W. F. CLASS.
Apparatus for Pumping Fluids from Casks.
No. 220,961. Patented Oct. 28, 1879.

WITNESSES

ATTORNEYS.

UNITED STATES PATENT OFFICE

WILLIAM F. CLASS, OF CLEVELAND, OHIO.

IMPROVEMENT IN APPARATUS FOR PUMPING FLUIDS FROM CASKS.

Specification forming part of Letters Patent No. 220,961, dated October 28, 1879; application filed June 10, 1879.

To all whom it may concern:

Be it known that I, WILLIAM F. CLASS, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Apparatus for Pumping Fluids from Casks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in the bung portion of the apparatus, through which air is forced into the barrel, and through which

also the fluid is ejected.

The invention consists in the construction

hereinafter described and claimed.

In the drawings, Figure 1 is a longitudinal central section of an apparatus embodying my invention. Fig. 2 presents a separate view of the different parts constituting the said apparatus. There is also shown in dotted lines in Fig. 1 the tube through which the fluid is ejected.

In the said drawings, A is the plug or bung portion of the apparatus. It is hollow upon its interior at A', and leading into this interior space is an air-conduit, B, provided with a valve, B', which seats outwardly, so as to be closed by pressure from within, but opening by a superior pressure of air from the outside through the tube B. The interior cavity, A', is diminished in size at A2, and is at this point adapted to receive the collar C. This collar has a section, C', of rubber tubing slipped upon it, which serves as a packing between the collar and the portion A² of the bung or plug. This packing projects in at c' beyond the inner end of the collar C. C² are handles or arms, by which the collar C may be wrenched snugly into place. D is the tube through which the fluid is ejected by pressure from within.

It will be observed that the inner end, c', of l

the packing C' binds snugly upon the tube D. so as to serve as a secure packing for the tube, and offer sufficient resistance to prevent the tube from being forced out. Moreover, the enlarged portion of the cavity A' affords a free space around the projecting portion c'of the packing, so that the pressure within the cask operates upon the exterior of the portion c' of the packing to bind it securely upon the tube D.

The operation of the device is as follows: The bung or plug having been driven into the cask, the collar C, with its packing, is inserted at the top, and the tube D pushed down through the collar until its lower end is near the bottom of the cask. Air or gas is then forced from the pump through the conduit B into the cask until the desired pressure is attained. The pump is then stopped, and the valve B' closes upon its seat. The contents of the cask may now be drawn through the tube D until the pressure within the cask is not sufficient to force the liquid therefrom, when the pressure may be again applied with the air-pump; or, if desired, the pump may be brought into action each time that a draft is made from the tube D, in order that the pressure may be maintained uniform at all times.

What I claim is—

The combination, with the plug, whose open end is formed with an inwardly-projecting annular shoulder having a plain surface, of the tubular elastic packing, whose lower portion fits about the discharge-tube, and the frictional collar, which clamps the upper portion of said packing laterally between the same and said shoulder, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two

subscribing witnesses.

WILLIAM F. CLASS.

Witnesses: FRANCIS TOUMEY, WELLS W. LEGGETT.