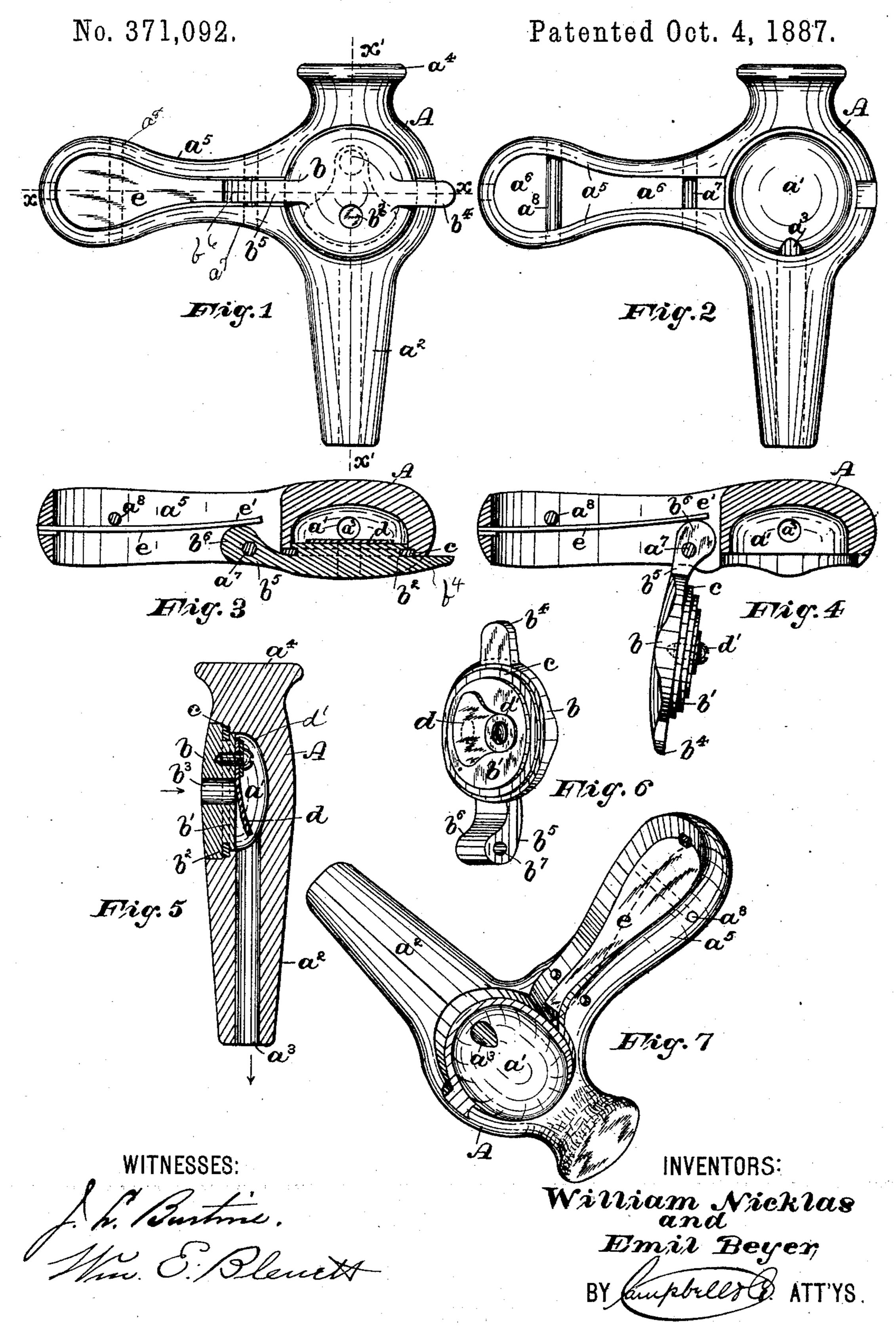
W. NICKLAS & E. BEYER.

DEVICE FOR VENTING BARRELS.

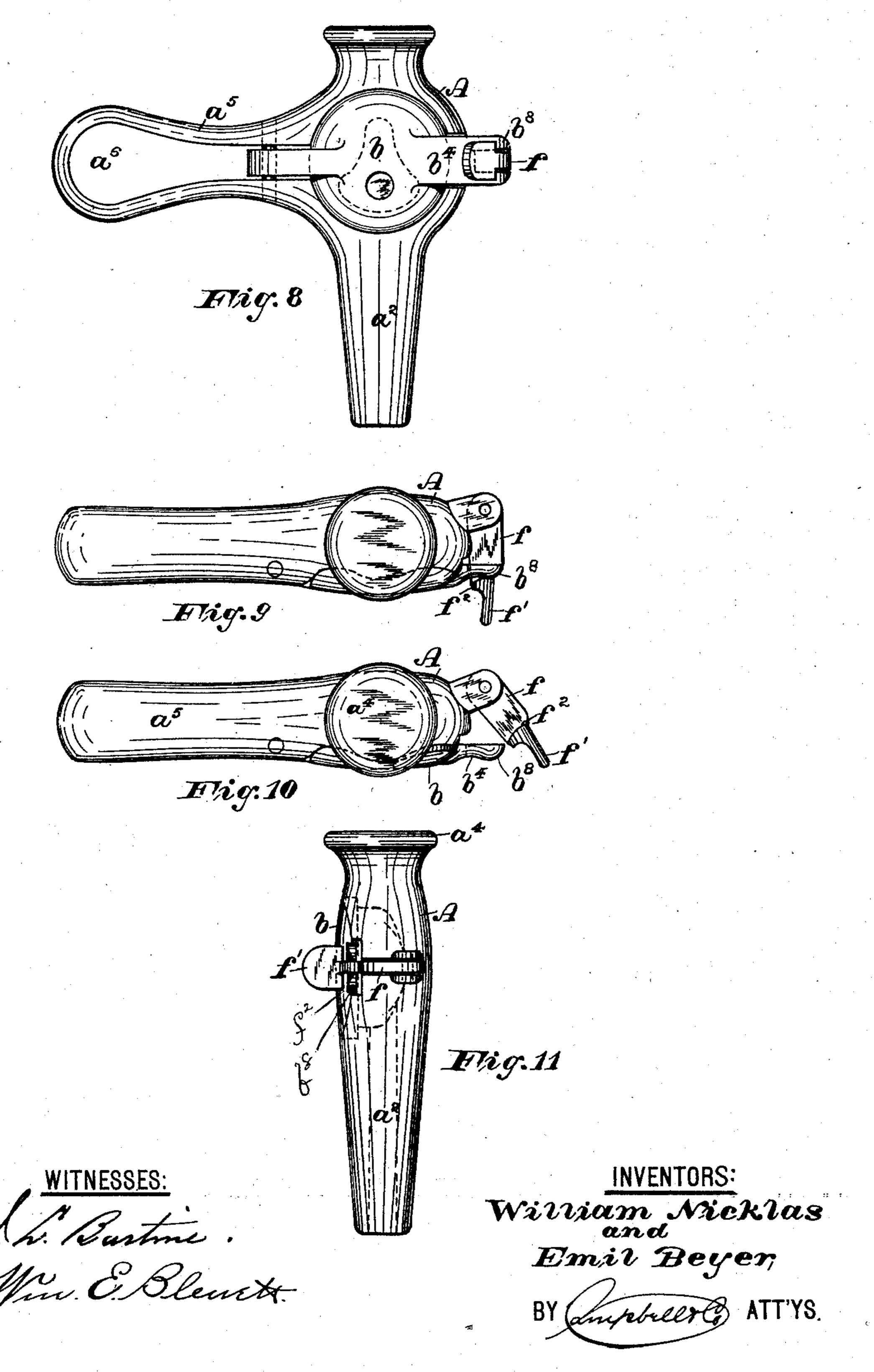


(No Model.)

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No. 371,092.

Patented Oct. 4, 1887.



United States Patent Office.

WILLIAM NICKLAS AND EMIL BEYER, OF NEWARK, NEW JERSEY.

DEVICE FOR VENTING BARRELS.

SPECIFICATION forming part of Letters Patent No. 371,092, dated October 4, 1887.

Application filed February 18, 1887. Serial No. 228,031. (No model.)

To all whom it may concern: ,

Be it known that we, WILLIAM NICKLAS and EMIL BEYER, citizens of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Devices for Venting Barrels; and we 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in a device for venting beer and other liquors, described in an application contemporaneous herewith, in which the plates which form the venting chamber are removably secured together by means of a screw, and said plates are so formed as to provide a handle by which the vent may be grasped in handling

the same.

In the improvement herein described the plates which form the venting-chamber are hinged together to prevent their removal and separation, and to enable the vent to be readily cleaned without the trouble of unscrewing the

parts.

30 In the accompanying two sheets of drawings, in which similar letters of reference indicate corresponding parts in each of the several views, Figure 1 is a side elevation of the improved vent. Fig. 2 is a similar view of 35 the main portion or body of the vent shown in Fig. 1, the hinged cover and spring being removed. Figs. 3 and 4 are sectional views taken through x, Fig. 1, showing the cover in its closed and opened positions, respectively. 45 Fig. 5 is a section through x', Fig. 1; and Figs. 6 and 7 are perspective views of the hinged cover and the main portion of the vent, respectively. On Sheet 2, Fig. 8 is a side elevation of the vent, illustrating another means 45 of fastening the cover. Figs. 9 and 10 are top views of the same, indicating the locked and unlocked positions of the fastening device; and Fig. 11 is a front elevation of said form of vent.

The vent shown in said views consists of the

main portion or body A, having therein a venting-chamber, a', and a tapering portion, a^2 , provided with a venting-duct, a^3 , leading from said venting-chamber, as in Fig. 5, into the barrel when the vent is inserted therein. 55 A cover, b, is pivotally secured or hinged to the body of the vent at some suitable point, and closes down over the venting-chamber, as indicated in Figs. 1 and 3. The face or under side, b', of said cover is raised, projecting down 60 into the venting-chamber, and is preferably undercut at b^2 to receive a packing-ring, c, which renders air-tight the joint between the cover and the sides of the venting-chamber.

A valve-opening, b^3 , is provided in said 65 cover, and over the inner end of the opening is a flexible valve, d, preferably of rubber, which is secured to the face of the cover and on one side of the valve-opening, as at d', substantially as is illustrated in the contemporane 70 ous application hereinbefore mentioned.

Above the venting chamber, on the top of the vent and in a line with the tapering tubular portion a^2 , is a head, a^4 , upon which the mallet strikes in driving the vent into the barrel. In the vent illustrated in our pending application there was no provision made for driving the vent, the mallet striking directly upon the main portion of the vent and the separable plate as well, thus bringing the shock so of the blow directly upon the screw. By forming the head a^4 upon the main portion, which is made very strong, no injury to the more delicate parts of the vent results.

To facilitate the handling and the driving 85 and removal of the vent into and from the barrel, a projection or arm, a^5 , is formed on the body of the vent, which serves as a handle in manipulating the vent. As indicated in Figs. 1, et seq., the said handle is provided 90 with an opening, a^6 , which materially lessens the weight and cost of the vent, and when a spring is used to close the cover over the venting chamber, provides a convenient receptacle for said spring, as illustrated in Figs. 1, 3, 95 and 4.

The cover, as illustrated in said views, and also in Fig. 6, is provided with oppositely-projecting tongues or lugs b^4 and b^5 , one of which, b^4 , serves as a finger-piece in raising 100

the cover, and the other, b^5 , is provided with an eccentric or bulging portion, b^6 , and a pinperforation, b^7 , through which the pin a^7 passes, by which the cover is pivotally secured 5 within the opening a^6 , as indicated in Figs. 1, et seq. The spring e is secured in the opening a^6 , and at its free end e' bears against the eccentric portion b^6 on the tongue b^5 , and by its pressure holds the cover down tightly over

ic the vent-chamber.

In lieu of the spring for holding the cover tightly over the valve chamber, the device illustrated on Sheet 2 may be used with advantageous results. In said device the tongue b^4 15 is slotted and rounded or beveled on the upper side at b^8 , and to the body of the vent is hinged or pivoted an arm, f, having a finger-piece, f', the under side or edge of which, f^2 , is rounded to engage with the rounded surface b^8 on the 20 tongue. The main portion of the arm lies in the slot in said tongue when in its holding position, as in Fig. 11.

By this arrangement and construction the cover may be closed tightly over the venting-25 chamber, and has one advantage over the spring, as the cover may be raised with but very little effort. The opening in the handle also provides a convenient place in which to pivot this form of cover also. A pin, a^8 , is 32 arranged across the opening a^6 to support and

stiffen the spring.

Having thus described our invention, what

we claim is—

1. In a vent, the combination, with the body 35 thereof provided with a venting-chamber therein and a tubular portion having a venting-duct therein communicating with said

venting-chamber, of a cover constructed and arranged to close said venting-chamber and pivotally secured or hinged to said body por- 40 tion and having a slotted tongue projecting therefrom, provided with a rounded upper surface, and a locking-arm hinged to the body of the vent and provided with a rounded or inclined surface adapted to engage with the 45 rounded surface on the slotted tongue, for the

purposes set forth.

2. In a vent, the combination, with the body thereof provided with a venting-chamber therein, a tubular portion having a venting- 50 duct communicating with said venting-chamber, and an arm or handle projecting from said body, provided with an opening, a6, therein, of a cover constructed and arranged to close said venting-chamber, pivotally secured or hinged 55 to said body in the opening in the arm projecting therefrom and provided with a slotted arm or tongue having a rounded upper surface, a packing-ring arranged to close the joint between said cover and venting chamber, and 60 a locking-arm hinged to the body of the vent and provided with a rounded or inclined surface adapted to engage with the rounded surface on the slotted tongue, for the purpose set forth.

Intestimony that we claim the invention set forth above we have hereunto set our hands

this 4th day of February, 1887.

WM. NICKLAS. EMIL BEYER.

Witnesses:

FREDK. C. FRAENTZEL, FREDK. F. CAMPBELL.