C. A. DE TEMPLE.

HANGER BOX OILER.

APPLICATION FILED APR. 11, 1914.

1,155,472. Patented Oct. 5, 1915.

Fig. 1

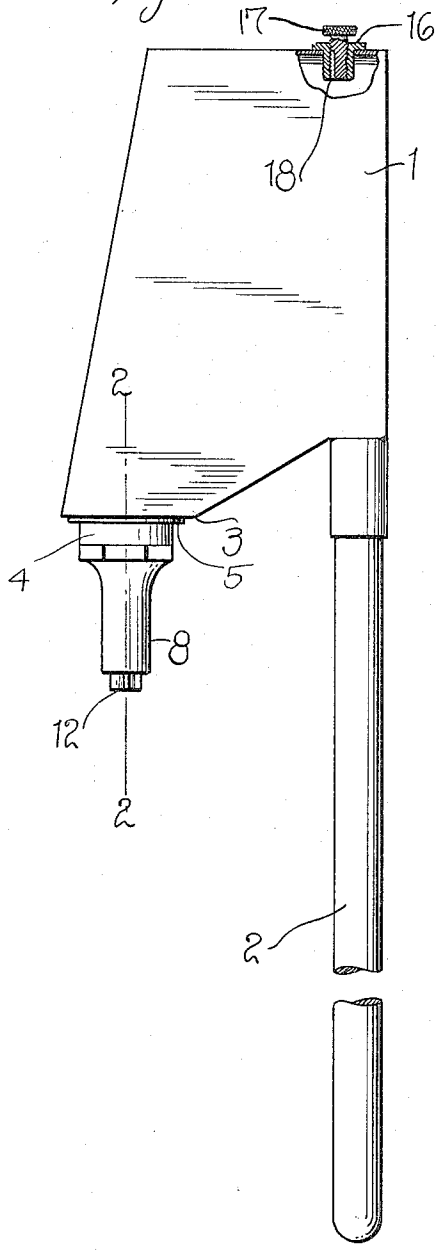


Fig. 2

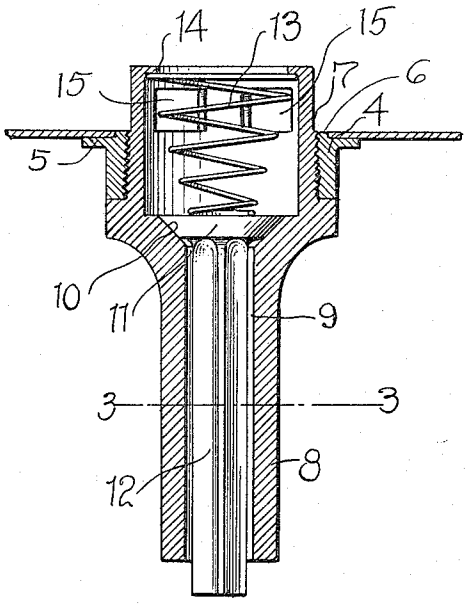
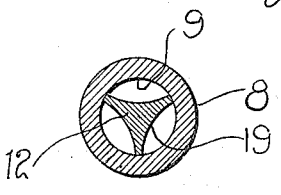


Fig. 3



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HANGER-BOX OILER.

1,155,472. Specification of Letters Patent. Patented Oct. 5, 1915.

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To all whom it may concern:

Be it known that I, CHARLES A. DE TEMPLE, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Hanger-Box Oilers, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to hanger box oilers. As is well known, the ordinary procedure observed in oiling over-head or hanger boxes for shafts is for the operator to place a ladder against the shaft, mount the ladder and apply the oil to the box. This is not only an operation that requires time, but is attended with great danger, as frequently the ladder slips or the operator's clothes become entangled with the belt with the result that serious injury and frequently death ensues.

It is an object of the present invention, in a ready, thoroughly feasible and practical manner, to eliminate the objectionable features above stated, and to insure the ready application of oil to a hanger box from the floor, without waste, and without any danger whatever to the operator.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel arrangement, and combination of parts of a hanger box oiler as will be hereinafter fully described and claimed.

In the accompanying drawing forming a part of this application, and in which like characters of reference indicate corresponding parts, Figure 1 is a view in side elevation of the implement, a portion being in section. Fig. 2 is an enlarged detail sectional view through the valve mechanism. Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 2.

The device embodies an oil can designated generally 1, with which is connected a staff or handle 2. The oil can as a whole is of substantially rectangular form and is provided at its lower end with an inclined extension in the bottom 3 of which is arranged the mechanism for supplying the oil to a hanger box, and also for cutting off the supply of oil when the required quantity has been fed. It is to be observed that the staff or handle 2 is secured to the bottom 3 at one side of the inclined extension and adjacent a margin of said bottom.

The oil feed control mechanism comprises, in part, a collar 4, which is internally threaded, and is provided at its top with a circumferential flange 5 that is designed to rest against the under side of the bottom 3 of the extension, and to be soldered thereto, the bottom of the sleeve having an annular shoulder 6 to project through the bottom 3. The threads of the collar 4 are engaged by external threads on a sleeve 7 carried by the upper end of a valve guide 8, which is provided throughout the greater portion of its length with a bore 9, terminating at its upper end in an outwardly flared valve seat 10. The valve guide 8 is disposed in parallelism with the adjacent extremity of the staff or handle 2 whereby the operation of the device is greatly facilitated. The seat is engaged by a tapered valve 11 carried by a stem 12 which is of a length, when the valve 11 is seated, to project at its lower end below the valve guide. The valve 11 is a solid structure but the stem 12 is of curvilinear triangular form or contour in cross section, for a purpose which will presently appear.

Arranged within the sleeve 7 is a helical coiled spring 13, the smaller end of which rests upon the upper face of the valve, and the larger end of which bears against an inturned circumferential flange 14 carried by the sleeve, the object of the spring, as will be obvious, being to hold the valve normally seated. The sleeve at its upper portion is provided with a plurality of ports 15 to permit oil to pass within the sleeve in an unobstructed flow.

Secured to the top of the can is a nut 16 into which is threaded a screw 17, the latter being provided with a groove 18 that extends throughout approximately half of the length of the screw, and is designed, when the screw is turned, to bring the upper end of the slot above the nut to permit air to pass into the interior of the can and thus allow the oil to escape.

The operation of the device as above defined is as follows: The can having been previously supplied with oil, the screw 17 is loosened to permit air to pass to the can. The staff 2 is grasped and the can is moved over the hanger box, and the lower end of the stem 12 is brought into engagement with the oil box in the hanger to one side of the opening. Upon a downward pull being imparted to the staff, the valve 11 will be unseated, and oil will be allowed freely to pass down through the guide, between the channels 19 formed in the same, and thence to

the hanger box. Immediately upon stress being removed from the staff, the valve will automatically seat itself and the flow of oil will thus be cut off.

A feature of the oil can to which attention is called is the inclined extension 3, the object of which is to insure the feeding of all the oil within the can to the valve guide, thereby rendering it unnecessary to tilt the can which would otherwise be required if the bottom of the can were flat as usual.

It will be seen from the foregoing description, that although the improvements above set forth are simple in character, that they will be thoroughly efficient for the purpose designed, and will coact in the production of a practical and easy operative form of hanger box oiler.

I claim:

A device of the character described comprising, in combination, a receptacle provided with a discharge opening, a staff secured to said receptacle, a tubular guide member detachably engaged with the receptacle and projecting a predetermined distance therein, the exterior portion of the guide member being disposed in substantial parallelism with the adjacent extremity of the staff, the inner end portion of the bore of the guide member being enlarged to afford a valve seat, the portion of the guide member within the receptacle having inlet ports produced therein, the inner extremity of the guide member being provided with an inwardly disposed flange, a valve within the enlarged portion of the bore of the guide member coacting with the valve seat therein, an expansible member interposed between the valve and the flange of the guide member for maintaining said valve normally seated, and an extension carried by the valve projecting through the outer portion of the bore of the valve member, said extension being of such a length as to extend exteriorly of the guide member when the valve is seated, said extension being provided with open end grooves disposed longitudinally thereof and serving as a guiding means for the discharge from within the receptacle.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

CHARLES A. DE TEMPLE.

Witnesses:
WALTER PREISS,
CHARLES GODT.

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