

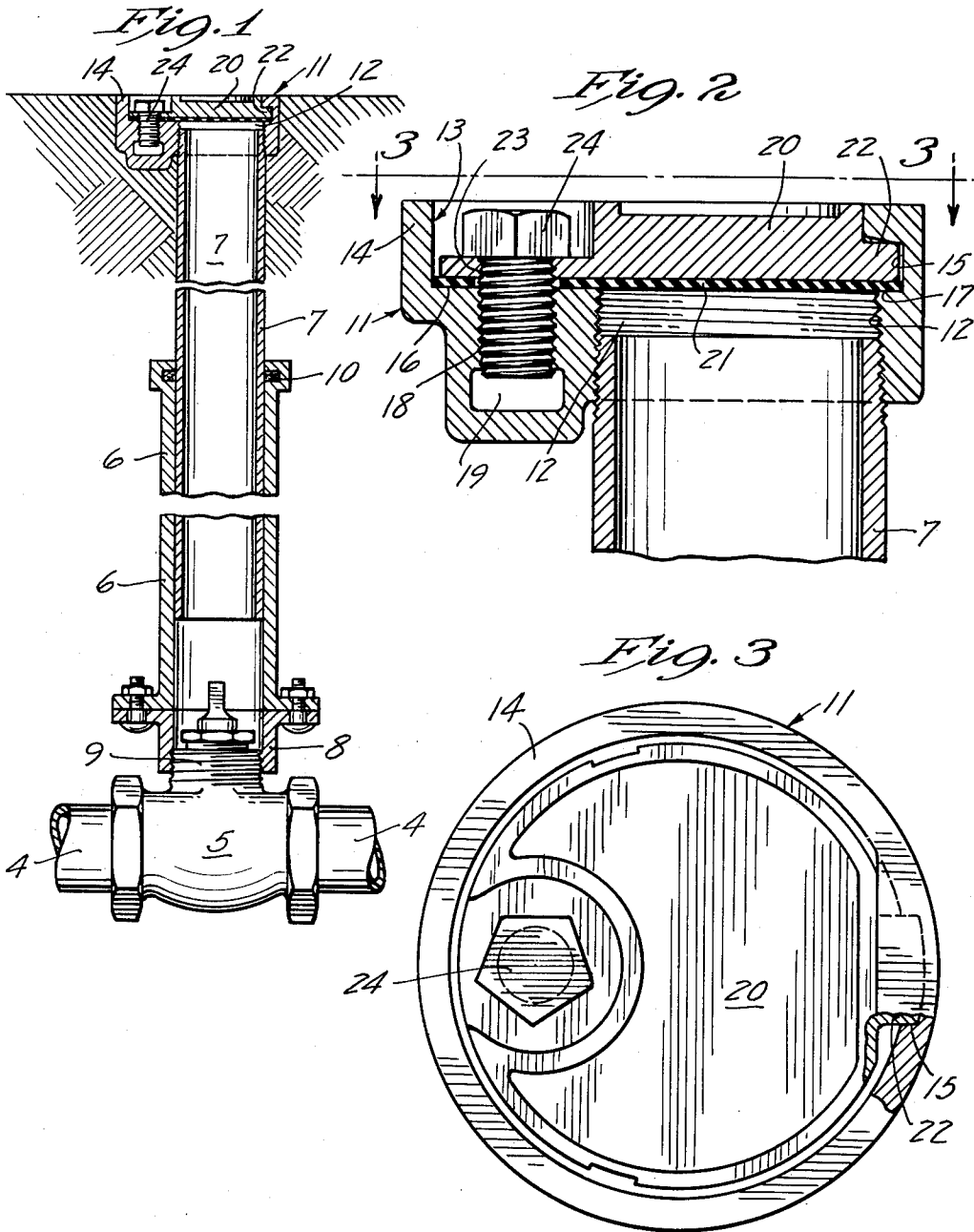
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OUTLET BOX CLOSURE

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OUTLET BOX CLOSURE

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1 Claim. (Cl. 137—371)

My invention relates to stop boxes for the curb stop valves of water mains, and more particularly to improvements in enclosure mains for the upper end of said stop boxes.

The primary object of my invention is the provision of a device of the class immediately above described which is so constructed as to resist rust and corrosion due to exposure of the working parts thereof to moisture.

A still further object of my invention is the provision of a device of the class described which is simple in construction, is inexpensive to produce, and which is always easy to open and close for service purposes.

The above and still further objects and advantages of my invention will become apparent from the following detailed specification, appended claim, and attached drawings.

Referring to the drawings, wherein like characters are indicated by like parts throughout the several views:

Fig. 1 is a view chiefly in vertical section, but with some portions shown in elevation and others broken away, showing my improved device in working position on the upper end of a stop box which, in turn, is connected to a water main.

Fig. 2 is an enlarged fragmentary detail of the upper end portion of the structure shown in Fig. 1, and

Fig. 3 is a view in plan taken substantially on the line 3—3 of Fig. 2.

Referring with greater particularity to the drawings, the numerals 4 represent sections of the water main, the numeral 5 represents a curb stop valve of standard construction interposed between sections 4 and the water main. The numerals 6 and 7 represent respectively the lower and upper telescoping sections of the stop box. Section 6, as shown, is connected to the valve 5 through the medium of a flanged coupling sleeve 8 which has screw threaded reception with the upwardly projecting screw threaded nipple 9 formed integrally with the valve 5. Moisture is prevented from entering the box by a packing gland 10.

Closure means for the upper end of the stop box 7 is in the nature of a generally cylindrical head 11 having a screw threaded opening 12 in its bottom for the reception of the upper end portion of the box forming section 7. As shown, the opening 12 is axially offset with respect to the axis of the head 11. Head 11 at its upper end is provided with an upwardly opening axial recess 13 which, as shown, is of considerably greater diameter than the opening 12 and communicates with said opening 12. The wall of the head 11 formed by the recess 13 is identified by the numeral 14. Wall 14 is undercut as at 15 to provide a notch at one side of the box opening 12.

Head 11, diametrically opposite the notch 15 defines a

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shelf 16 which lies on the same level and forms a continuation of the annular shoulder 17 surrounding the opening 12. Diametrically opposite the notch 15 said head 11 is provided with a threaded hole 18 which opens upwardly through the shelf 16 in radially outwardly spaced parallel relationship to the opening 12. As shown, the opening 12 terminates at its lower end in a diametrically enlarged chamber 19. A generally circular cover plate 20, of a diameter only slightly less than that of the recess 13, is receivable within the recess 13 and is adapted to rest upon the annular shoulder 17 and shelf 16 with a suitable sealing washer 21 interposed therebetween. Cover plate 20 is provided with a radially outwardly projecting tooth 22 receivable in the notch 15, and in diametrically spaced relationship to said tooth 22 with an axially extended opening 23 for the reception of a headed lock screw 24. As shown, the lock screw 24 has an axial length such that it terminates at its lower end when in the operative sealing position, Figs. 1 and 2, in spaced relation to the bottom of the chamber 19. The chamber 19 permits accumulation of some dirt and extraneous material over the years without impairing the clamping ability of the lock screw 24. On the other hand, the fact that the chamber 19 is completely sealed from atmospheric moisture and drainage assures almost complete freedom from rust or corrosion of the parts.

My invention has been thoroughly tested and found to be completely satisfactory for the accomplishment of the above objects, and while I have described the preferred embodiment thereof, same is capable of modification without departure from the scope of the appended claim.

What I claim is:

Closure means for the upper end of a stop valve box, said means comprising a generally cylindrical head having a screw threaded opening in its bottom for reception of the upper end portion of said box, said opening being axially offset with respect to the axis of said head, said head at its upper end being provided with an axially opening recess in communication with said opening, a side wall portion of said recess being undercut to provide a retaining notch at one side of said box opening, said head diametrically opposite said notch defining a screw threaded hole extending downwardly from said recess in radially outwardly spaced relation to said box opening and terminating at its lower end in a diametrically enlarged chamber, a closure plate in said recess, said closure plate having a radially outwardly projecting tooth receivable in said notch and an axially extended opening in diametrically opposed relationship to said tooth, and in alignment with the threaded hole in said head, a lock screw extending through said opening in the cover plate and having screw threaded engagement with said threaded hole whereby to close said chamber, said screw terminating at its lower end above the bottom of said chamber, and a gasket interposed between said cover plate and the bottom of said recess whereby to seal the interior of the box opening and said chamber.

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