

(No Model.)

F. M. HAY.
AUGER HANDLE.

No. 461,529.

Patented Oct. 20, 1891.

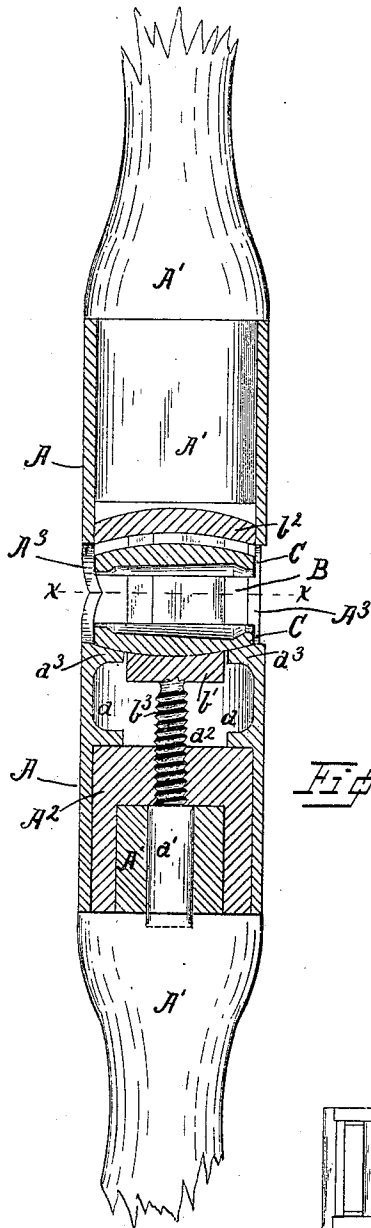


Fig. 1.

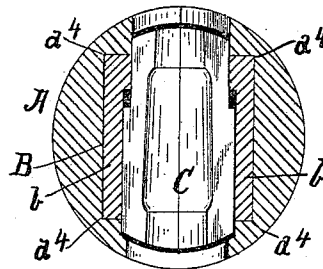


Fig. 2.

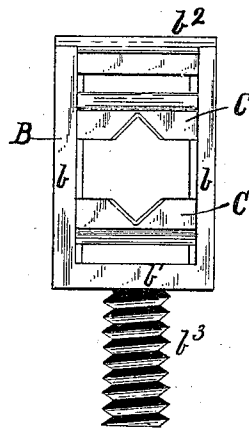


Fig. 3.

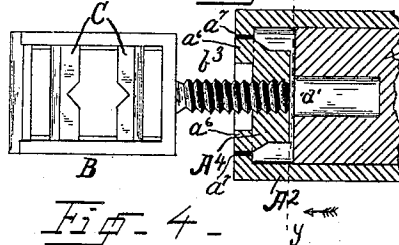


Fig. 4.

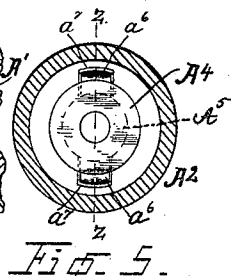


Fig. 5.

Witnesses:
Ed. Willis;
Cyrus T. Dean

Inventor:
Francis M. Hay
By Atty's: Hallock & Hallbeck

UNITED STATES PATENT OFFICE.

FRANCIS M. HAY, OF ERIE, PENNSYLVANIA.

AUGER-HANDLE.

SPECIFICATION forming part of Letters Patent No. 461,529, dated October 20, 1891.

Application filed June 26, 1890. Serial No. 356,805. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS M. HAY, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Auger-Handles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to auger-handles; and it consists in certain improvements in the construction of the same, as will be hereinafter fully set forth, and pointed out in the claims.

The invention is illustrated in the accompanying drawings as follows:

Figure 1 shows the essential parts of the device in longitudinal vertical section. Fig. 2 shows the same parts in transverse vertical section on line $x x$, Fig. 1. Fig. 3 is a top or plan view of the gripping mechanism. Figs. 4 and 5 show an alternative construction. Fig. 5 is a vertical section on the line $y y$, Fig. 4, looking in the direction of the arrow, and Fig. 4 being a longitudinal section in the plane of the line $z z$ in Fig. 5.

A is the stock or central part of the handle, which is made of malleable iron, is hollow, contains the gripping apparatus, and serves as a socket for the wooden ends of the handle A' .

A^2 is an iron ferrule on the end of one of the wooden handles and has a screw-threaded opening a^2 through it into the cavity a' in the end of the wooden part. The ferrule A^2 abuts against the ledge or shoulder a on the inside of the stock A.

B is a loop or frame composed of the sides $b b$ and ends $b' b^2$, and it fits in a guideway a^4 at the central part of the stock. (Seen in Fig. 2 most clearly.) On one end of the loop B there is a screw-threaded shank b^3 , which enters the screw-threaded opening a^2 in the ferrule A^2 . The end b^2 of the loop extends above the sides of the loop and is concave on its inner side. There is a central transverse opening A^3 through the stock to receive the shank of the auger, which, when inserted, will be within the loop B.

Within the loop there are two jaws C C,

which are convex on their backs and V-formed on their faces, so as to engage and hold the squared end of the auger-shank. One of these jaws has its bearing against the concave inner side of the end b^2 of the loop B, and the other has its bearing at its ends against a shoulder or ledge a^3 on the inside of the stock near the shoulder a , the bearing-faces of which are concaved to conform to the convexity of the back of the jaw.

The jaws C C are put into the loop before it is inserted into the stock, and the loop when inserted into the stock is put in at the end opposite the shoulders a and a^3 , with the screw-shank b^3 in advance. The handle A' , having the ferrule A^2 thereon, is then inserted at the opposite end of the stock from that at which the loop was inserted, and the screw-shank b^3 is screwed into the ferrule by turning the handle. The other handle A' is then inserted in the end of the stock opposite the handle having the ferrule thereon and the device is then ready for use. When an auger-shank is inserted in the opening A^3 , the handle A' , having the ferrule thereon is turned and the loop is drawn toward it. This brings the jaws into contact with the auger-shank, and as they have their bearings against concaved surfaces they will adjust themselves to the taper of the shank and obtain a firm bearing thereon, and when the screw is firmly set up the auger will be tightly gripped.

In the alternative construction shown in Figs. 4 and 5 there is a loose-winged nut A^4 , held in a recessed opening in the end of the ferrule A^2 in place of the end of the ferrule forming the nut. A^5 marks the opening in the end of the ferrule, a^7 the recesses in the sides of said opening, and a^6 the wings on the nut A^4 , which fit in said recesses. Winged nuts fitting in recessed openings are common in mechanical construction, and the purpose of their use is well understood by the most ordinary mechanics. The functions of the several parts in the present construction are the same as ordinarily—that is to say, the function of the opening A^5 is to receive the nut A^4 and that of the recesses a^7 is to receive the wings a^6 of the nut. The object of the modification over the construction shown in Fig. 1 is to avoid the rigidity incident to

the construction shown in Fig. 1 and give a flexible and yielding connection between the ferrule and the nut.

What I claim as new is—

- 5 1. In an auger-handle, the combination of the stock A, having the transverse opening A³, bearing-shoulders *a* and *a*³, and sockets for the handles A' A', the threaded ferrule A² on one of said handles, the loop B, with
10 screw-shank working in said threaded ferrule, and the jaws C C, contained within said loop, substantially as and for the purposes set forth.
2. In an auger-handle, a stock A, having sockets for the handles A' A', a transverse

opening for the auger-shank, a longitudinal 15 way for the loop B, and the bearing-shoulders *a* and *a*³, in combination with the loop B, having a screw-shank *b*³ and contained jaws C C, and one of said handles A' adapted to be revolved within its socket and carrying a nut which acts upon the said screw-shank *b*³. 30

In testimony whereof I affix my signature in presence of two witnesses.

FRANCIS M. HAY.

Witnesses:

J. M. G. MCKERROW,
CHAS. E. GRAHAM.