

(No Model.)

L. STUHR.
AUTOMATIC VENT FOR CASKS.

No. 464,703.

Patented Dec. 8, 1891.

FIG. 1

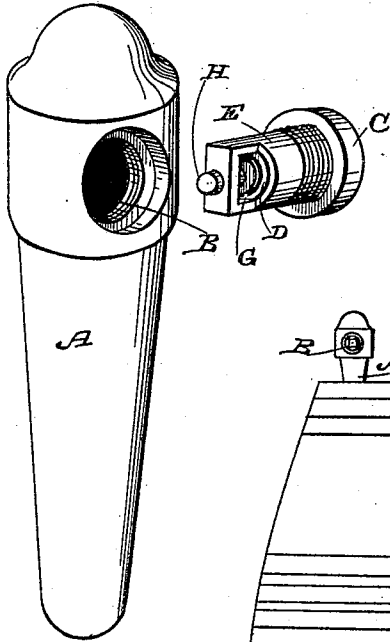


FIG. 2

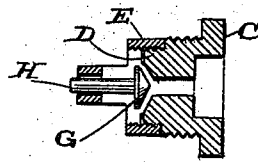
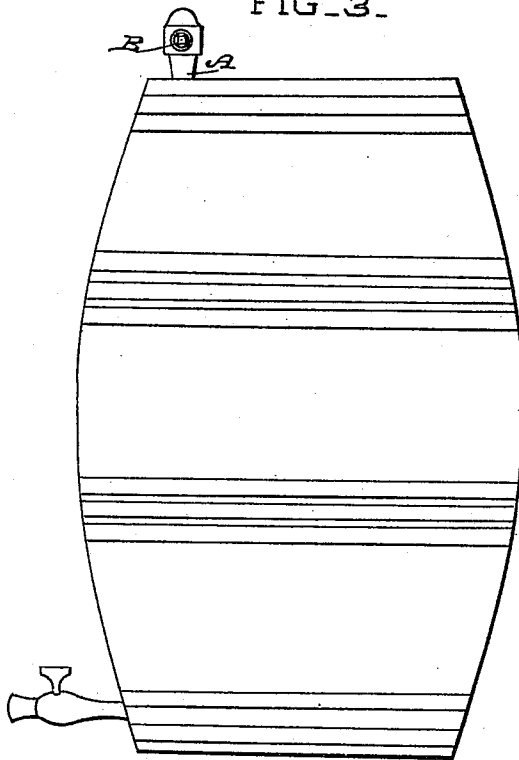


FIG. 3



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UNITED STATES PATENT OFFICE.

LOUIS STUHR, OF SAN FRANCISCO, CALIFORNIA.

AUTOMATIC VENT FOR CASKS.

SPECIFICATION forming part of Letters Patent No. 464,703, dated December 8, 1891.

Application filed May 25, 1891. Serial No. 394,053. (No model.)

To all whom it may concern:

Be it known that I, LOUIS STUHR, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Automatic Vents for Casks; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a device which is especially applicable to casks and kegs containing lager-beer and other liquids not under pressure.

It consists of an automatically-operating vent and check-valve, which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a view of the tubular socket with the valve-plug removed. Fig. 2 is a section of the valve-plug. Fig. 3 shows the application of my invention in a keg.

In drawing what are known as "still" liquors, or those having no carbonic-acid gas which is retained in them by external pressure, it is necessary to make some sort of an opening in the upper part of the cask for the admission of air to take the place of the liquid as it is withdrawn. This is especially necessary in the case of lager-beer, and in order to provide such a vent which will admit the necessary quantity of air and at the same time protect the interior of the cask from the admission of foreign substances and also prevent any escape of the gas which gradually escapes from the beer and is contained in the cask, I have devised my present invention.

A is a tapering tubular socket-piece, which is fitted to be driven into the upper end of the cask, and it has an opening B made upon one side. This opening is screw-threaded in the inner portion and has a countersunk opening exterior to the screw-threaded portion, into which the head C of the part which carries the valve is fitted. Beneath the head C is a screw-threaded portion which fits the threads of the part A, and beyond this is a smaller screw-threaded valve-seat portion D, over which the cap E is screwed from the opposite end. A hole is made centrally through this portion, and a conical valve-seat is made in the face of the part D, against which the valve G closes outwardly to prevent any escape of

air or gas in that direction. This valve G is contained within the hollow cap E. It is made of rubber or other light material, the outer face fitting the seat on the portion D and the inner face being flat and fitting against the flat bottom of the cap. A stem or shank H extends through a hole in the inner end of the cap E and serves as a guide to keep the valve in place.

The end of the cap E is made in the form of a yoke or bridge, through which the stem H passes, and an open space is left upon each side to allow air to pass in freely when the valve is raised from its seat and flow to the interior of the cask; but when any pressure occurs within the cask caused by the gradual release of gas from the liquid the valve will be closed against the seat in the part D, and the gas will thus be prevented from flowing outwardly. As soon as the liquid is drawn down again sufficiently to create a vacuum within the cask the valve will be forced off the seat D and air will flow in through the central hole and through the spaces around the valve.

The outer face of head C has a square socket made in it for the insertion of a tool by which it may be screwed into the countersunk opening in the part A, and it will thus be protected from injury or from loss.

The upper end or head of the part A is made sufficiently heavy to allow of its being driven into the end of the cask without injury to the valve or valve-seat.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An automatic vent and check-valve for casks, consisting of the screw-threaded cylindrical plug having the central hole made through it and a seat upon the inner end, a cap fitting over said seat, a valve fitting the interior of said cap, closing outwardly against the seat in the plug, and openings made through the cap exterior to the periphery of the valve, whereby the valve may be closed against the seat to prevent the escape of gas from the interior, while air may be admitted around the valve when the latter is opened, substantially as herein described.

2. A vent and gas-check for casks, consisting of the plug having the seat on its inner

end and a hole communicating with said seat
from the outside, a screw-cap fitting over said
seat, containing an outwardly-closing valve,
openings made through the cap exterior to
5 the periphery of the valve, whereby air is ad-
mitted when the valve is open, and the valve-
holder or part A, adapted to be driven into
the cask, having the screw-threaded and
countersunk opening on the side to receive

and protect the valve, substantially as herein is
described.

In witness whereof I have hereunto set my
hand.

LOUIS STUHR.

Witnesses:

S. H. NOURSE,

J. A. BAYLESS.