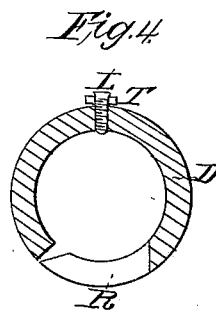
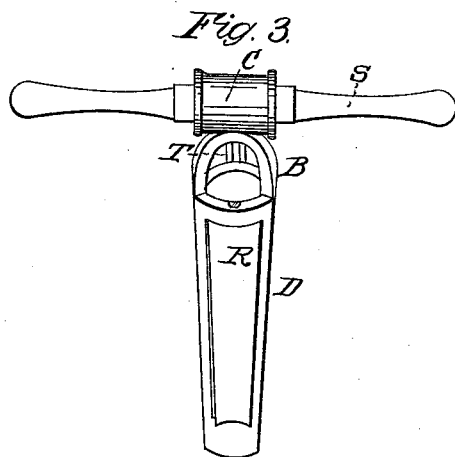
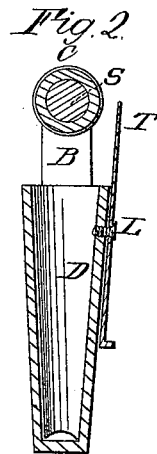
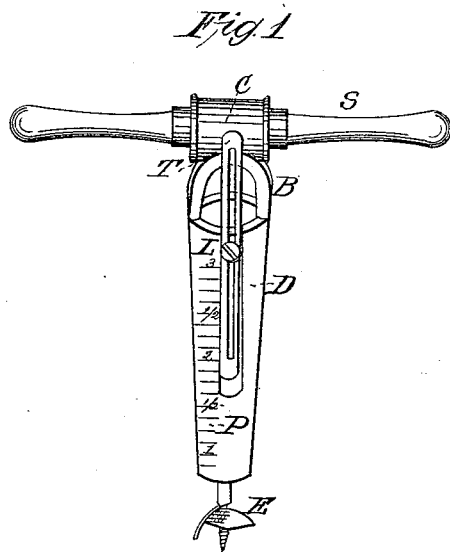


L. Gray,
Bung Auger.
N^o 51,451. Patented Dec. 12, 1865.



Witnesses

Josiah W. Ellis
Ed. Williams Jr.

Inventor

Lyman Gray

UNITED STATES PATENT OFFICE.

LYMAN GRAY, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN BUNG-HOLE REAMERS.

Specification forming part of Letters Patent No. **51,451**, dated December 12, 1865; antedated December 5, 1865.

To all whom it may concern:

Be it known that I, LYMAN GRAY, of the city of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Bung-Hole Reamers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 represents a perspective view of my improved reamer. Fig. 2 is a transverse vertical section of the same. Fig. 3 represents a front view of the reamer, showing the position of the knife or cutter. Fig. 4 is a cross-section of the pod.

All the parts are lettered, and similar letters indicate like parts in the different views.

The nature of my invention consists in making the pod or body of the reamer hollow to collect the chips or cuttings and prevent them from falling into the barrel, and open at the top or largest end, whereby the cuttings, as they accumulate, can be thrown out, that they may not interfere with the operations of the knife.

My improvement also consists in forming an index on the pod or body of the reamer, which, in combination with a sliding gage, enables the operator to so regulate the cut that no mistake can occur in preparing the barrels for the various-sized bungs.

Another part of my invention consists in securing the handle to the pod by means of an arch spanning the large open end, and sufficiently high above the mouth of the pod to give free passage to the cuttings while being thrown out.

To enable others to understand and make my improvement, I will proceed to describe its construction by reference to the accompanying drawings.

I construct my improved reamer by making a hollow metallic pod, D, with an opening on one side sufficiently large for the insertion of a steel knife, R, secured therein by a small screw, A, at the top or large end, the shape of the pod and knife being shown in Figs. 3 and 4. On the opposite side of the pod are a series of figures running from the bottom or small end to the top, forming a scale or index representing the diameter. Beside this index is a sliding gage, T, secured to the pod, and made adjustable by means of a set-screw, L, moving in a long slot, which allows the gage to be slid up or down, as the case may require. The large end of the pod D is left open for the purpose hereinbefore stated, and is spanned by a high arch, B, supporting a longitudinal socket, C, through which a wooden handle, S, is passed for working the reamer.

The small end of the pod D may be furnished with a bit or short auger, E, rather larger than the least diameter of the reamer, for the purpose of boring into barrels that are not already provided with a bung-hole.

The object and working of reamers constructed for this purpose being well understood, no description is herein deemed necessary.

Having described my improvement, what I claim is—

A tapering hollow pod, D, open at the top or largest end, when said large end or open top is surmounted by an arch, B, and socket for supporting the handle, in the manner shown, and in combination therewith the use of the scale of figures on the outside of the pod and sliding gage attached thereto, operating substantially as represented, for the purpose herein set forth.

LYMAN GRAY.

Witnesses:

JOSIAH W. ELLS,
EB. WILLIAMS, Jr.