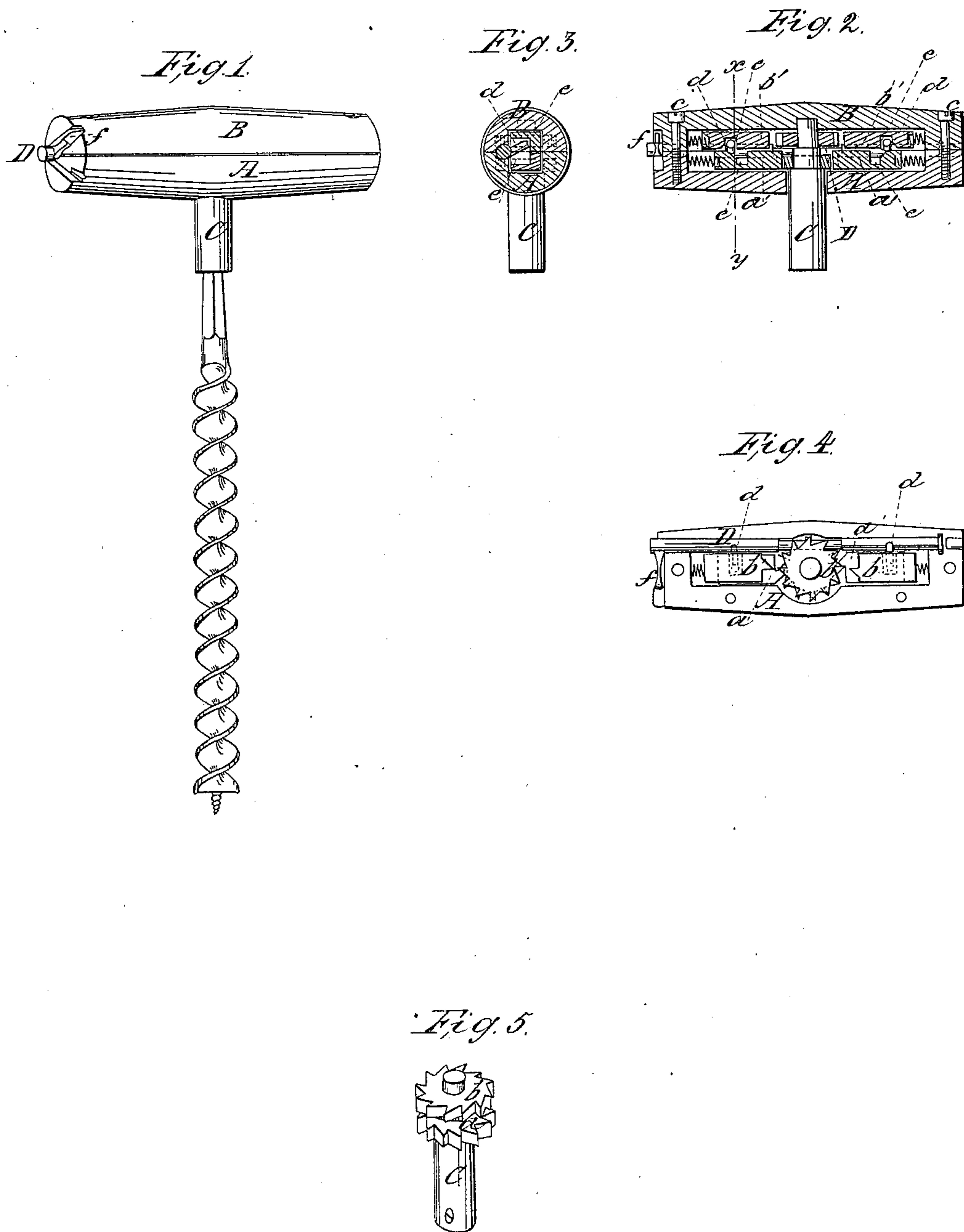


*G. H. Talbot,*  
*Auger Handle.*  
*N<sup>o</sup> 13,925.      Patented Dec. 11, 1855.*



# UNITED STATES PATENT OFFICE.

G. H. TALBOT, OF BOSTON, MASSACHUSETTS.

## AUGER-HANDLE.

Specification of Letters Patent No. 13,925, dated December 11, 1855.

*To all whom it may concern:*

Be it known that I, GUILLAUME HENRI TALBOT, of Boston, in the county of Suffolk and State of Massachusetts, have invented  
5 a new and useful Improvement in Handles for Augers, Gimlets, and other Tools and Instruments to Which Such Handles are Applicable; and I do hereby declare that the following is a full, clear, and exact de-  
10 scription of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, is an outside view of an auger having applied to it one of my improved  
15 handles. Fig. 2, is a central section of the handle taken lengthwise. Fig. 3, is a transverse section of the same taken in the line  $x, y$ , of Fig. 2. Fig. 4, is a view of the handle, with one of the two parts of which its  
20 shell or external portion is formed, removed to show the interior. Fig. 5, is a perspective view of the socket which receives the auger, gimlet or other tool or instrument.

Similar letters of reference indicate corresponding parts in the several figures.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A, B, is the shell or external part of the  
30 handle which is of the same form externally as the common auger or gimlet handle but instead of being solid is divided centrally in a plane perpendicular to the axis of the auger, into two parts A and B, the said  
35 parts being screwed together by screws  $c, c$ . This shell A, B, should be preferably made of cast metal, in which case the necessary cavity in the interior to contain the ratchets, pawls, etc., hereinafter described, may be  
40 formed in the casting. C, is the socket to receive the auger or other tool or instrument, which fits to turn freely in two bearings formed, one in each part of the shell A, B, of the handle, and has tightly secured  
45 to it two ratchet wheels  $a, b$ , whose teeth incline in opposite directions, the said ratchet wheels being allowed plenty of room to turn freely in the cavity of the handle. Opposite the ratchet wheel  $a$ , there  
50 are two sliding spring pawls  $a', a'$ , arranged lengthwise of the handle, one on each side and opposite the ratchet wheel  $b$ , two similar pawls  $b', b'$ .

D, is a small shaft which is fitted to bearings formed in the ends of the two parts A and B, of the shell of the handle, half in

each, thus bringing the axis of the shaft in the plane which passes between the pawls  $a', a'$ , and those  $b', b'$ . This shaft has a small lever  $f$ , outside the handle to turn it  
60 as far as necessary and is furnished with two toes  $d, d$ , one of which plays in recesses  $e, e$ , made in one pawl  $a'$ , and its corresponding pawl  $b'$ , as shown in Fig. 3, and the other in similar recesses in the other two  
65 pawls. The side of each recess  $e$ , which is farthest from the center of the handle is beveled, as shown in Fig. 2, and the toes  $d, d$ , of the shaft D, which are arranged parallel with each other, occupy such a position that when turned into the recesses either  
70 of the two pawls  $a', a'$ , or those  $b', b'$ , they act on the beveled sides of the recesses and force those two pawls out of gear with their respective ratchet wheels, but leaving  
75 the recesses of the other two pawls, allow the latter to engage with their respective ratchet wheels. This is illustrated in Fig. 2, where the toes are represented as having  
80 left the recesses of the pawls  $a', a'$ , and entered those of the pawls  $b', b'$ , allowing the former to fall into gear and throwing out the latter. The same condition is illustrated in Fig. 4. The consequence of  
85 this, is, that by turning the handle back and forth the auger will be turned to the right or in the direction for boring,  $a$  being the right hand ratchet wheel, but if the position of the toes were reversed, by means  
90 of the lever  $f$  the direction of the rotation of the auger would be reversed. The lever  $f$  of the shaft D, which to express its duty, may be termed the reversing shaft, is made  
95 slightly elastic, so that when left free it may enter one of two notches made in the end of the handle to receive it and by that means is confined to keep the toes in position to ungear either of the two ratchet wheels.

The two pawls to each ratchet wheel are  
100 not absolutely necessary, as one for each might serve the purpose very well, but by employing two better security is afforded.

Now it will be observed that while, by my arrangement as described of the actuating pawls and ratchet wheels with the  
105 reversing shaft and so forth within the body of the handle, the ordinary form of gimlet handle, crossing or extending over both sides of the axis of the auger or bit,  
110 is preserved, to afford a convenient clutch to the hand for the steady operation of the

bit in a straight line without tendency by the pressure of the hand to incline the bit to either side as is well known in the action of such handles over or as compared to  
5 one sided handle arrangements especially in the performance of small work, the same facility of giving the required turning action to the bit in either direction by vibrating instead of turning the handle completely around is obtained as is done by the  
10 one sided handle drill stock in common use and which also has been provided with a double reversible pawl and ratchet gear for operation of the drill in either direction by  
15 the vibration of the handle, but in my arrangement I do away with the one sided handle action or pressure and preserve the common property, shape, appearance and so forth of the more steady and convenient  
20 double or ordinary gimlet handle for operation either in the ordinary way, of turning the handle around with the gimlet or bit, (or where there is not convenient space in the piece of work for so turning the handle  
25 completely around) for its operation by a vibratory action by pressure on both sides of the bit as described and these several advantages are obtained without any liability to damage or derangement of parts, any obstruction of the ratchet and pawl devices to  
30 the hand, or mar to the slightly appearance of the gimlet tool, as the several pawls, ratchet and reversing gear are arranged within and covered or protected all around  
35 by the body of the handle, while, by the

handle being formed in two parts longitudinally, every facility is afforded, by taking off the upper part, for repair should derangement occur.

I do not claim as new the manner herein 40 described of giving a revolving action in either direction to the auger bit or boring tool by reversible pawls and ratchets operating in connection with a vibrating handle, apart from the relative arrangement and 45 form of handle specified, as such is common to drill stocks: but

I do claim as a new and useful improvement in gimlet or auger handle arrangements, and desire to secure by Letters Patent, 50

The arrangement, substantially as herein specified, within the body of the said handle, which crosses the bit, of the ratchets 55 (*a b*) and pawls (*a' b'*) with their reversing gear, for operation of the bit or bit socket in either direction, either by a revolving or vibratory action of the gimlet handle on pressure of the hand applied on both sides of the axial line of the bit and under 60 the usual clutch of the hand on the handle over the center line of the bit, and whereby the actuating pawls, ratchets and accompanying devices form no obstruction and are protected from injury or derangement essentially as set forth. 65

G. H. TALBOT.

Witnesses:

O. D. MUNN,  
J. G. MASON.