

B. F. BEE.
GIMLET.

No. 172,377.

Patented Jan. 18, 1876.

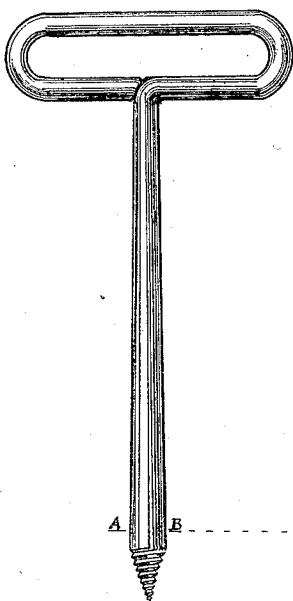


Fig. 1



Fig. 3



Fig. 4

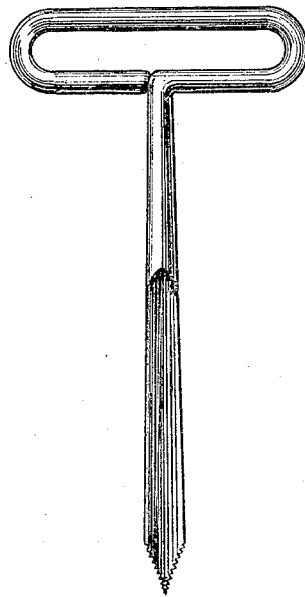


Fig. 2

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UNITED STATES PATENT OFFICE.

BENJAMIN F. BEE, OF HARWICH, MASSACHUSETTS.

IMPROVEMENT IN GIMLETS.

Specification forming part of Letters Patent No. 172,377, dated January 18, 1876; application filed November 8, 1873.

To all whom it may concern:

Be it known that I, BENJAMIN F. BEE, of Harwich, in the county of Barnstable and State of Massachusetts, have invented certain Improvements in Gimlets, of which the following is a specification:

This invention has for its object to furnish a gimlet which will be very efficient in use; and the invention consists in the novel construction of the gimlet, which be fully hereinafter described, and pointed out in the claim.

Figure 1 is an elevation, showing the convex side of a gimlet embodying my invention. Fig. 2 is an elevation, showing the concave side of the same. Fig. 3 is an enlarged view of the cutting portion. (Shown in Fig. 2.) Fig. 4 is a cross-section through A B, Fig. 1, showing the portion of a circle embraced by the external and internal surfaces of the gimlet directly above, and corresponding with, the cutting part.

One of the greatest difficulties in using ordinary gimlets is their tendency to split the material, owing, mainly, to the conical screw designed to draw the gimlet into the work; and also, that the cutting portion is enlarged above the screw.

In my invention the cutting-edge extends, practically, throughout the entire cone, and up to the largest cross section of the cut, and, being threaded throughout this distance, although something more than one-half of the cone is removed when properly made, it furnishes abundant means for drawing the tool into the work. In fact this gimlet penetrates the material with far more ease than the other kinds in use; for, as it cuts the material away as it progresses, it removes the resistance to its progress.

When properly made, the cutting-edge should terminate exactly in the point. That point furnishes a center about which the tool revolves. Directly above the point a cross-

section should show something less than a semicircle in the convex surface, and continue so throughout the cut. This will insure a relieved cutting-edge, always presented to the work, and is an important feature of my invention. The form of such cross-section is shown in Fig. 4. Another perplexity in using the ordinary gimlet is the insecurity of the handle.

In my invention the handle of the gimlet is a continuation of the shank, bent into such convenient form as to embrace all the essential qualities of the ordinary handle and something more. It is found in practice that this handle affords a more agreeable feeling to the fingers when using the gimlet than the usual solid kind, while it is more convenient for hanging up the gimlet.

It will be readily seen that nothing short of the destruction of the shank can separate the handle from the gimlet proper.

The handles of stove-pokers and such like cheap articles are sometimes made something in this manner; also, the handles of cheese and butter triers, &c., are made in an oblong or elliptical form, but are usually welded to the shank, and I do not consider such as touching my invention; but I have never seen or known the kind of handle hereinbefore described to be applied to gimlets, for which it seems so admirably adapted, both for cheapness and efficiency.

-What I claim as my invention is—

As a new article of manufacture, a gimlet constructed of a single piece of metal, the shank of which is a semi-tube having a cutting-screw, and the handle formed by bending the end of the shank, as shown and described.

BENJAMIN F. BEE.

Witnesses:

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