the ends *e*, have curved or cam surfaces *e²* extending from the notches *e'* to the outer edges of the jaws. It will be observed

that the spring jaws are expansible in a direction in line with the axis of the pivot *d*, or in other words in a direction at right angles to the direction in which the block D swings, and as the ends of the jaws are inclined and notched, as shown, the bit *b* will act upon them to spread them apart when moved transversely against them. That is to say, assuming the block D and the bit *b* to be in the position shown in Fig. 3, by moving the bit inwardly and causing it to bear upon the ends of the jaws, the latter will be spread apart and will immediately spring back into position to hold the bit in place as shown in Fig. 1, and the block D will assume the position shown in Figs. 1 and 2. This is the working position and will be maintained in the ordinary use of the tool. The bit may be readily removed by the operator's catching hold of the outer end of the bit and swinging it to one side, that is to the left, as shown in Fig. 3, thus automatically springing the jaws outwardly and allowing the bit to pass. When it has passed, it may be removed axially. This method of operation results from the use of a swinging block. If the block were stationary it would be necessary to manipulate the jaws E by hand. Not only would it be difficult to open these jaws by the fingers, but it would probably be necessary to use both hands, there would be danger of pinching the fingers and altogether the operation would be clumsy.

Having described my invention, what I claim is—

In a bit stock, the combination with a head portion, of a block pivoted thereto, and having a socket to receive the head of the bit, and resilient jaws constructed to engage the shank portion of the bit, and expansible in a direction parallel with the axis of the pivot of the block, or in other words in a direction at right angles to the direction in which the block swings.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 20th day of September, 1893.

FREDERICK J. COLVIN.

Witnesses:

SAMUEL A. BALDWIN,
ELLSWORTH B. COOPER.