No. 695,237. Patented Mar. 11, 1902.

R. SCHEUFFGEN.

APPARATUS FOR PREVENTING EXPLOSIONS IN VESSELS CONTAINING EXPLOSIVE FLUIDS.

(Application filed Mar. 25, 1901.)

(No Model.)

Fig. 1.

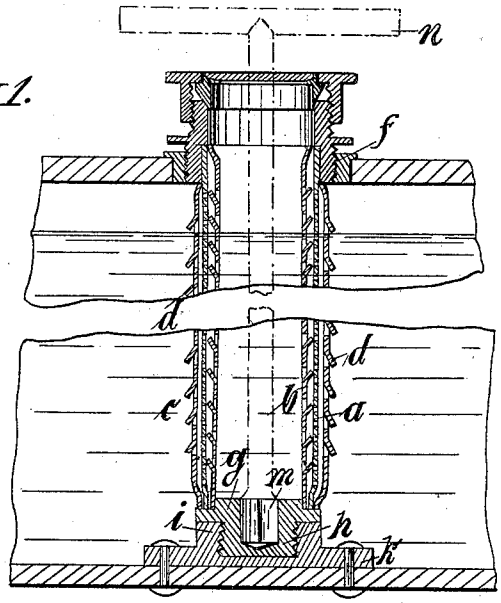


Fig. 2.

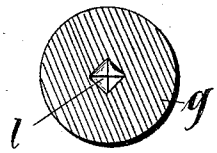


Fig. 3.

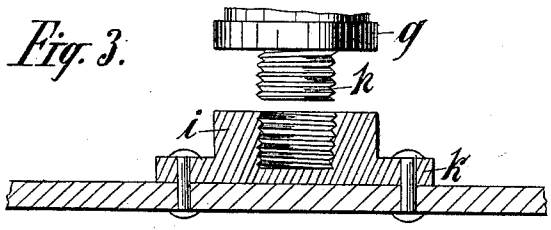
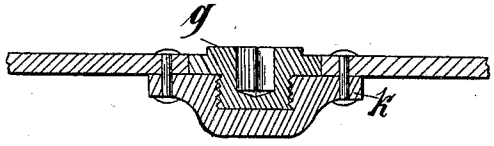


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

ROBERT SCHEUFFGEN, OF SALZKOTTEN, GERMANY.

APPARATUS FOR PREVENTING EXPLOSIONS IN VESSELS CONTAINING EXPLOSIVE FLUIDS.

SPECIFICATION forming part of Letters Patent No. 695,237, dated March 11, 1902.

Application filed March 25, 1901. Serial No. 52,775. (No model.)

To all whom it may concern:

Be it known that I, ROBERT SCHEUFFGEN, a subject of the King of Prussia, German Emperor, residing at Salzkotten, in the Kingdom of Prussia and German Empire, have invented certain new and useful Improvements in Apparatus for Preventing Explosions in Vessels Containing Explosive Fluids, of which the following is a specification.

The present invention relates to an apparatus for preventing explosions in vessels containing explosive fluids, which differs from similar hitherto-known apparatus by the fact that the usual sieve device is removably connected with the vessel so as to be readily detached therefrom and interchanged whenever desired and without causing any trouble or difficulty.

In the accompanying drawings, Figure 1 shows the apparatus in vertical section as applied to a barrel, and Fig. 2 is a plan view of the base of the device. Fig. 3 shows the method of releasing the connection between the sieve device and the vessel to contain the liquid. Fig. 4 shows another method of attachment.

As will be seen in Fig. 1, the sieve (which may be constructed of any desired form) consists in the present case of a perforated cylinder *a*, having both inside and out a protecting-lining *b* and casing *c*. This protecting-lining and casing are preferably provided with tongues or teeth *d*, which are turned either in an upward or downward direction, according to the purpose, in order to prevent any deliberate or accidental injury to the cylinder *a*.

The sieve device, comprising the three portions *a b c*, is attached to the wall of the vessel (which, as in the present case, may be a barrel) by means of a screw-thread *f*, which takes into a threaded ring fitted into, say, the bung-hole or in any other convenient manner and is provided at its lower end with a base *g*, having a threaded extension or boss *h*. This threaded boss *h* enters a corresponding socket or nut *i*, provided with a flange *k*, which is attached in any convenient manner to the wall of the vessel on the side opposite to the bung-hole and either inside or outside the wall or when the sieve device is applied to a can upon the bottom of the can itself. (See Figs. 1, 3, and 4.) As the screw-threaded boss is screwed into or out of the socket *i*, so the sieve device may be attached to or disconnected from the vessel, thus enabling the sieve-cylinder to be removed from or attached to the wall of the vessel at pleasure. In order to still further facilitate the removal of the sieve device, the base *g* or the threaded boss *h* is provided with a keyhole *l*, into which fits the square or similarly-shaped key *m*. This key is of sufficient length to project above the top of the sieve device and is provided at this end with a handle *n*, by which it may be turned either to the right or left to rotate the sieve-cylinder with its threaded boss, so as to attach or disconnect it.

It is of course obvious that any other method of attachment may be employed in place of the screw connection shown in the example of construction—as, for instance, a bayonet-joint or the like. In the same way the sieve device may be disconnected from the vessel in any other way differing from the above-described construction. The vessel itself may be a can, a barrel, a canister, or any other vessel.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. A safety device for vessels containing explosive liquids constructed as herein described with a perforated cylinder *a*, secured at top by a screw-collar and at bottom by a base-piece *g* having a boss adapted to engage a fixed socket-piece; in combination with a fixed nut *f* for the reception of the screw-collar and a fixed socket-piece *i* in which the boss *h* engages as explained.

2. The combination of the perforated tube *a;* a screw-collar in which the top of said tube is held; a base-piece *g* by which the bottom of the tube *a* is held, formed at bottom with a boss *h* adapted to engage in a suitable fixed socket and at top to receive a suitable key for turning it into and out of engagement; a fixed nut *f* by which the screw-collar is received and held; and a fixed socket-piece *i* formed to receive and hold the boss *h*, substantially as described.

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

ROBERT SCHEUFFGEN.

Witnesses:

SAMUEL GEORGE TRIPP,

MAX FORSTER.