

(No Model.)

J. N. DEVOY.

AUGER HANDLE.

No. 413,037.

Patented Oct. 15, 1889.

Fig. 1,

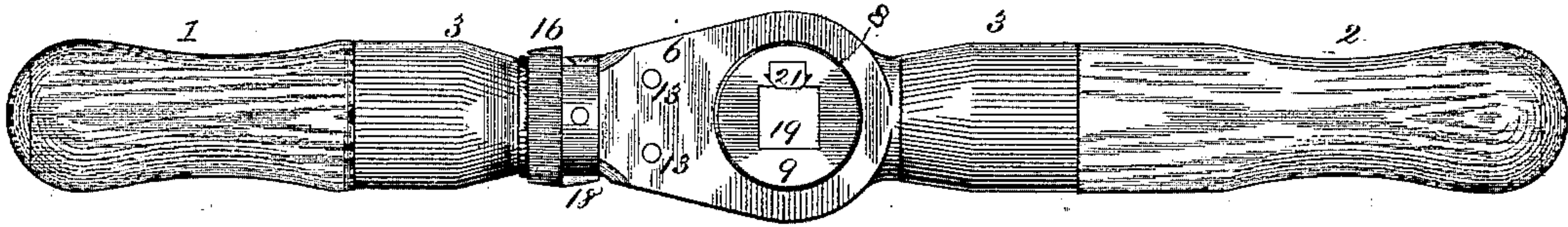


Fig. II,

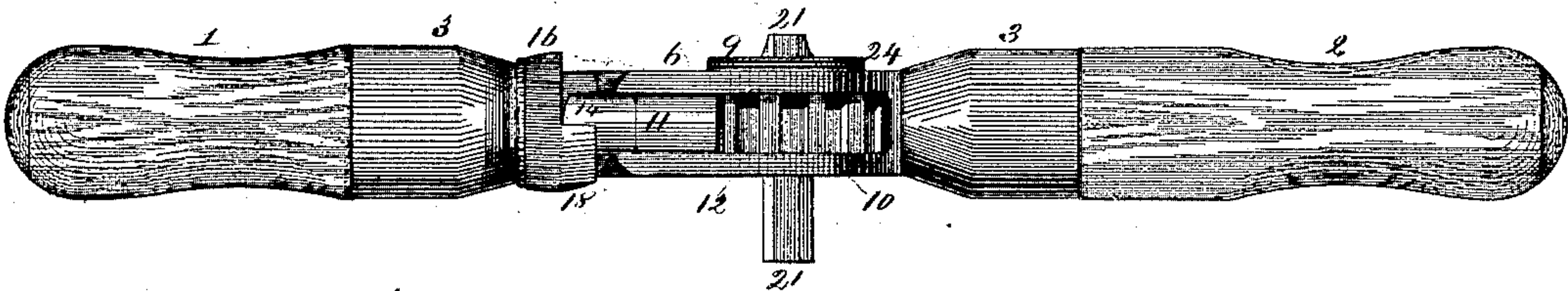


Fig. III,

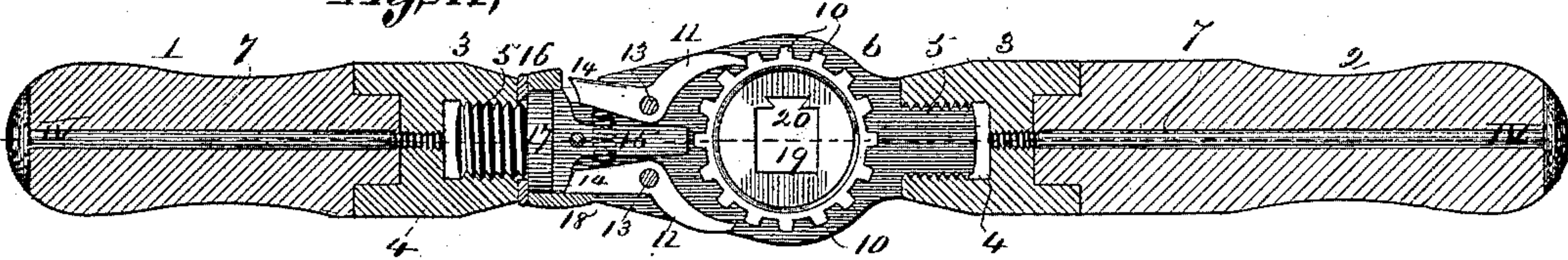


Fig. IV,

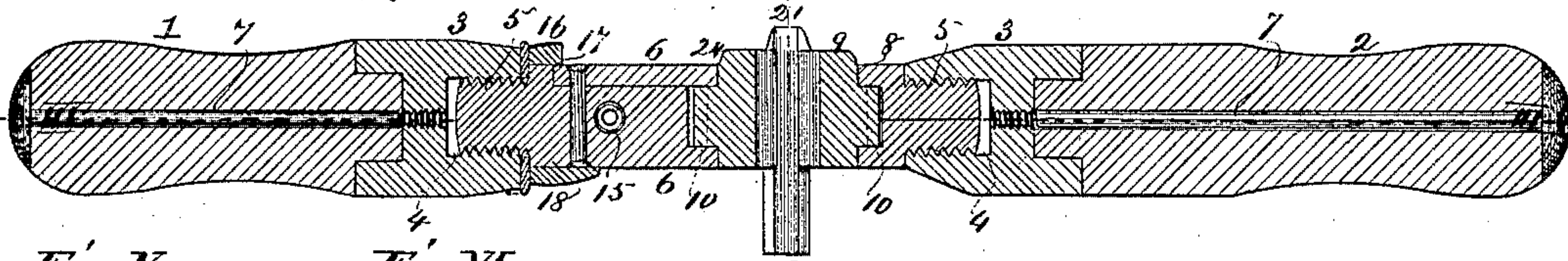


Fig. V,

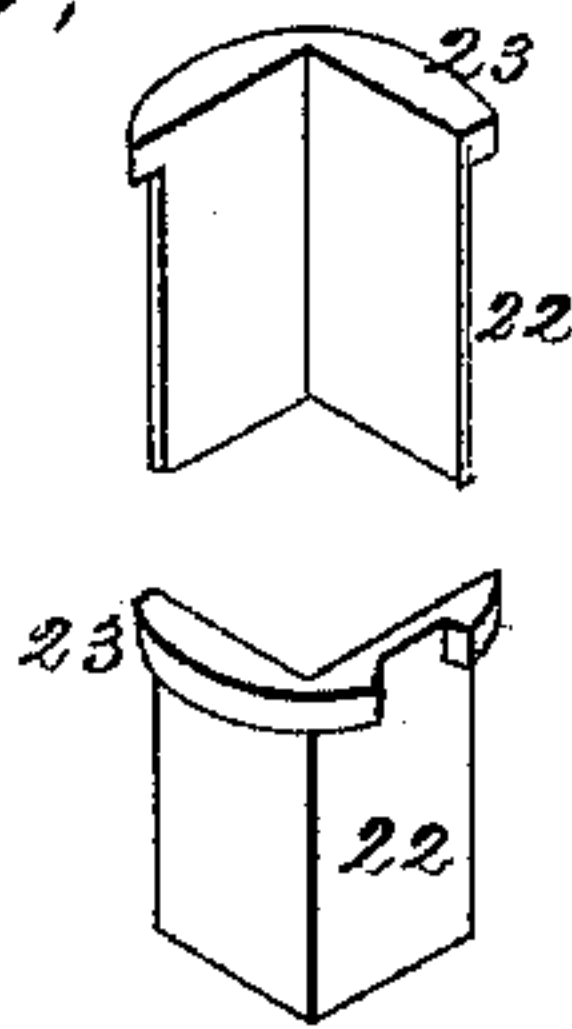


Fig. VI,

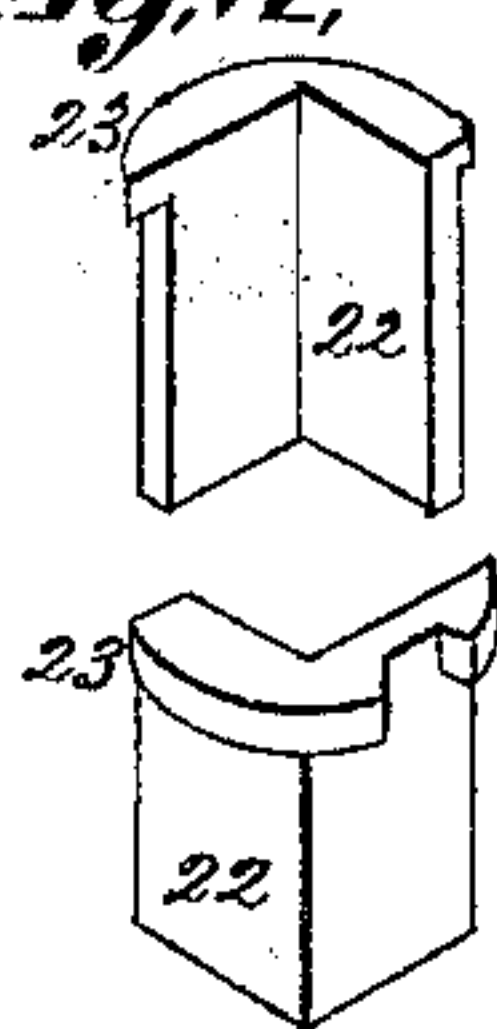


Fig. VII,

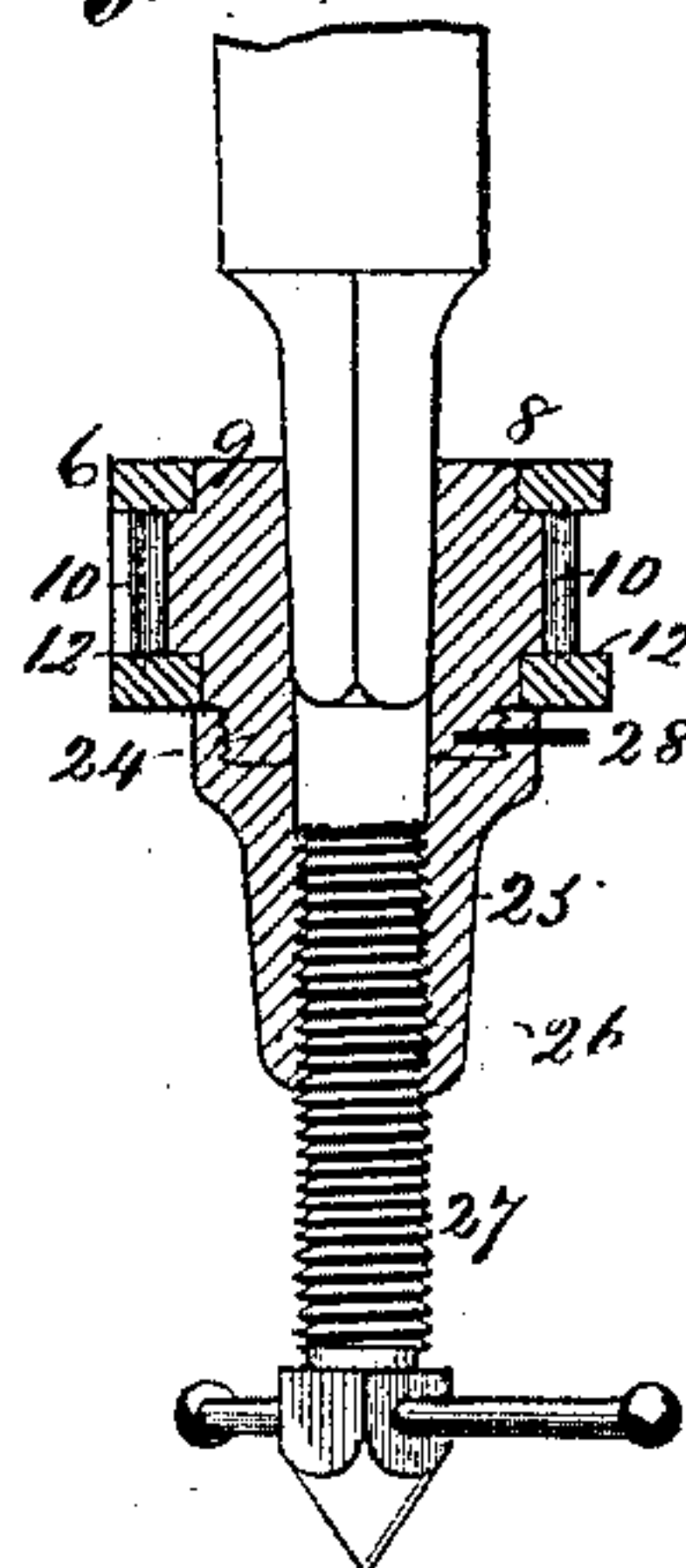
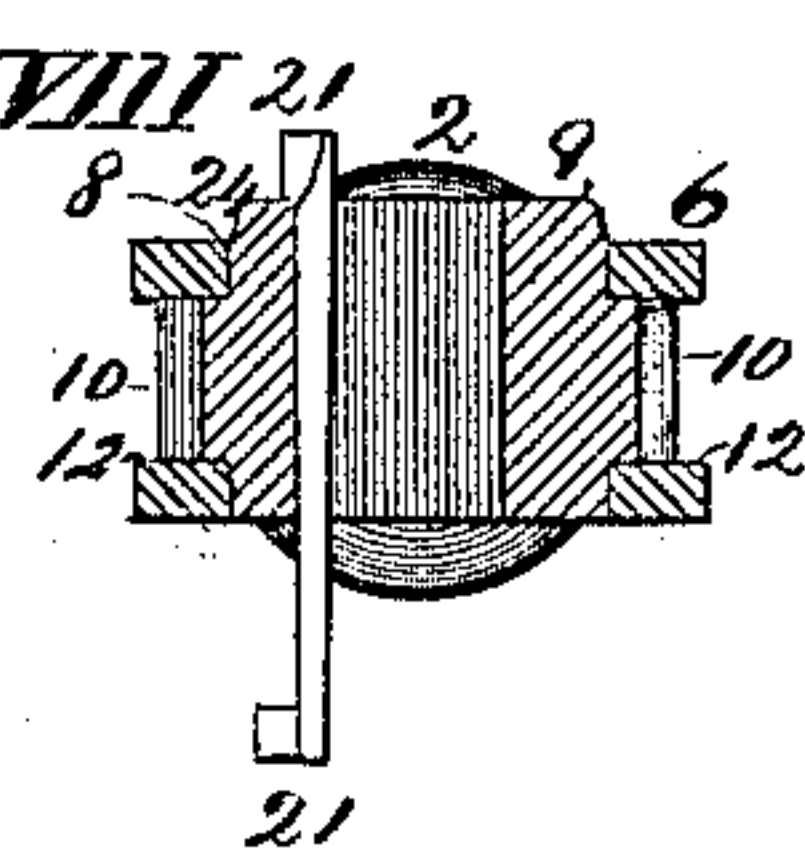


Fig. VIII,



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AUGER-HANDLE.

SPECIFICATION forming part of Letters Patent No. 413,037, dated October 15, 1889.

Application filed January 29, 1889. Serial No. 297,911. (No model.)

To all whom it may concern:

Be it known that I, JAMES N. DEVOY, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Auger-Handles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This auger-handle has one of its grips removable, and the barrel having the socket for the auger-shank is made to turn and fitted with a ratchet device, so that the instrument may be used in a contracted space, not permitting the use of both grips or a complete revolution.

The device has a sliding dovetail key by which the auger-shank may be fixed in the socket.

Figure I is a top view of the handle. Fig. II is a side view of the handle. Fig. III is a longitudinal section at III III, Fig. IV. Fig. IV is a longitudinal section at IV IV, Fig. III. Figs. V and VI are enlarged perspective views of reducers for decreasing the size of the shank-socket, as may be required. Fig. VII is a section showing a feed attachment. Fig. VIII is a transverse section at VIII VIII, Fig. IV.

1 and 2 I call the "grips," the whole device being a removable auger-handle. The grips are fitted in ferrules 3, having screw-threaded sockets 4, which engage on screw-studs 5 of the head 6. The ferrules are held on by screw-rods 7. The head has a transverse bore or socket 8, in which the barrel 9 has bearing. The barrel has at its mid-length circumferential teeth 10, which are engaged by the points of the two spring-pawls 11. These pawls, and also the teeth 10, work in a transverse slot 12 of the head 6. The pawls are fulcrumed at 13 to the head, and their heels 14 are pushed asunder by the spring 15, so as to hold their points in engagement with the teeth 10, at the same time allowing the teeth to slip beneath the points.

16 is a collar turning on the part 17 of the head. The collar has a lip 18, which may be made to bear upon the heel 14 of either of the pawls, so as to hold the toe or point of the pawl out of engagement with the teeth 10, (see

Fig. III,) where the lower pawl is held by the lip in this position. It will be well understood that a rotary reciprocation being imparted to the head 6 causes the intermittent rotation of the barrel in one direction if one pawl is left free to act and in the opposite direction when the other pawl is active, and that when both pawls engage the teeth 10 the barrel is locked in the head and turns therewith.

This ratchet device is not broadly new, nor do I claim the same as my invention. The head may be composed of two parallel parts attached together by rivets or otherwise. The square socket for the shank of the auger is shown at 19. Upon one side of the socket is made a dovetail groove 20, in which fits a dovetail gib or key 21 of wedge form, whose office is to lock the barrel firmly upon the shank.

In some of the mechanic arts, notably in ship-building, augers are used with a square shank many feet in length and of equal section from end to end, so that the handle may be applied to any part of the shank. The augers are often used in places where there is not room for the revolution of the handle, so that common wrenches are at times to be resorted to as a means for turning the augers. My handle is more especially intended for use with such augers, but may be used with all other augers. Where there is space for the revolution of the handle, it may be turned completely around or may have a rotary reciprocation, the proper pawl being put in action and the other pawl thrown out of action. When, however, the space is so contracted that there is not room for both of the grips 1 and 2, the grip 2 is removed by unscrewing the ferrule 3 from its stud 5, and the handle is then worked with one grip alone.

In order to change the handle to another part of the auger-shank, the key 21 is driven upward in its seat 20, and to lock the handle on the shank is driven downward again.

In order to reduce the size of the socket 19, I use section bushes or reducers 22, which are made with flanges 23 at one end to prevent them dropping through the socket.

In Figs. II, IV, VII, and VIII is shown a screw-threaded extension 24 for the purpose

of the attachment of a socket-piece 25, having a screw-threaded socket 26 to receive a feed-screw 27.

The feeding device is of the most simple kind, and no claim is made on it *per se*, but only in the described combination, and I do not confine myself to the feed device having the construction here illustrated. The piece 25 would be secured upon the projection or annular boss 24 by a pin or key 28, or by any other suitable means.

I do not confine myself to the particular ratchet device which I have shown for governing the rotation of the barrel 9, as other ratchet devices might be used for this purpose.

It will be well understood by mechanics that the auger can be held truer in line and the hand will be relieved from much friction by using the handle by a reciprocating movement than by giving it the usual full rotary movement, and in this way my handle has considerable advantages over the ordinary handle.

I claim herein as new and of my invention—

1. An auger-handle having a removable grip 2, a ferrule 3, having a screw-threaded socket,

a longitudinal rod 7, for securing the ferrule to the grip, a turning-barrel adapted to receive the shank of an auger, a head 6, containing said barrel, and a screw-stud 5, onto which the ferrule of the grip is screwed, substantially as set forth.

2. An auger-handle having a socket 19 for the auger-shank, with a dovetail seat or groove 20, and a wedge-formed dovetail key working in the seat, substantially as and for the purpose set forth.

3. The combination, in an auger-handle, of a grip 1, a removable grip 2, a turning-barrel 9, having the shank-socket extending from top to bottom, a ratchet device governing the rotation of the barrel, a screw-threaded projection 24, and a socket-piece 25, adapted to screw on the projection and to receive a feed-screw adapted to bear on the top of the auger-shank either above or below the top of the turning-barrel, substantially as and for the purpose set forth.

JAMES N. DEVOY.

In presence of—

SAML. KNIGHT,

THOMAS KNIGHT.