W. HANEY. Auger.

No. 208,087.

Patented Sept. 17, 1878.









Witnesses.

UNITED STATES PATENT OFFICE.

WILLIAM HANEY, OF EAST HAVEN, CONNECTICUT.

IMPROVEMENT IN AUGERS.

Specification forming part of Letters Patent No. 208,087, dated September 17, 1878; application filed March 20, 1878.

To all whom it may concern:

Be it known that I, WM. HANEY, of East Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Ship-Augers; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent in—

Figure 1, side view, looking toward the cutting-edge; Fig. 2, reverse or opposite side; Fig. 3, perspective view with the cutter removed; Fig. 4, perspective view of the cutter.

This invention relates to an improvement in that class of wood-boring instruments known as ship-augers.

In the use of these augers the cutting-lip is frequently broken, and when broken the instrument is useless. This frequent breaking makes this instrument an expensive one for the ship-carpenter.

The object of this invention is to overcome this difficulty; and it consists in constructing the auger with a detachable cutting-head, as more fully hereinafter described.

The body A of the auger is made in the usual manner; but instead of forming a cutting-lip at the head end a rib, a, is formed across the head in a horizontal plane, leaving a shoulder, d, on the outside—the rib of dovetail form, as seen in Fig. 2.

The head B, as seen in Fig. 4, is constructed with a groove, e, corresponding to the rib a, and with a plain surface, f, corresponding to the shoulder d, and with the cutting-lip C, which forms the continuation or termination of the twist, and substantially of the usual shape, so that when set onto the head end of

the twist it will complete the auger—in appearance, substantially the usual construction. This cutter may be secured by a small screw from the under side into the body or otherwise. The rib takes the strain, so that all that is required of the fastening device is to prevent the head from slipping laterally.

By this construction, if the cutting lip breaks it is only necessary to remove the head and replace it with a new one, the heads of a certain size being all alike, and furnished several with each auger. The expense of a new auger at every break is almost entirely saved, as these heads are comparatively inexpensive.

While it is preferable to construct the rib on the body of the auger and the groove in the head, it will be understood that this order may be reversed, and that by using the expression "rib on the one part and groove in the other," I wish to be understood as including such modification.

I do not broadly claim an auger with a removable cutting-lip, as such I am aware is not new. I am aware that augers have been constructed with removable cutters and heads, and therefore do not broadly claim such as my invention, as such may be seen in Letters Patent No. 75,379, of 1869, No. 111,099, of 1871, and No. 158,090, of 1874; but

What I do claim as new, and desire to secure by Letters Patent, is—

A ship-auger having the head end constructed with a rib and with a removable head, with a corresponding groove for attaching the head to the auger, substantially as described.

WILLIAM HANEY.

Witnesses:

JOHN E. EARLE, H. A. KITSON.