F. M. EIBER.

SERVICE BOX AND LID.

APPLICATION FILED MAR. 21, 1913.

1,131,687. Patented Mar. 16, 1915.

Fig. 1.

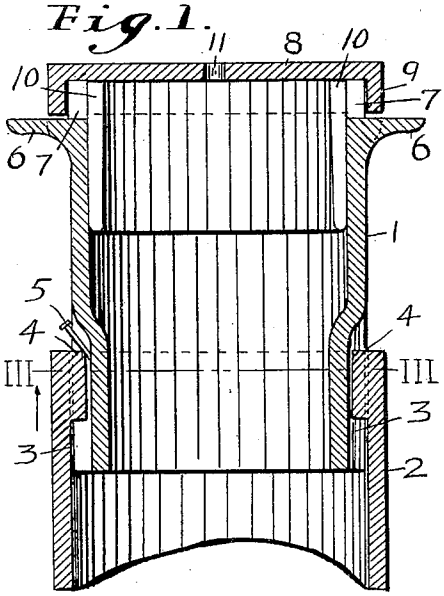


Fig. 2.

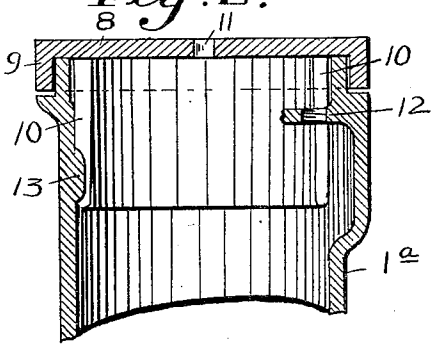


Fig. 3.

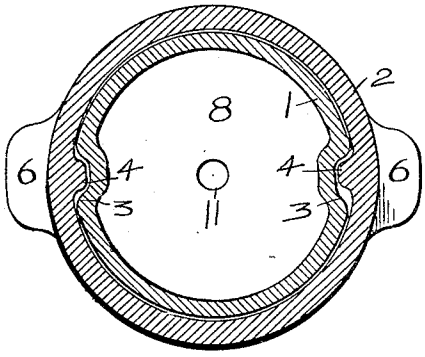


Fig. 4.

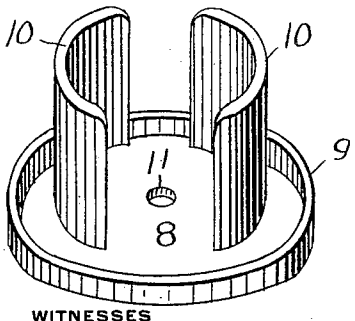
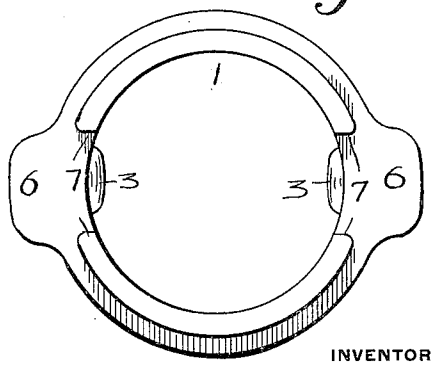


Fig. 5.



WITNESSES

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SERVICE-BOX AND LID.

1,131,687. Specification of Letters Patent. Patented Mar. 16, 1915.

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To all whom it may concern:

Be it known that I, FRANK M. EIBER, a citizen of the United States, and residing in the borough of Millvale, in the county of Allegheny and State of Pennsylvania, have invented or discovered new and useful Improvements in Service-Boxes and Lids, of which the following is a specification.

My invention relates to new and useful improvements in lids for service boxes, such as stop cock boxes used in water or gas distribution and similar purposes. The form of lid now in general use is secured in place on the box by means of a brass screw or bolt passing through the lid and engaging a threaded hole in an internal boss integral with the box. As the lid is usually placed flush with the side walk or street surface, it is subjected to hard usage and frequently tampered with by unauthorized persons, and consequently often broken off and lost or destroyed. The open box becomes filled with dirt and refuse which must be dug out at great expense and trouble before access can be gained to the cock. As frequently happens, the integral boss on the box becomes broken or the bolt broken off therein, in which case a lid can no longer be secured to the box in the usual manner but the box must be dug up and a new one installed before a lid can be fixed in place.

My improved lid may be secured on one of the improved form of boxes shown in Figures 1, 3 and 5 in connection with my lid, on one of the standard type of boxes now in general use as above referred to or on any other type of box, so that when a box becomes so broken or damaged that the usual lid cannot be secured in place, one of my improved lids may be used with complete satisfaction.

My improved lid is provided with two spaced apart flanges laterally curved to substantially correspond into the curvature of the wall of the box. The material of the lid is such that these flanges are resilient so that when the lid is driven into place the flanges are wedged inside of the box, the flanges being first spread or contracted, as the circumstances may require to fit the interior of the box snugly. A few taps with a tool followed by the insertion of a chisel or other pry under the edge of the lid enables the lid to be lifted off. However, its accidental displacement is impossible.

In the accompanying drawings, Fig. 1 is a partial vertical section of my improved box fitted with my improved lid, Fig. 2 is a vertical section showing my improved lid fitted upon a standard box; Fig. 3 is a horizontal section taken along the line III—III in Fig. 1, looking in the direction of the arrow; Fig. 4 is an inverted perspective of my lid, and Fig. 5 is a top plan view of the box shown in Fig. 1.

The following is a detail description of the drawings.

1 is the upper member of an extension service box, adapted to telescope into the lower member 2 of said box.

3 represents one or more longitudinal grooves or depressions in the outer surface of said upper member 1 extending to within a short distance of the top of said member.

4 represents one or more projections or lugs on the interior surface of the lower member 2 adjacent to the top thereof and adapted to engage with the grooves 3. To adjust the height of the service box so that the lid to be applied will be flush with the side walk or street, the upper member 1 is slid down to the proper level and a wedge member 5, such as a nail, is driven in between the groove 3 and the projection 4, thus securing the upper member 1 at the proper height. By removing the wedge, the member may be readjusted at pleasure. Adjacent to the upper end of member 1 are two oppositely placed lateral ears 6 and the top of the member is slotted down to said ears as at 7.

The lid is composed of a top plate 8 having a circumferential depending flange 9 which fits down over the top of the box member 1 and rests upon or approaches ears 6.

10 represents depending flanges integrally carried by the plate 8 at a point removed from the circumferential edge thereof, and curved to substantially conform with the interior wall of the box member 1. The lid is preferably a malleable casting or some other material possessing a certain amount of ductility and resiliency.

To install the lid the flanges 10 are inserted in the top of box member 1 and the lid driven down until it fits snugly in the position shown in Fig. 1. The flanges 10 may be spread or contracted to provide the proper snugness of fit. To remove the lid, a few lateral blows are given with a hammer and a chisel inserted between an ear 6

and the edge of flange 9 as a pry, the slot 7 permitting the chisel to be driven in as a wedge and the ear acting as the fulcrum. A hole 11 may be provided in the plate 8 for lifting the lid with a suitable hook. Owing to the ability to expand or contract the flanges 10, the lid may be adjusted to fit a wide range of service box diameter.

In Fig. 2 I have shown my lid fitted on a standard service box, the upper member 1^a of which is shown. 12 is the internal boss into which the bolt of the standard lid is screwed. This boss as also stop 13 of the standard service box, used to limit the telescoping of the box members, are straddled by the flanges 10, or in other words occupy the spaces between the said flanges.

The advantages of my improved lid are many. There is no threaded engagement between the lid and the box nor are any external or exposed attaching means required. The external circumference of my lid is identical with that of the standard lid, so that it can be substituted therefor without disturbing or enlarging the aperture in the side walk or street formerly occupied by the standard lid. My lid is preferably made of malleable iron as such material is very substantial and durable, lacking the brittleness of ordinary cast iron.

What I desire to claim is:—

The combination of a service box provided with laterally extending flat topped ears adjacent to the upper end of the box and the wall of said box being slotted vertically from its top down to said ears, with a lid provided with depending integral spring flanges adapted to be driven down into the interior of said box to hold the lid in place and having an annular depending flange on the head of said lid adapted to fit down over the top of the service box and rest upon said ears, substantially as and for the purpose set forth.

Signed at Pittsburgh, Penna., this 17th day of March, 1913.

FRANK M. EIBER.

Witnesses:
E. A. LAWRENCE,
W. S. WALSH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."