Jan. 17, 1933. E. W. HOFFMAN 1,894,867

SAFETY SHIELD

Filed Aug. 25, 1931 2 Sheets-Sheet 1

Fig. 1

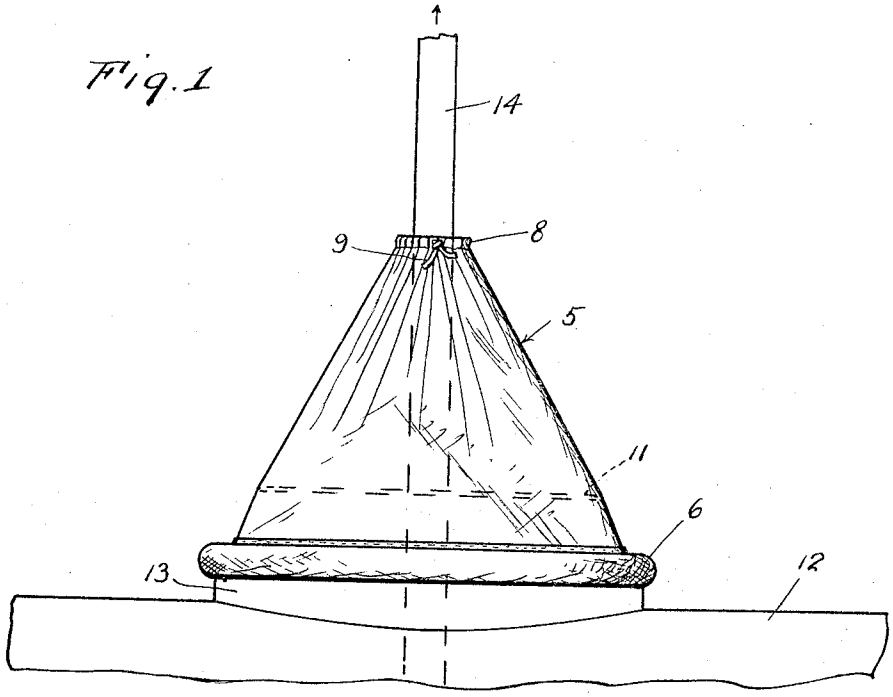
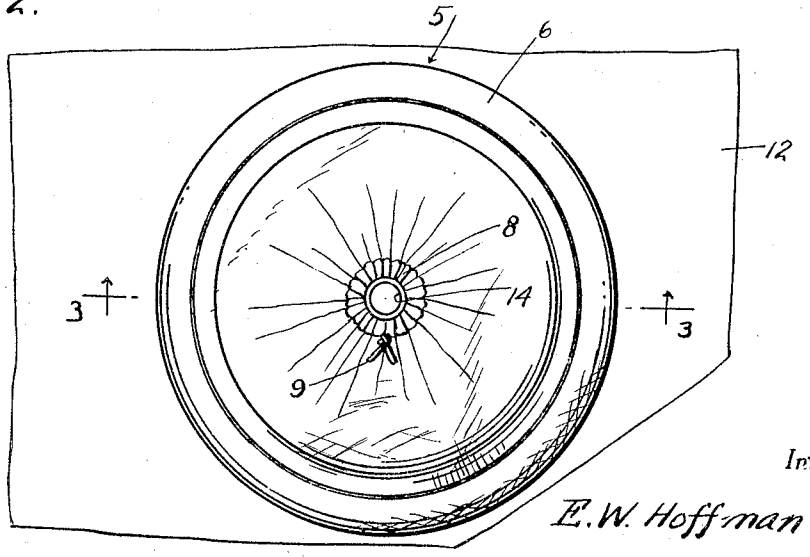


Fig. 2.



Inventor

E. W. Hoffman

By Clarence A. O'Brien

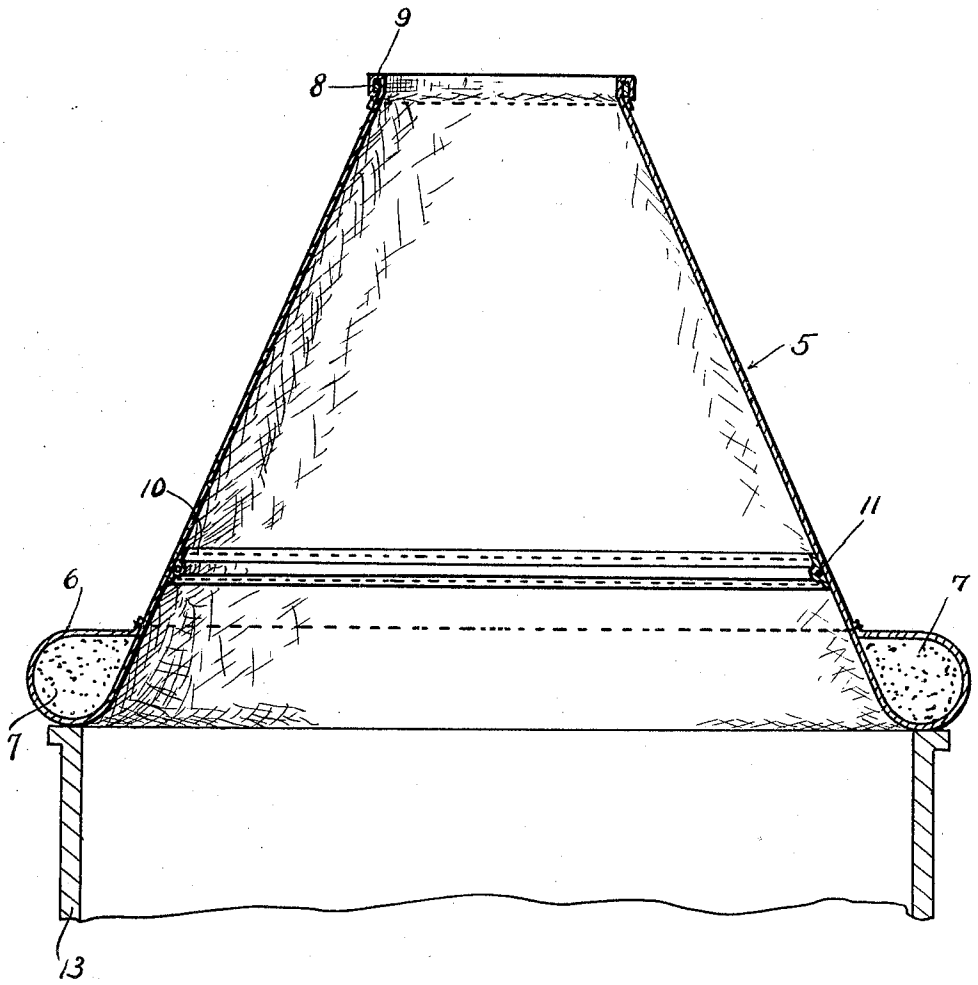
Attorney

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Fig. 3.



Inventor

E. W. Hoffman

By Clarence A. O'Brien

Attorney

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UNITED STATES PATENT OFFICE

EARL W. HOFFMAN, OF DUBUQUE, IOWA, ASSIGNOR TO JOHNSON HIGH TEST OIL COMPANY, OF FREEPORT, ILLINOIS, A CORPORATION OF ILLINOIS

SAFETY SHIELD

Application filed August 25, 1931. Serial No. 559,313.

The object of this invention is to provide a shield for use in unloading railway tank cars, such as are employed for transporting such liquids as gasoline and the like.

A still further object of the invention is to provide a flexible and collapsible shield for disposition about the opening of the tank car, subsequent to the removal of the dome, so as to protect the contents of the tank from exposure thus eliminating fire hazards, as might be caused by flying sparks, lightning, and the like during the unloading process.

Other objects and advantages of the invention will become apparent after a study of the following description, taken in connection with the accompanying drawings, wherein:—

Figure 1 is an elevational view of the cover, the same being shown as applied to the tank car.

Fig. 2 is a top plan view thereof.

Fig. 3 is a vertical transverse sectional view taken substantially on the line 3—3 of Fig. 2.

With reference more in detail to the drawings, it will be seen that the shield designated generally by the reference character 5, is preferably conical, being open at its ends, and the same is formed from a single sheet of fabric cut to the required shape and rolled into the form of a cone with the adjacent edges of the fabric sewed or otherwise secured together.

The shield 5 at its largest end is provided with a pocket 6 extending circumferentially, and in this pocket is sand or other suitable material 7 providing a weight for said end of the shield. The pocket 6 may be formed or provided in any suitable manner. However, in the present instance, as shown, the material of the shield is hemmed to provide the pocket 6.

Adjacent its upper or smallest end the material of the shield 5 is likewise hemmed to provide a circular pocket 8 within which is a draw string 9.

Adjacent the largest end of the shield, there is stitched to the wall thereof a circular strip of fabric or other material from which the shield is formed. This circular strip designated generally by the reference character 10 serves to confine in position interiorly of the shield, a ring 11 which aids in retaining the shield expanded adjacent its lower weighted end.

In actual practice, and during unloading of the tank car, a portion of which is shown in the drawings and designated generally by the reference character 12, the shield 5 has the weighted end thereof resting on the upper edge of the neck 13 of the tank car as shown in Fig. 3.

The unloading pipe 14 will of course extend beyond the upper end of the shield 5, and the shield 5 at said upper end is contracted and secured about the pipe 14, through the medium of the draw string 9, the ends of which are tied together in a manner well known in the art.

With the shield located and secured in position in this manner, it will be seen that the neck 13 is substantially closed, and the possibility of the contents of the tank becoming ignited by flying sparks or by the elements, is obviated.

Even though I have herein shown and described the preferred embodiment of the invention, it is to be understood that numerous changes in the shape, size and arrangement of the several parts may be resorted to without departing from the spirit and scope of the appended claims.

Having thus described my invention, what I claim as new is:—

1. A shield formed of flexible material provided with a circular pocket at one end thereof, weight means in said pocket, and having its opposite end contractable.

2. A shield formed from a single length of material, and provided with a pocket adjacent one edge thereof, weight means in said pocket, and a draw string adjacent the opposite edge thereof.

3. A conical shield provided adjacent the largest end thereof with a circular pocket, weight means in said pocket, and a stiffening ring secured to the wall of the shield in spaced relation to the weight.

4. A shield for closing the filling neck of a tank during unloading thereof, comprising a conical body formed of flexible material and having at one end thereof a circular pocket adapted to rest on the neck, weight means in said pocket and an opposite end contractible about the unloading pipe.

In testimony whereof I affix my signature.

EARL W. HOFFMAN.