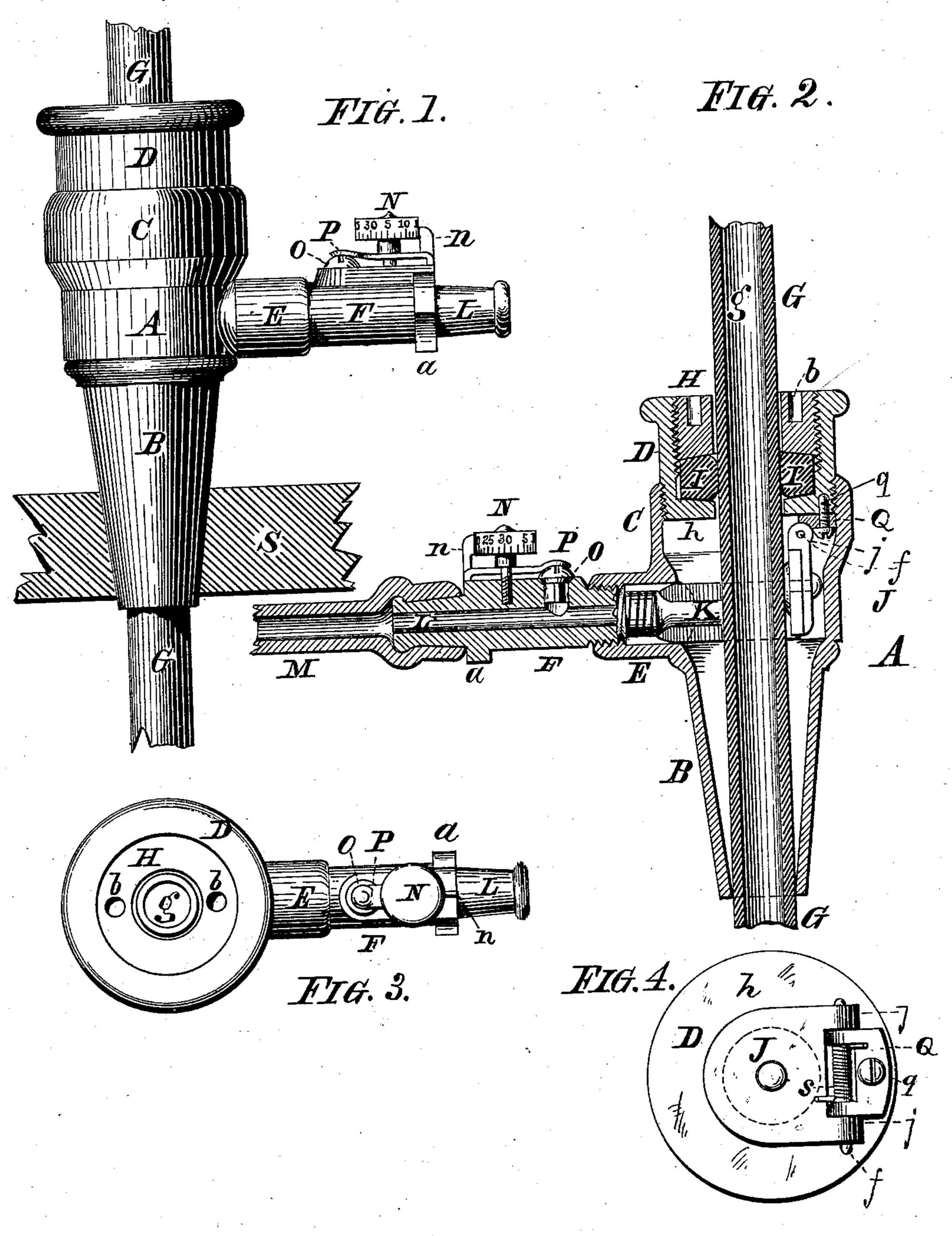
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No. 285,065.

Patented Sept. 18, 1883.



Witnesses: Llie O. Stark

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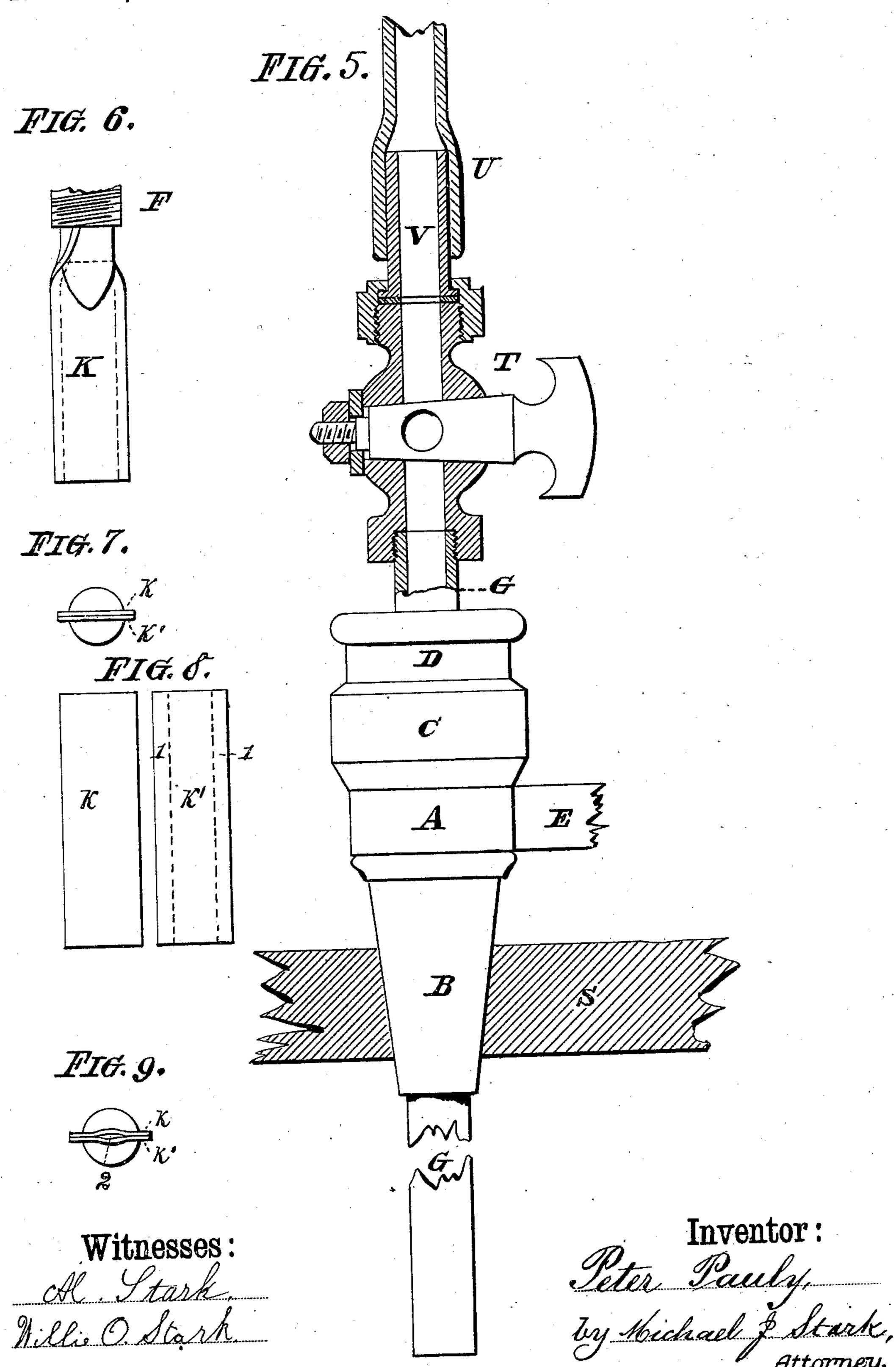
Inventor:

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## United States Patent Office.

PETER PAULY, OF BUFFALO, NEW YORK.

## DEVICE FOR TAPPING BEER BARRELS, CASKS, &c.

SPECIFICATION forming part of Letters Patent No. 285,065, dated September 18, 1883. Application filed January 31, 1883. (No model.)

To all whom it may concern:

Be it known that I, PETER PAULY, of Buffalo, in the county of Erie and State of New York, have invented certain new and useful 5 Improvements in Devices for Tapping Beer Barrels, Casks, &c.; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, 10 and exact specification, which will enable others skilled in the art to which it appertains to make and use the same.

My present invention has general reference to improvements in devices for tapping beer 15 barrels, casks, &c.; and it consists, essentially, in the novel and peculiar combination of parts and details of construction, as hereinafter first fully set forth and described, and then pointed

out in the claims.

In the drawings already referred to, which serve to illustrate my said invention more fully, Figure 1 is a side elevation of my improved vent. Fig. 2 is a longitudinal sectional elevation, and Fig. 3 a plan of the same. Fig. 4 is 25 a plan view of the under side of the vent-cap, showing the closing-valve in position. Fig. 5 is an elevation of the tapping device, showing the stop-cock in section. Fig. 6 is an elevation of the rubber bag-valve. Fig. 7 is a plan of 30 the same. Fig. 8 is a plan of the two pieces of soft rubber of which the bag is constructed. Fig. 9 is a plan of the valve, showing the passage through the same when the plates are forced apart.

Like parts are designated by corresponding

letters of reference in all the figures.

In the drawings, A designates the body of my vent, having on its lower part the usual tapering shank, B, and terminating in an in-40 ternally-screw-threaded socket, C. Into this socket C is fitted a cap, D, having within its screw-threaded core a plug, H, provided with recesses b for application of a wrench and an elastic packing-ring, I, the lower part or disk, 45 h, of said cap D being provided with a flapvalve, J, pivoted to a hinge-piece, Q, as clearly shown in the drawings. This hinge-piece Q q, and its pintle f is surrounded by a coil-50 spring, s, in such manner as to cause the flapvalve J to resume a closed position with ref-

erence to the passage through the cap D whenever possible. The body A is provided with a branch, E, into which is screwed a tube, F, terminating in a nozzle, L, to which is secured 55 the usual air-supply pipe, M. The tube F has transversely an aperture fitted with a valve, O, kept in a closed position by a spring, P. This spring is tensioned by means of a micrometer-screw, N, having in the periphery of its 60 head certain marks designating the pressure in pounds to the square inch at which the valve O will open, a pointer, n, being provided to indicate the respective position or pressure to

which the said valve O is set.

To the pipe or tube F, and within the body A, is secured a rubber valve or bag, K, of the usual and well-known construction, to act as an induction-valve, and to prevent the escape of air or gas from the cask S. This "bag- 70 valve," so called, is, as usually made, composed of two plates or strips of very thin soft rubber, K K', Figs. 8 and 9, cemented together along their longitudinal edges 1, Fig. 8, so as to form a "bag" or tube open on both 75 ends. One of these ends is passed over the nozzle on the tube, F, and tied or otherwise secured thereto. If pressure is exerted upon the outside of this tube, it tends to close the same, while if a fluid is forced through between the 80 plates they will separate, as shown at 2, Fig. 9, and thus produce a passage for the same. In this manner air forced through the hose M, tube F, and valve K will pass into the interior of the cask into which the apparatus is in-85 serted, while any escape of liquid from the said eask is prevented by the bag-valve closing against the same. In Fig. 2 the pipe G is shown as substantially fitting into and closing the lower end of the tapering shank B. In 90 practice this is not the case; but the said pipe is fitted sufficiently loose into this tapering shank to permit air being forced past said pipe G in said tapering shank B.

In operation, the vent is inserted into a bar- 95 rel or cask by driving it into the proper opening in the head or a stave of said barrel. The flap-valve J being closed, as well as the rubber is secured to the disk h by means of a screw, | valve K and the safety-valve O, no liquor will escape from the valve. Now, a pipe, G, is roo passed through the passage in the cap D and the body, &c., of the vent into the interior of

the cask, &c., a stop-cock, T, Fig. 5, on the end of said pipe, in conjunction with the elastic packing-ring I, preventing the escape of liquor when said tube G is passed through the 5 vent. When being inserted into the vent, the pipe G will push the flap-valve J open, while as soon as said pipe is withdrawn the spring s will close the same again, thus always keeping the vent closed when the tube G is not in ro position. Air is supplied to the cask by means of an air-forcing device (not shown) through the flexible tube M, the pipe F, and the rubber valve K. As soon as a predetermined pressure is exceeded the valve O will 15 be forced open and allow the excess of air to escape, while egress of the same from the barrel or cask is prevented by the rubber valve K. The liquor is forced from the barrel or cask through the passage g and other suitable 20 connecting-pipes to the draft-faucet in the usual manner, such draft-faucet being usually connected with the stop-cock T by means of a hose-coupling, V, and a hose or rubber pipe, U. Having thus fully described my invention, I

25 claim as new and desire to secure to me by Letters Patent of the United States— 1. As an improved article of manufacture,

a device for tapping beer barrels, casks, &c., having the body A, provided with a branch 30 fitted with a pipe, one end of which is provided with a suitable valve, K, and the other

with a nozzle for the attachment of a hose, said body A being provided with means for making a tight joint around the pipe G, and with a valve for closing the aperture through which 35 said pipe is passed, as and for the object specified.

2. The combination, with the body A, of the branch pipe F, having the safety-valve O and the air-controlling valve K, said safety-valve 40 being provided with means, substantially as described, for adjustment, as stated.

3. In a device for tapping beer barrels, casks, &c., the combination, with the body A, having the socket C, of the cap D, plug H, 45 elastic packing I, and the valve J, the whole being constructed for operation substantially in the manner as and for the purpose stated.

4. The combination, with the cap D, having the disk h, the plug H, and the elastic pack- 50 ing I, of the flap valve J, pivoted to the hingepiece Q, and the spiral spring s, surrounding the pintle f, substantially as and for the object specified.

In testimony that I claim the foregoing as 55 my invention I have hereto set my hand in the presence of two subscribing witnesses.

PETER PAULY.

Attest:

MICHAEL J. STARK, JOHN C. DUERR.