No. 740,122. PATENTED SEPT. 29, 1903

E. N. GREENWOOD.

BUNG PULLING IMPLEMENT.

APPLICATION FILED JAN. 19, 1903.

NO MODEL.

Fig. 1

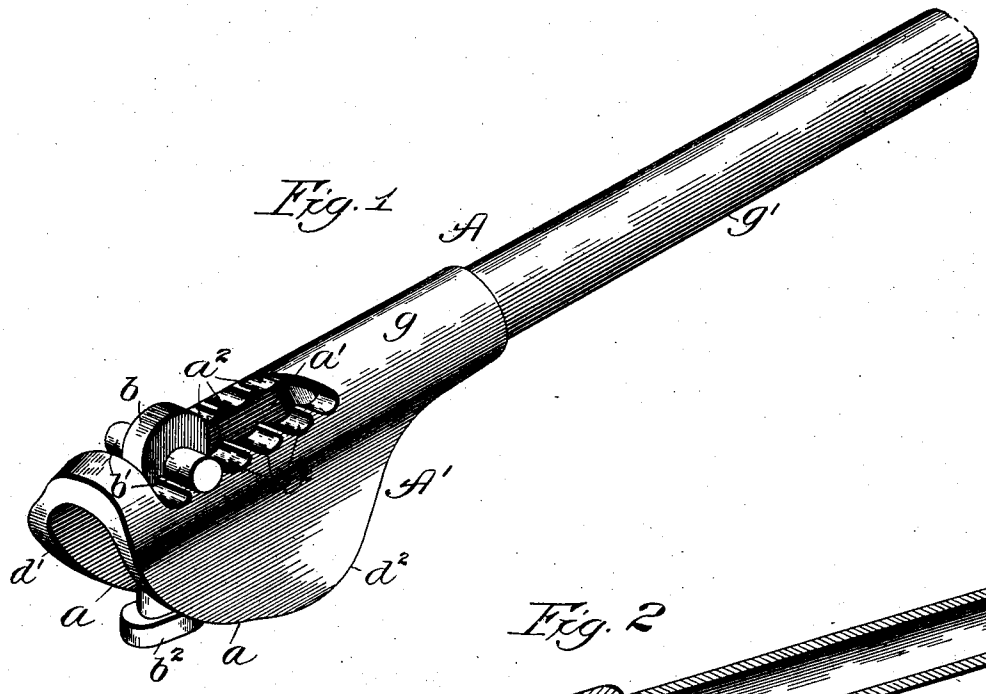


Fig. 2

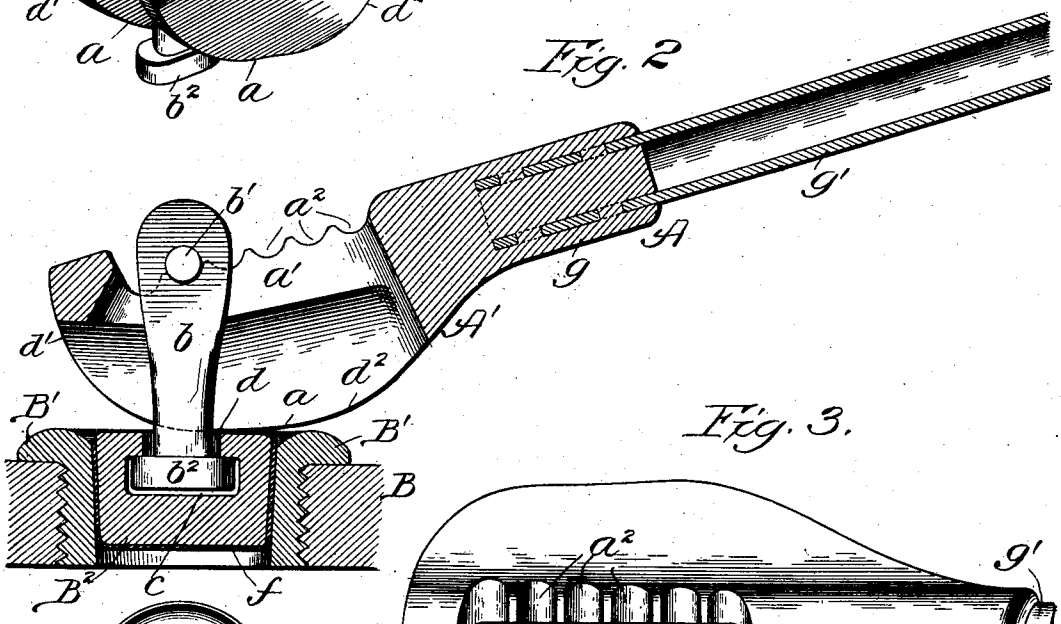
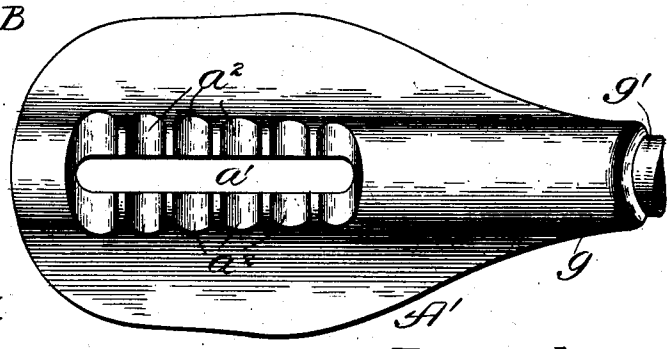


Fig. 3.



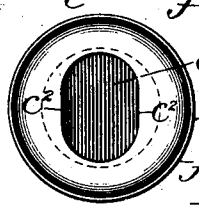


Fig. 4.

Witnesses:
Chas. E. Gaylord.
John Enders Jr.

Inventor:
Edwin N. Greenwood,
By Dyrenforth, Dyrenforth & Lee,
Att'ys.

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No. 740,122. Patented September 29, 1903.

UNITED STATES PATENT OFFICE.

EDWIN N. GREENWOOD, OF CHICAGO, ILLINOIS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE NATIONAL METAL BUNG COMPANY, OF CHICAGO, ILLINOIS.

BUNG-PULLING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 740,122, dated September 29, 1903.

Application filed January 19, 1903. Serial No. 139,583. (No model.)

To all whom it may concern:

Be it known that I, EDWIN N. GREENWOOD, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Bung-Pulling Implements, of which the following is a specification.

My invention relates particularly to implements for pulling bungs from barrels, kegs, &c.; and my primary object is to provide an implement of this character which will serve readily to extract bungs regardless of the depth to which they have been driven into their bushings.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 represents a broken perspective view of my improved bung-puller; Fig. 2, a broken longitudinal sectional view showing the device applied to the bung of a barrel; Fig. 3, a broken plan view of the implement, and Fig. 4 a plan view of a bung with which the implement is adapted to be employed.

In the preferred construction I provide a hand-lever A with a head A′, having lower cam edges *a* and its upper portion provided with a longitudinal slot *a′*, flanked by a series of transverse bearings a^2. Adjustably supported by the head A′ is a bolt or member *b*, provided at its upper portion with a transverse pivot *b′*, adapted to engage any one of the series of bearings a^2 and having an oval-shaped flanged head b^2, adapted for connection with the bung.

B represents a portion of a barrel, B′ a bung-bushing applied to an opening in the barrel, and B^2 a bung driven into the bushing. The bushing and main body of the bung are of metal, and the bung has a chamber *c* with an oval oblong-shaped opening *c′* at the upper surface of the bung and adapted to receive the head b^2 of the bolt *b*. Flanking the opening are flanges c^2, beneath which the extremities of the flanged head of the bolt may be turned after the head has been inserted through the opening. The cam-surfaces *a* are separated a suitable distance to permit them to rest upon the bushing at points *d* (one only shown) at opposite sides of the bung. The head enlarges gradually from its tip *d′* to a point d^2 near its base. This permits the bolt *b* to be adjusted with reference to the head of the implement to suit the implement to the depth of the bung which is to be extracted.

In the operation of pulling the bung the implement is applied by inserting the head b^2 through the opening *c′* and then turning the implement while the cam-surfaces *a* rest upon the bushing till the long axis of the head b^2 is parallel with the short axis of the opening *c′*. The pivot *b′* is then adjusted in the highest notch possible counting toward the base of the head of the implement, the handle of the implement being lifted to permit this adjustment. Thereupon the handle of the implement is pressed downwardly, prying over the bushing and causing the bung to be extracted. It will be observed that the fulcrum of the lever is close to the center of the bushing, so that a long leverage is obtained and no "dead pull" results. Usually the bung is incased in a paper cap *f*, and while a powerful force is required to start the bung but little force is required to extract the same after it has been started.

The head A′ may be formed of cast-steel or in any other suitable manner. It is provided at its shank *g* with an annular socket receiving the tubular handle *g′* of the implement.

Changes in details of construction within the spirit of my invention may be made. Hence no undue limitation should be understood from the foregoing detailed description.

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

1. An implement of the character described, comprising a hand-lever equipped with a hollow head having cam-surfaces adapted to bear upon stationary surfaces at opposite sides of the bung and provided with a series of bearings, and a member confined between the sides of said head and provided with means for engaging any desired bearing and having bung-engaging means, for the purpose set forth.

2. An implement of the character described, comprising a hand-lever having cam-surfaces

separated by a space for receiving a bung between them and provided with a slotted upper portion flanked by a series of bearings, and a bung-engaging member provided with a transverse pivot adapted to engage any desired one of said bearings, for the purpose set forth.

3. An implement of the character described, comprising a hand-lever having a slotted head provided with suitably-spaced cam-surfaces and having at its upper portion transverse bearings, and a bolt provided at its upper portion with a transverse pivot and having a flanged lower end, for the purpose set forth.

4. An implement of the character described, comprising a hand-lever equipped with a head provided with cam-surfaces separated by a suitable space and provided at a distance above said cam-surfaces with transverse bearings, said head enlarging from its tip to near its base portion and a bung-engaging member adjustably pivoted on said bearings.

5. An implement of the character described, comprising a hand-lever equipped with a head having sides provided with cam-shaped lower edges, said sides enlarging from the tip of the member to the base portion thereof, a series of transverse bearings at the upper portion of said head, and a bung-engaging member suspended between said sides, for the purpose set forth.

6. An implement of the character described, comprising a hand-lever equipped with a longitudinally-slotted head having sides provided with cam-shaped lower edges, said head enlarging from its tip to near its base portion, a plurality of transverse bearings at the upper portion of said head, and a bolt having a flanged lower end and provided at its upper end with a transverse pivot, for the purpose set forth.

EDWIN N. GREENWOOD.

In presence of—
ALBERT D. BACCI,
WALTER N. WINBERG.