

H. C. HART.
Bit-Stock.

No. 161,031.

Patented March 23, 1875.

Fig. 1.

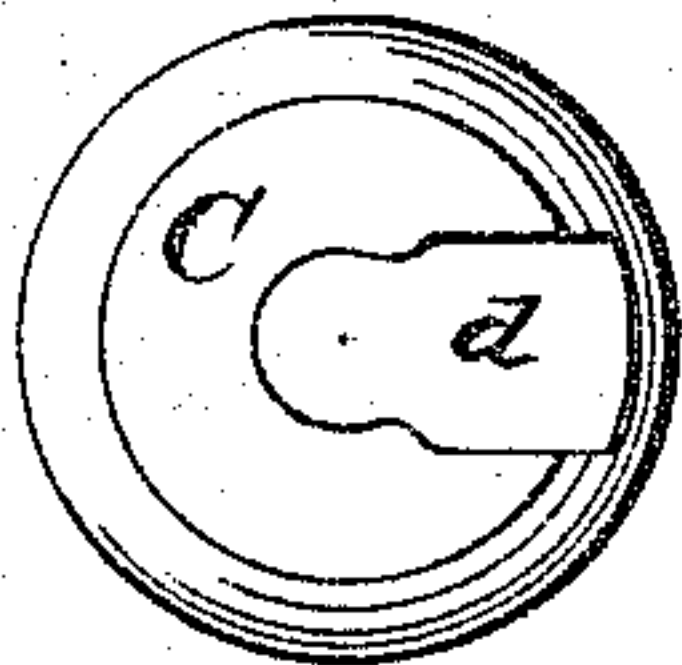


Fig. 2.

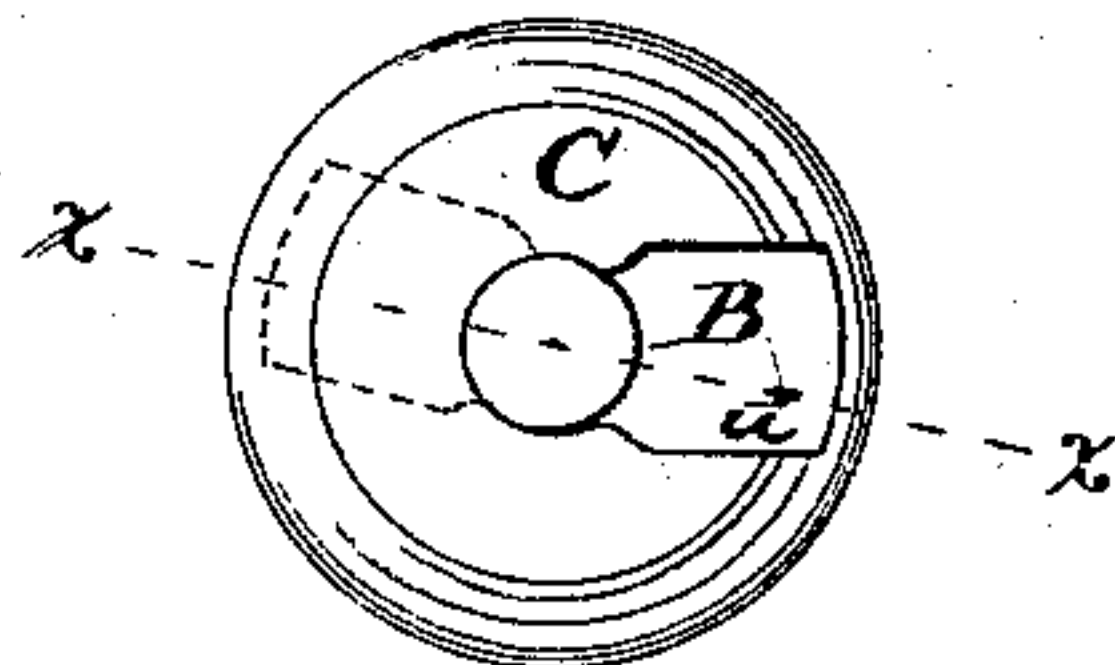
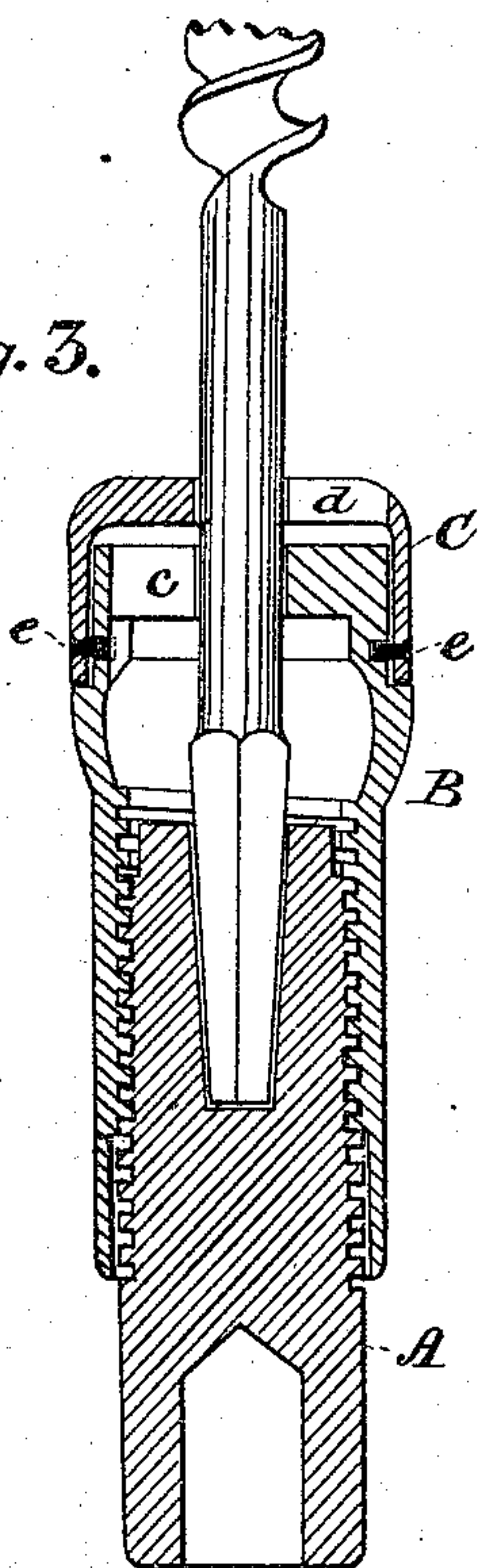


Fig. 3.



WITNESSES
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UNITED STATES PATENT OFFICE.

HUBERT C. HART, OF UNIONVILLE, CONNECTICUT.

IMPROVEMENT IN BIT-STOCKS.

Specification forming part of Letters Patent No. **161,031**, dated March 23, 1875; application filed December 23, 1874.

To all whom it may concern:

Be it known that I, HUBERT C. HART, of Unionville, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Bit-Stocks, of which the following is a specification:

In my improved bit-holder the screw-head has a rectangular tapering bore in its end, and fitting upon this head is a screw-sleeve, the end of which sleeve is provided with a supplementary cap having a partial rotation thereon. The ends of the sleeve and cap are each provided with openings, which, when the cap is turned in a certain position, correspond, so that the shank of a bit may be inserted within the head, all as hereinafter described.

In the accompanying drawing, Figures 1 and 2 are end views of a bit-stock head which embodies my invention, and Fig. 3 is a central and longitudinal section of the same on line *x x* of Fig. 2.

A designates the screw-head of a bit-stock, provided with a rectangular tapering bore, *a*. Upon this head is a screw-sleeve, B, the screw thereof corresponding with that of the screw-head A. The end of this sleeve B is provided with an opening, *c*, Fig. 3, one side of which is semicircular in form, the circle which forms it being concentric with the sleeve B, and the other side of the opening *c* being rectangular, and of such size as to allow the shank of a bit to pass through it. Over the end of the sleeve B is a supplementary cap, C, which cap has an opening, *d*, in its end, said opening corresponding in shape and size to that of the opening *c* in the sleeve B. This cap is secured in place by means of pins *e e*, Fig. 3, the inner ends of which rest in grooves formed in the sleeve B, and of such length as to limit the rotation of the cap upon the sleeve. These grooves are so arranged that when the cap C is rotated in such a direction as to loosen the screw-sleeve, it will be brought with

the openings *c d* corresponding with each other, as shown in Fig. 1, after which any further movement of the cap will carry the sleeve with it, and so that when the cap is turned in the opposite direction the cap will rotate upon the sleeve until it is brought into the position shown in Fig. 2, (the opening *c* of the sleeve B being designated by broken lines,) after which the further movement of the cap forces the screw-sleeve down upon the screw-head.

The operation is as follows: The screw-sleeve B is loosened when the openings *c d* correspond, and the shank of a bit is passed through the openings, and its lower end is inserted in the rectangular tapering bore. The cap C is then turned into the position shown in Fig. 2, when it cannot rotate farther upon the sleeve B. In this position the exposed portion of the two openings *c d* form a complete circle, within which the round portion of the bit-shank rests. The further movement of the cap C carries the sleeve B with it, screwing it down upon the screw-head until the bit-shank is forced firmly into the bore, as shown in Fig. 3.

The construction of the device is simple and cheap. It is convenient for use, and will hold the bit true and rigidly in place.

I am aware of the patents granted to A. C. Moore, No. 16,931, March 31, 1857, and S. B. Hill, No. 76,632, April 14, 1868, and fully disclaim what is therein shown.

I claim as my invention—

The supplementary rotating cap C, in combination with the screw-head A and sleeve B, the cap and sleeve being provided with corresponding openings, all substantially as and for the purpose described.

HUBERT C. HART.

Witnesses:

A. S. UPSON,
W. W. PINNEY.