

(No Model.)

F. H. SAUER.
SAFETY VALVE.

No. 582,956.

Patented May 18, 1897.

Fig. 1.

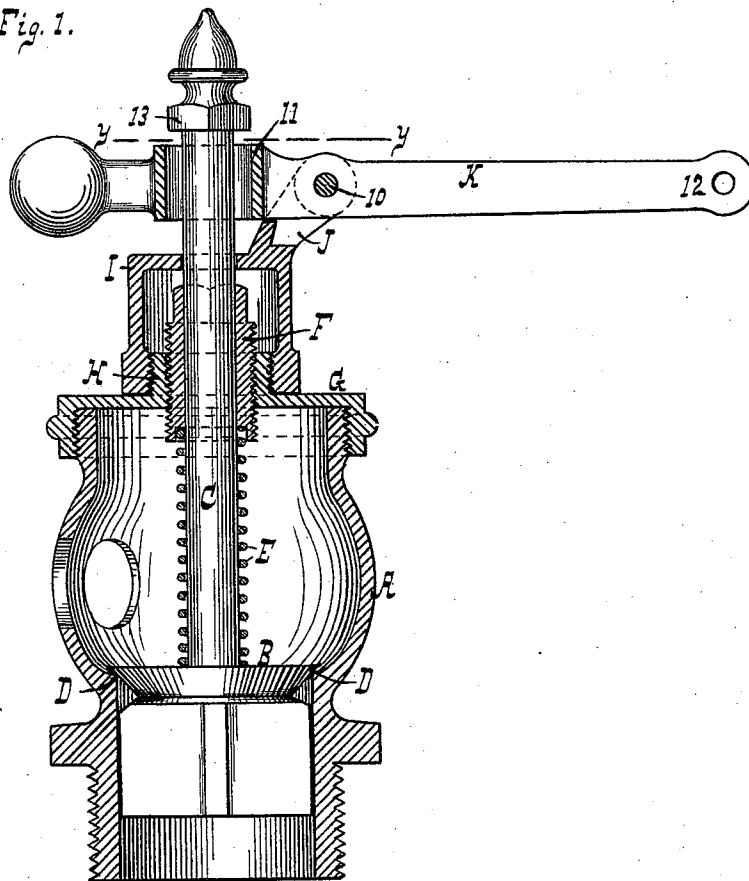
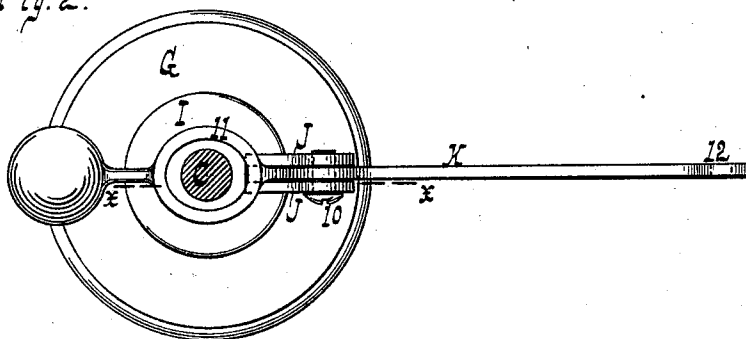


Fig. 2.



WITNESSES:

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FREDERICK H. SAUER, OF NEW YORK, N. Y., ASSIGNOR TO SCHÄFFER & BUDENBERG, OF MAGDEBURG-BUCKAU, GERMANY.

SAFETY-VALVE.

SPECIFICATION forming part of Letters Patent No. 582,956, dated May 18, 1897.

Application filed September 19, 1896. Serial No. 606,426. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK H. SAUER, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Safety-Valves, of which the following is a specification.

This invention relates to certain improvements in safety-valves, as pointed out in the following specification and claim, and illustrated in the accompanying drawings, in which—

Figure 1 represents a vertical section in the plane indicated by the line *x x*, Fig. 2. Fig. 2 is a horizontal section in the plane indicated by the line *y y*, Fig. 1.

In the drawings the letter A designates the shell of the valve. B is the valve, and C is the valve-stem. The valve is depressed upon its seat D by a spring E, or, if desired, a weight may be substituted for the spring. The pressure exerted by the spring E upon the valve can be regulated by a screw F, which engages a screw-socket formed in the top or cover G of the shell A. This cover is provided with a screw-nipple H, adapted to engage a screw-thread on the inner surface of a cap I, from which extend two arms J J, which form the bearings for a pin 10, on which swings the blow-off lever K. This lever is adjusted so that it rests upon a shoulder formed between the arms J J, whereby it is retained in a substantially horizontal position, and it is provided with an eye 11, through which the valve-stem passes freely. On or near the upper end of the valve-stem is formed a shoulder 13, which is sufficiently large to engage the upper edges

of the eye 11, so that if the end 12 of the blow-off lever K is depressed the upper edge of said eye strikes the shoulder and the valve is raised from its seat, so that the steam can blow off. It will be readily seen from this description that by retaining the blow-off lever in a substantially horizontal position the eye 11 is prevented from coming in contact with the valve-stem, and this stem can freely move up and down without impediment.

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

The combination with the casing A, of the valve B arranged therein, means for depressing the valve upon its seat, the valve-stem C, the shoulder 13 formed thereon, the cap I adjustably mounted on the casing and carrying the arms J, a shoulder formed between said arms, the blow-off lever K pivoted between said arms and provided with an eye 11 forming an unobstructed passage for the valve-stem and adapted to engage the shoulder 13 when the end 12 of the blow-off lever is depressed, and means for retaining the blow-off lever in a position at right angles to the valve-stem, so as to permit said valve-stem to move up and down freely without coming in contact with the blow-off lever substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

FREDERICK H. SAUER.

Witnesses:

WM. C. HAUFF,
E. F. KASTENHUBER.