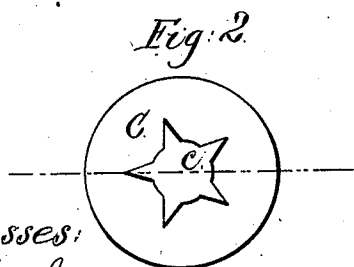
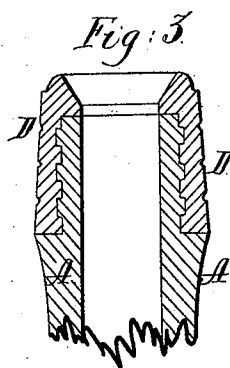
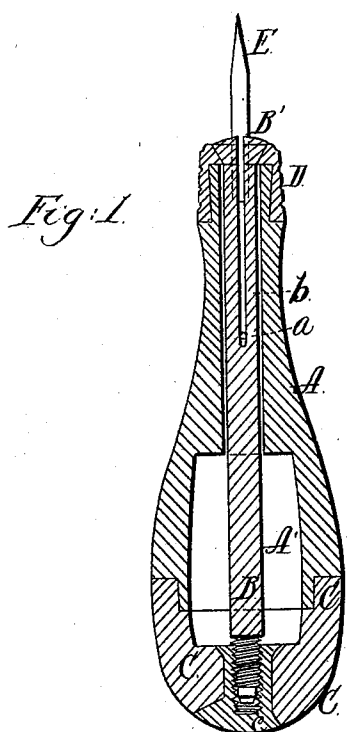


N. S. Clement,
Awl Handle,
Nº 62,938, Patented Mar. 19, 1867.



Witnesses:
D. W. Stetson
H. C. Dey

Inventor:
Nathan S. Clement
by his attorney
J. D. Stetson

United States Patent Office

NATHAN S. CLEMENT, OF NEW BRITAIN, CONNECTICUT.

Letters Patent No. 62,938, dated March 19, 1867.

IMPROVEMENT IN AWL HANDLES.

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, NATHAN S. CLEMENT, of New Britain, in the county of Hartford, in the State of Connecticut, have invented certain new and useful improvements in Handles for Awls and analogous tools; and I do hereby declare that the following is a full and exact description thereof.

My device seizes and liberates the awl by opening and closing a divided socket. This general mode of construction has been long known, but my invention is different from any before known to me, and superior thereto.

I will first describe what I consider the best means of carrying out my invention, and will afterwards designate the points which I believe to be new. The accompanying drawings form a part of this specification.

Figure 1 is a central longitudinal section.

Figure 2 is a view of the rear end.

Figure 3 is a section showing on a larger scale the mode of joining the ferrule and handle.

Similar letters of reference indicate like parts in all the figures.

A is the main body of the handle. It is perforated through its axis to receive the steel or iron stem B, and is recessed toward the rear, as indicated by A', to form a receptacle for the tools which are not in use. C is a cover for this receptacle. It also contains a metallic nut, *c*, which fits on the threaded end of the stem B, as indicated. This nut *c* is star-shaped on its outer surface, as shown in fig. 2, and is larger, both at its inner end and outer end, than along the centre of its length. It is formed of type metal, or analogous material, and is cast in place. The process of forming it consists in putting the cover C in a proper position in sand or in a mould, and after inserting the stem B, or, by preference, a highly polished steel former made of corresponding shape, the type metal is poured in until the mould or the cavity is full. After the metal is chilled the stem B or corresponding former is removed by unscrewing it, and the surfaces of the metal *c* are subsequently finished by hand or by machinery. The opposite end of the stem B is split for a considerable distance, as indicated by *b*. The stem is also formed with a tapering head, as indicated by B'. The split *b* receives a nail or wire which is driven through the handle and through the split after the stem is put in its proper position in the handle. The tapering head B' fits to the corresponding interior of the ferrule D. This ferrule is secured on the handle A by embracing it for a little distance, the surface of the handle being formed irregularly, so as to lock with the corresponding shaped ferrule, as indicated in the drawing. The ferrule D is cast in place by means similar to that just described for the production of the nut *c*. A small amount of longitudinal motion of the stem B is allowed, by driving the nail or wire a little above the lower end of the split *b*. It will, of course, be understood that a suitable socket is formed for the awl or other tool, and that this socket coincides in position with the split *b*, but is not as deep. The socket is square in section.

The parts of my handle being properly put together, the cover C is turned in such direction as to partially unscrew the nut *c* from the screw on the stem B. It is then pushed forward so as to carry the stem with it, and this, by pushing out or protruding the tapering front end of the stem B beyond the ferrule D, allows it to spring open a little. The awl E is now inserted in its proper position, and the cover C is screwed in the opposite direction, so as to draw the stem B into the nut *c*. This movement draws the tapering part B' down into the tapering socket in the ferrule D, and causes it to be pressed together with such force as to confine the awl E. In this condition the tool may be used for any length of time, and the reverse of the above-described operation will liberate the awl and allow the handle to be carried in the pocket, or allow the tools to be changed at pleasure.

I do not claim separately the divided and tapering stem B B', operating as represented, nor the nut *c*, nor the handle and cover A C. I do not claim anything shown in the patent issued to D. H. Chamberlain, dated May 30, 1848, but having now fully described my invention, what I claim as new therein, and desire to secure by Letters Patent, is as follows:

I claim as a new article of manufacture the awl handle herein described, having a tapering head, B', on a movable stem, operated by a nut, *c*, locked in the cover C, by being headed or enlarged to match the recesses provided in said cover, as herein set forth.

N. S. CLEMENT.

Witnesses:

SAMUEL BAKER,

L. M. GUERNSEY.