H. W. Olney,

Attaching Augers to Handles.

No. 50,838. Patented Nov. 7, 1865.

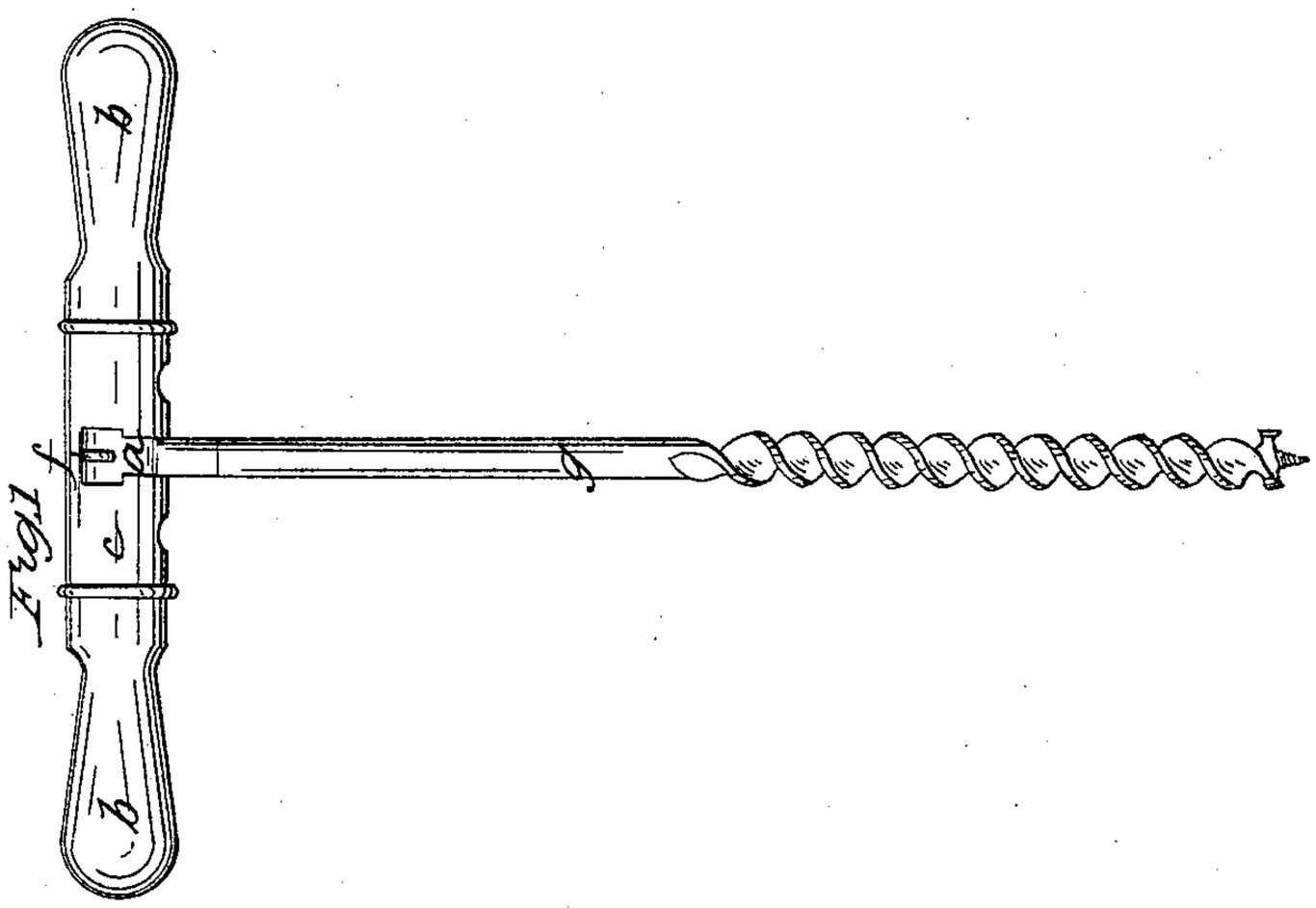

Fig. 1

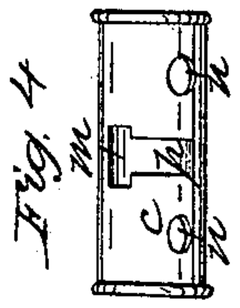

Fig. 4

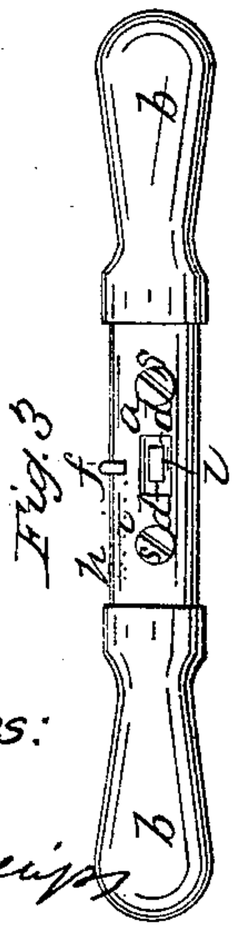

Fig. 3

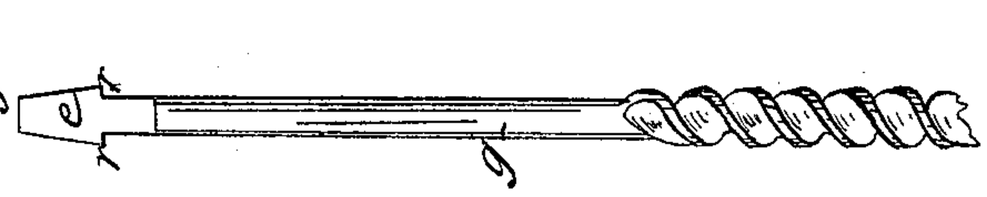

Fig. 2

Witnesses:

J. H. Phillips

E. Harmon

Inventor:

Hiram W. Olney

by his atty

T. Bakewell

UNITED STATES PATENT OFFICE.

HIRAM W. OLNEY, OF ALLEGHENY, PENNSYLVANIA.

IMPROVEMENT IN ATTACHING AUGERS TO THEIR HANDLES.

Specification forming part of Letters Patent No. **50,838**, dated November 7, 1865.

To all whom it may concern:

Be it known that I, HIRAM W. OLNEY, of the city of Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Auger-Handles; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a representation of an auger with the handle attached. Fig. 2 represents the head of an auger adapted to my improved handle. Fig. 3 shows the handle with its sleeve removed. Fig. 4 shows the sleeve detached.

In the several figures like letters denote similar parts.

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

In Fig. 3, *a* is a short metallic tube or hollow cylinder, into each end of which a piece of wood, *b b*, is inserted, of proper shape to form the handle, these hand-pieces *b b* being attached by screws *s s* after the sleeve *c* is placed in the tube *a*, the heads of the screws *s s* being flush with the surface of the tube.

In the side of the tube *a*, midway from either end, is a rectangular aperture, *d*, large enough to receive the head *e* of the auger-bit *g*, which is barbed on both sides, as shown in Fig. 2. Back of the aperture *d*, or farther round on the tube and midway from each end of it, the head *f* of a spring, *i*, projects through a small slot, the spring being placed inside the tube and riveted to it at *h*.

Over the tube *a* is placed a metallic sleeve, *c*, of the same length as the tube *a*, and fitting on it so as to turn easily without being loose. After the sleeve is placed on the tube the hand-pieces *b b* are inserted and fastened by the screws *s s*, there being holes *n n* bored in the sleeve to allow of their insertion.

In the side of sleeve *c* is a rectangular hole, *m*, corresponding in size, shape, and relative position to the hole *d* in the tube *a*, so that when the sleeve is turned round to the proper place the holes *d* and *m* exactly coincide.

Connected with the hole *m* in the sleeve and opening into it is a slot, *p*, the width of which is just equal to the width or thickness of the head of the bit immediately below the barbed projections *r r*, and the length of the slot *p* in the direction of the periphery of the sleeve is such that when the sleeve is turned round on the tube *a*, so that the end of the slot *p* presses against the head of the auger-bit, the knob *f* of the spring *i* will just project up into the aperture *m* of the sleeve, and thus prevent the sleeve being turned back without depressing the knob.

The use of the slot *p*, which is too narrow to allow the barbs *r r* of the auger-head to pass it, is to confine the barbed head *e* within the cavity *d* of the tube, the length of the head *e* of the auger above the barbs *r r* being just equal to the interior diameter of the tube *a*, the end of the auger-head *e* entering a notch, *l*, in the tube *a*, opposite the aperture *d*, so that when the barbed head *e* is inserted in the opening formed by the coincidence of the apertures *d* and *m* in the tube *a* and sleeve *c* the under side of the barbs *r r* will be flush with the surface of the tube *a*, and when the sleeve is turned partly round, so as to uncover the knob *f* of the spring, the edges of the slot *p* in the sleeve will pass over the barbs *r r*, thus securely fastening the auger-bit in its place.

To release the auger from its handle it is only necessary to depress the knob *f* with the thumb and turn the sleeve back, when, the apertures *d* and *m* again coinciding, the auger may be at once withdrawn.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the tube *a*, to which the hand-pieces *b b* are attached so as to form the handle of the tool, with the tubular sleeve *c* placed over the tube *a* so as to turn thereon, and having an aperture, *m*, to receive, and a slot, *p*, the edges of which pass under and hold, the barbed head of the auger or bit, and a spring-catch, *f*, to hold it in place, substantially as hereinbefore described.

In testimony whereof I, the said HIRAM W. OLNEY, have hereunto set my hand.

HIRAM W. OLNEY.

Witnesses:

ALLAN C. BAKEWELL,
A. S. NICHOLSON.