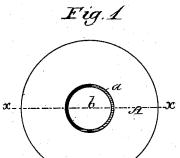
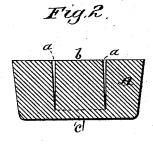
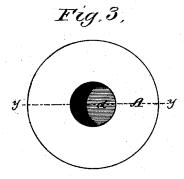
G. BORST. Bung.

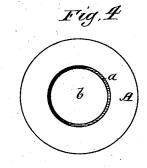
No. 203,316.

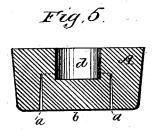
Patented May 7, 1878.

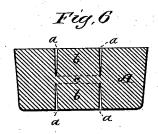












WITNESSES. William & Boadford John Cunimins INVENTOR, George Borst, perbha!H. Fowler, Attorney,

UNITED STATES PATENT OFFICE.

GEORGE BORST, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN BUNGS.

Specification forming part of Letters Patent No. 203,316, dated May 7, 1878; application filed April 16, 1878.

To all whom it may concern:

Be it known that I, GEORGE BORST, of Rochester, in the county of Monroe and State of New York, have invented a new and valuable Improvement in Bungs; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a top-plan view of my improved bung. Fig. 2 is a top sectional view of the same, taken on line x x of Fig. 1. Fig. 3 is a top-plan view of a bung embracing a modification of my invention; Fig. 4, a similar view of the under side, and Fig. 5 a sectional view taken on line y y of Fig. 3; Fig. 6, a sectional view of a bung, showing further modifications of my

invention.

This invention has relation to the manufacture of vent-bungs, and appertains more particularly to that class of bungs in which a portion of the material thereof is removed, so as to leave a web of wood at the opposite side of the bung, in which the hole is bored, or at or near the interior portion of the bung, the web being broken or pushed out by a suitable instrument when a vent is required, without the necessity of removing the bung from the cask or other vessel in which it is inserted.

The objection heretofore experienced with the above class of vent-bungs was the great danger of the web becoming accidently punctured, and the vent given to the contents of the cask or barrel during its transportation; also, the ease with which the web could be opened with a knife or other similar instrument by meddlesome persons, which has been frequently done, much to the loss of the

A further and very important objection to the bungs having a web formed by the removal of a portion of the material is that the web is not of sufficient thickness to withstand the pressure within the cask or barrel, or, if made sufficiently thick, it cannot be readily broken or pushed out.

My invention therefore has for its object to so construct the bung that all objections above |

enumerated will be removed, and at the same time admit of the vent being made by the ready displacing or removal of a portion of

the wood composing the bung.

The invention consists in making a groove or incision in one of the faces of the bung, extending a sufficient distance into the same, so that when a vent is required the material surrounded by the groove or recess may be readily removed by a knife or other sharp instru-ment, leaving a web of wood that can be easily broken or punched out, while, at the same time, the bung is not weakened previous to the making the vent, and therefore all ac-cidental opening of the web is avoided.

The invention further consists in boring a hole partially through the bung from one of the faces of the bung, and forming upon the opposite face into the bung a groove or incision, leaving the material surrounded by the same intact, but rendering it easily removed to form an opening through the bung for the

insertion of a vent-plug.

In the accompanying drawings, A represents a wooden bung, slightly tapering, and having formed upon one of its faces a groove or incision, a. This groove or incision extends only partially through the bung, so that when the material b, surrounded by the groove or incision, is removed a thin web, c, will be left, which may be readily broken or punched out.

Although I have described one form of the groove, it is evident that they may be made on either or both sides or faces of the bung, as illustrated in Fig. 6 of the drawings, and one of said grooves or incisions may be of greater circumference than the other, and extend above it; and, in place of the groove or incision upon one of the faces of the bung, an opening or cavity, d, may be formed, and the groove or incision upon the opposite face may extend even with or above the bottom of said cavity, as illustrated in Fig. 5 of the drawing.

It will be seen that a bung constructed according to my invention loses none of its original strength, and the groove or incision renders the wood surrounded thereby easily removed, leaving a web, c, that can be broken or punched out for the reception of a vent-

plug having a longitudinal bore.
With the bung having a cavity, d, all that

is necessary is to place the end of the ventplug in the cavity, and by a blow with a ham-mer or other suitable instrument or tool upon the end of the plug it will break or force in the solid portion, and air can then be admitted to the cask or barrel through said plug.

Having now fully described my invention,

what I claim as new, and desire to secure by

Letters Patent, is-

1. A vent-bung having upon one or both of its faces a groove or incision, extending partially through the same and surrounding the portion to be removed, substantially as and for the purpose set forth.

2. A vent-bung having formed upon one of its faces a cavity, and upon the opposite face a groove or incision surrounding the portion to be removed, substantially as and for the purpose specifiéd.

In testimony that I claim the above I have hereunto subscribed my name in the presence

of two witnesses.

GEORGE BORST.

Witnesses:

WILLIAM E. EDMONDS, CHAS. S. HENRY.