Oct. 2, 1928.

1,686,415

J. LYES

TRAP FOR DRAINS AND SEWERS

Filed Sept. 20, 1926

Fig. 1.

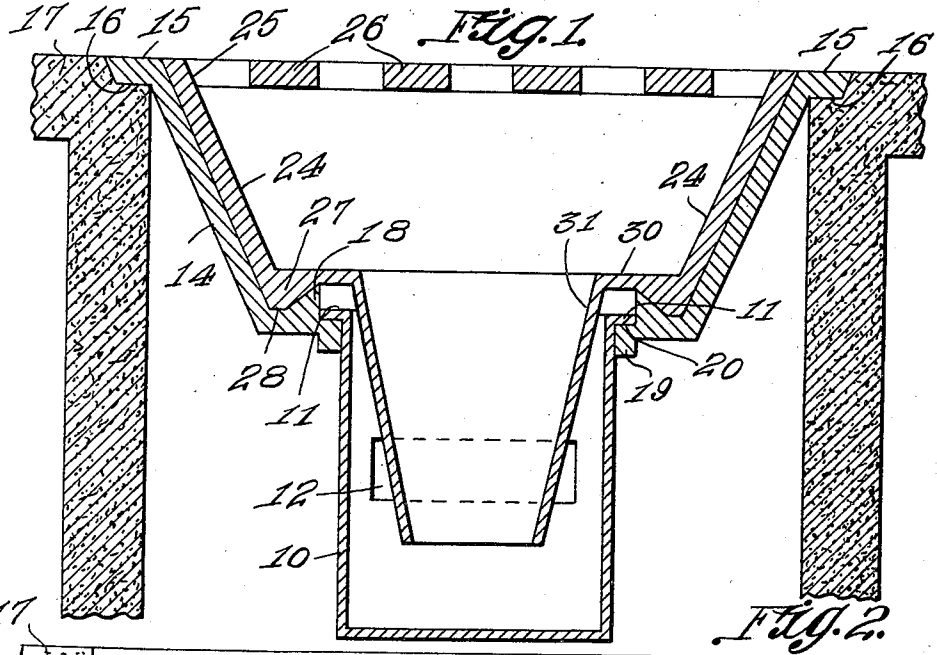
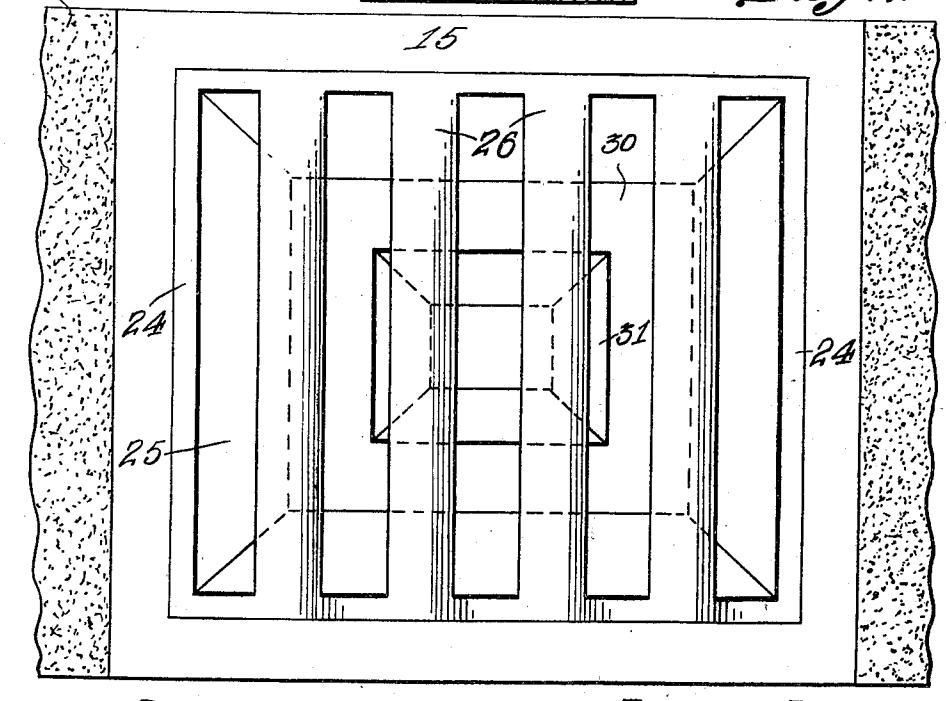


Fig. 2.



Leo Hayes,

WITNESS:

James Lyes,

INVENTOR

BY Victor J. Evans

ATTORNEY

Patented Oct. 2, 1928. 1,686,415

UNITED STATES PATENT OFFICE.

JAMES LYES, OF NEW YORK, N. Y.

TRAP FOR DRAINS AND SEWERS.

Application filed September 20, 1926. Serial No. 136,645.

The object of this invention is to provide a trap adapted to be manufactured in all sizes, so that it will be suitable for street use, for floor drains, and under practically all conditions in which a large or small volume of water is to be taken care of, and where a water seal is necessary or desirable for preventing odors and gases from causing annoyance or from producing dangerous conditions.

A further object is to provide, in a device of this character, a plurality of detachable elements for cooperation with an element permanently mounted in cement or concrete, or in the bottom of a receptacle for waste water.

With the foregoing and other objects in view, the invention consists in the novel construction and arrangement of elements described, illustrated and claimed, it being understood that modifications may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings forming part of this application,

Figure 1 is a view of the device in vertical section, the view also showing walls of cement or concrete between which the container providing the water seal and the other elements are mounted.

Figure 2 is a top plan view of the structure of Figure 1.

A container or receptacle 10 is provided with an upper flange 11 and with an opening 12, the latter being above the bottom of the receptacle, and determining the level of the liquid therein. It will be assumed that the container discharges thru opening 12 to any suitable duct or sewer.

A dished element 14 includes an upper flange 15 adapted to rest on the shoulder 16 formed in the cement or concrete work, so that the upper surface of flange 15 will be flush with the paving or other surface portion 17. Element 14 is provided with an upwardly extending flange 18 having an inclined surface as shown, and with a flange 19 providing a shoulder at 20 on which the flange 11 of the receptacle 10 is adapted to rest. Contact is made by gravity alone, for the reason that it is desired to have the parts detachable for cleaning, without the necessity of taking the time required for the disengagement of securing devices.

The inner element of the device includes the upwardly and outwardly flared portion 24 adapted to receive at its upper edge the beveled edges 25 of a plate or grating 26. Element 24 further includes the downwardly extending flange 27 adapted for reception within the channel formed at 28 in the element 14 before mentioned.

A flat surface 30 appears in Figure 1, and a funnel shaped element 31 extends downwardly from the inner edge of portion 30, this element 31 projecting to a point below the liquid level as defined by the lower edge of opening 12, constituting the discharge opening.

It will be observed that the shoulder formed at 20, and the flange 11 resting thereon, underlie the portion 30, and that the joint, or loose joint, produced between the elements 20 and 11 is thoroughly protected by the continuous surface formed by the flared portion 24, the horizontal portion 30 and the inner wall 31 of the funnel. Particular emphasis is placed upon the fact that all parts are promptly detachable for cleaning purposes, that the separate elements may be formed of any suitable material depending upon the particular use to which the trap is to be placed, that the liquid flows thru an inner element the walls of which are continuous to the point of discharge, and that the receptacle 10 is suspended on an outer element such as the dished member 14, the joint at 11 being out of the path of movement of the liquid.

Having described the invention what is claimed is:—

1. In a device of the class described, a container having an opening in the side wall thereof, a funnel-shaped device extending into the container below the opening thereof, providing a water seal, an upwardly and outwardly flared element projecting from the upper edge of the funnel and offset from the wall of the funnel to provide an inwardly extending portion, and a dished member receiving the flared element and having a flange for engaging the container at a point below the inwardly extending portion of the flared element.

2. In a device of the class described, a container having an opening in the side wall thereof, a dished member having a lower inwardly extending flange, a second flange connected with that first named, a container suspended from one of the flanges, and an inner detachable element including an upper flared portion, a lower funnel portion extending into the container below the opening in the

wall thereof and an intermediate portion engaging the other flange and projecting inwardly toward the upper portion of the container.

3. In a device of the class described, a container having an opening in the side wall thereof, a dished member having a lower inwardly extending flange, a second flange connected with that first named, a container suspended from one of the flanges, and an inner detachable element including an upper flared portion, a lower funnel portion extending into the container below the opening in the wall thereof and an intermediate portion engaging the other flange and projecting inwardly toward the upper portion of the container, said dished member having an upper outwardly extending supporting flange, and a grating supported within the upper portion of the inner detachable member.

In testimony whereof I affix my signature.

JAMES LYES.