

E. J. & W. L. NAHM.
OIL CUP CLOSURE.
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957,994.

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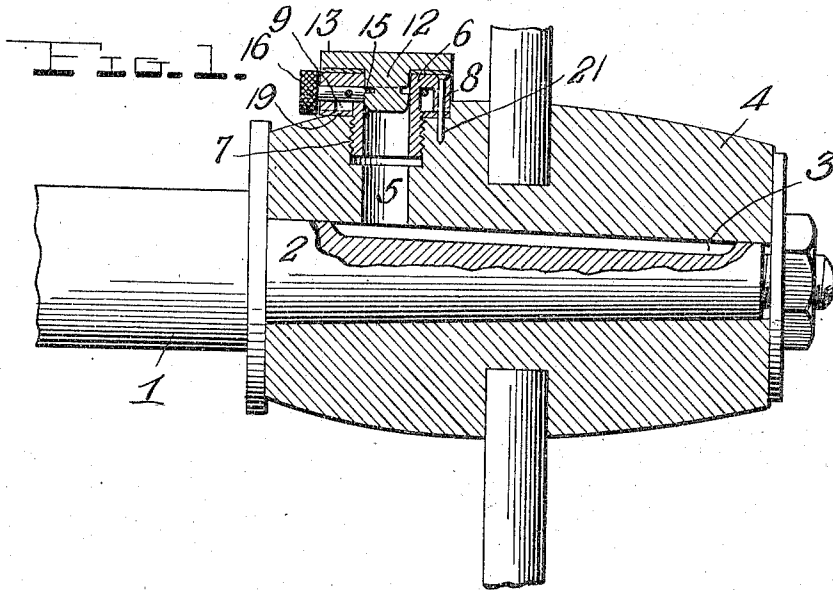


Fig. 2.

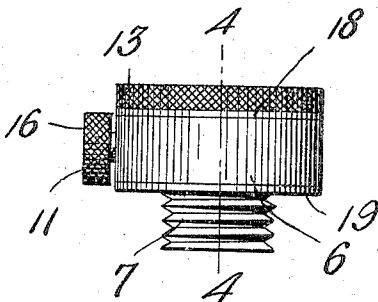


Fig. 3.

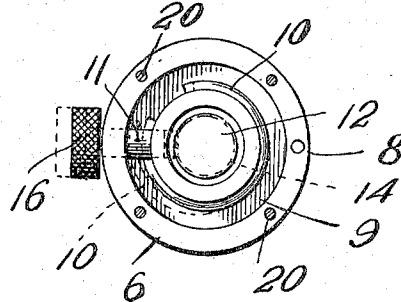


Fig. 4.

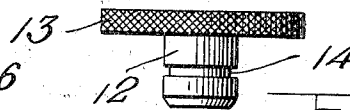
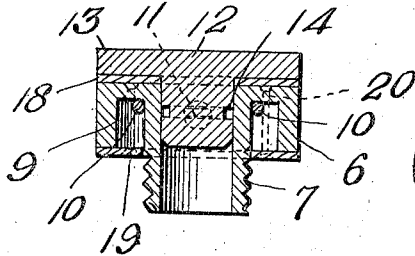


Fig. 5.

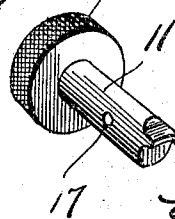


Fig. 6.

Witnesses

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EDWARD J. NAHM AND WARREN L. NAHM, OF ST. LOUIS, MISSOURI.

OIL-CUP CLOSURE.

957,994.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, EDWARD J. NAHM and WARREN L. NAHM, citizens of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Oil-Cup Closures, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in oil cups or lubricators, and more particularly to closures for the same.

The object of the invention is to provide an improved lubricating device of this character having a closure which may be quickly and easily removed and will be automatically fastened and securely retained in fastened position when inserted in the body of the device.

With the above and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a sectional view through the improved lubricating device and a wheel hub to which it is applied; Fig. 2 is a side elevation of the lubricator; Fig. 3 is a bottom plan view showing the bottom ring or washer removed and its fastening rivets in section; Fig. 4 is a sectional view through the device; Fig. 5 is a side elevation of the removable closure for the body of the device; and Fig. 6 is a perspective view of the locking pin for the closure.

Referring more particularly to the drawings, 1 denotes a vehicle axle having its spindle 2 formed with a longitudinal oil groove 3, and 4 denotes the hub of a wheel. In the practice of the invention, an opening 5 is bored or drilled through the hub 4, preferably, adjacent to its inner end, as shown in Fig. 1, and into said opening 5 is screwed a tubular body 6 of the improved lubricator. Said body 6 may be otherwise applied but it is preferably secured to the hub by providing the exterior of its lower end with screw threads 7 to engage the wall of the opening 5. The projecting upper or outer end of the body 6 is formed with an enlargement 8 in the form of a radially projecting annular flange having in its bottom an annular groove 9 concentric with the body 6. Said groove receives a substantially circular spring 10 which actuates a pin 11 provided

for the purpose of locking a closure 12 in the bore or opening of the body 6. Said closure is in the form of a cylindrical plug of such size as to fit the upper end of the body 6 and having a beveled lower end and an enlarged or flanged upper end 13. The intermediate portion of the plug or closure 12 is formed with an annular groove 14 adapted to receive a finger or projection 15 formed on the inner end of the locking pin 11, which latter is slidably arranged in a radial opening formed in the enlargement 8 and has upon its outer end a milled head or finger piece 16. The intermediate portion of the pin 11 which extends across the groove 9 in the enlargement 8 of the body is formed with a transverse opening 17 to receive one end of the circular spring 10, whereby the finger 15 on said pin is projected into the opening or bore of the body 6 and hence into the groove 14 in the plug 12 to retain the latter in the body. The outer edge of the flange 13 on the plug or closure 12 is preferably milled, as shown in Fig. 2, and beneath said flange is arranged a washer 18 of leather or the like for the purpose of preventing dust or other foreign matter from working into the tubular body 6.

For the purpose of preventing foreign matter from working into the groove 9 and interfering with the action of the spring 10, the bottom of said groove is closed by a metal washer or ring 19, which latter is preferably secured in position by rivets 20, as indicated in Figs. 3 and 4.

For the purpose of preventing the tubular body 6 from working out of the hub the enlargement 8 and ring 19 are formed with registering openings to receive a nail or the like 21 which is driven into the hub and serves to lock the tubular body 6 against rotation. The head of the nail or fastening 21 is disposed beneath the washer 18 and flange 13 of the plug 12 so that these last mentioned parts lock the nail 21 in position and prevent it from working out even though it may become loose.

In operation, when it is desired to lubricate the axle 2, the finger piece 16 of the locking pin 11 is pulled outwardly against the tension of the spring 10 to retract the finger 15 from the groove 14, whereupon, the plug or closure 12 may be lifted out of the tubular body 6. Oil or other lubricant may then be poured into said body or, when grease is employed, the tubular spout of a

grease can may be inserted in said body 6 and the grease forced from the spout down through the opening 5 in the hub and into the groove 3 in the axle spindle. By merely inserting the plug 12 in the tubular body 6 and pressing the same downwardly, the locking pin or catch 11 will automatically lock the same in position so as to retain the oil or other lubricant and prevent the entrance of foreign matter.

From the foregoing it will be seen that the invention provides an exceedingly simple and practical device of this character which may be produced at a small cost and readily applied to a hub of any vehicle wheel and also to other wheels and which will enable the axle or axle spindle to be quickly and easily lubricated without the removal of the wheel from the same.

Having thus described the invention what is claimed is:

1. In a device of the character described, the combination of a tubular body, a removable plug inserted in said body and having a pin-receiving seat or groove, a radially slidable locking pin arranged in said body and having at its outer end a finger piece, the inner end of said pin being adapted to enter the seat or groove in the plug, and a substantially circular spring arranged in the body and having one of its ends connected to said pin, whereby said spring will maintain the inner end of the pin in the seat or groove in the plug and will permit said pin to be moved outwardly in a radial direction to release the plug.

2. In a device of the character described, the combination of a tubular body having an

annular enlargement at one end, said enlargement being formed with an annular groove and with an intersecting radial opening, a removable plug inserted in the body to close the same and formed with an annular groove, a locking pin arranged in said radial opening and adapted to have its inner end engage the groove in the plug and a substantially circular spring arranged in the groove in the enlargement of the body and having one end connected to said pin, whereby the latter will be actuated inwardly.

3. In a device of the character described, the combination of a tubular body having an externally threaded inner end and an enlargement at its outer end, said enlargement being formed in its bottom with an annular groove and also with a radial opening intersecting said groove, a removable plug inserted in the body to close the same and formed with an annular groove, a slidable locking pin arranged in said radial opening in the enlargement of the body and adapted to enter said groove in the plug, a spring in the groove of the enlargement of the body and engaged with the pin for actuating the same, and a cover ring arranged upon the bottom of the enlargement of the body to close said groove.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses.

EDWARD J. NAHM.
WARREN L. NAHM.

Witnesses:

JOHN J. KELLY,
EMMA CLENDENING.