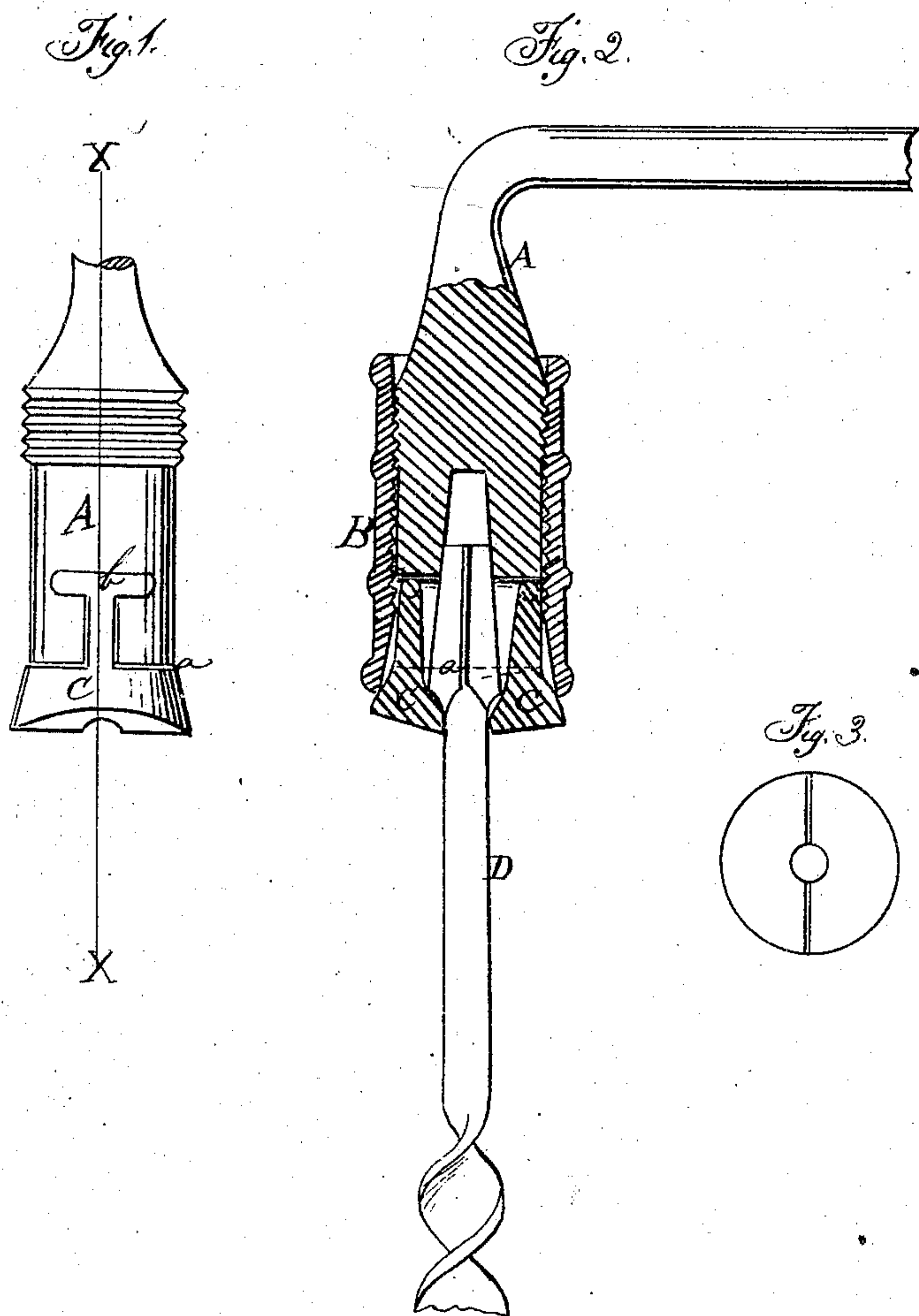


*C. M. Daboll.*  
*Brace for Bit.*

*Nº 75870*

*Patented Mar. 24, 1868*



*Witnesses*  
*Chas. Encke*  
*J. A. Service*

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# United States Patent Office.

CHARLES M. DABOLL, OF NEW LONDON, CONNECTICUT, ASSIGNOR TO THE  
WILSON MANUFACTURING COMPANY, OF SAME PLACE.

*Letters Patent No. 75,870, dated March 24, 1868.*

## IMPROVEMENT IN BRACES FOR 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, CHARLES M. DABOLL, of New London, in the county of New London, and State of Connecticut, have invented a new and useful Improvement in Braces for Bits; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to the manner in which the bit is fastened and held in the brace; and it consists in a tubular female screw or nut, of novel formation, and in two or more jaws or clamps, which are operated by the nut, whereby the bit is firmly secured in the brace, and easily detached therefrom, as will hereinafter be described.

Figure 1 represents the end of the brace with the nut off, in order to show to better advantage the form of the clamp.

Figure 2 is a section of the fastening-end of the brace, with the shank of an auger-bit fastened according to my invention.

Figure 3 is a view of the outer ends of the clamps.

Similar letters of reference indicate corresponding parts.

A represents a portion of the brace, it being the fastening-end; B is the tubular nut; C represents the clamps; D is the auger-bit. The end of the brace is formed with an orifice sufficiently large to admit the end of any ordinary auger or other bit; and the clamps C are so attached that they have sufficient play or open sufficiently wide to enclose and hold the largest size of auger-bits, as well as the smallest pod or gimlet-bit. In fig. 1 a side view of one of the clamps is seen. The inner end is in a T-form, and is sunken into the brace, so that its back or outer surface is flush with the brace, or so that it may be forced inward from the surface of the brace (as would be necessary in holding a very small bit) as far as the end of the brace or the line marked *a*. This T-end is simply dropped into the recess prepared for it, when it is held by the nut B, as seen in fig. 2. The peculiar shape of the outer portions of these clamps will also be noticed in the same figure. The portion *b* of the T-end acts as a hinge upon which the clamp works. The nut B is flaring at its outer end, as seen in the drawing, so that when it is screwed or turned up towards the clamp, it strikes the inclined surfaces of the clamps, and forces them together or towards each other. The clamps are cut out on their inner sides, so that they admit the enlarged or angular portion of the shank of the bit, but close up upon the bit, as seen, when forced in by the nut. When there is no shank or bit between the clamps, the nut will force them in contact with each other, when their outer ends will present the appearance seen in fig. 3. By turning back the nut B, the clamps are expanded sufficiently to admit the largest size of auger-bit without being displaced, but they are readily detached by turning the nut back past them.

It will be seen, from this formation and arrangement, that the screw-thread of the nut B is not brought in contact with the clamps, and of course it cannot be injured thereby.

I do not claim fastening the jaws to the stock by pivots or fixed pins, as I am aware this has already been done; but having thus described my invention,

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

1. The jaws C, constructed as described, having a semicircular base inclining outward, and provided with the T-shaped shank, fitting without pivots in the T-slot of the stock A, as herein described, for the purpose specified.

2. The jaws C, constructed as described, in combination with the screw-nut B, when the inner inclined surface of such nut bears equally at all points around the inclined circumference of the jaws C, provided with the T-shanks, as herein described, for the purpose specified.

3. The stock A, when provided with the T-slot, adapted to receive the T-shank of the jaws C, in combination with the nut B, whose screw-thread is above the jaws, as herein described, for the purpose specified.

CHARLES M. DABOLL.

Witnesses:

NATHAN BELCHER,  
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