

No. 680,850.

Patented Aug. 20, 1901.

W. P. FERGUSON.
LUBRICATOR ATTACHMENT FOR WHEEL HUBS.

(Application filed June 3, 1901.)

(No Model.)

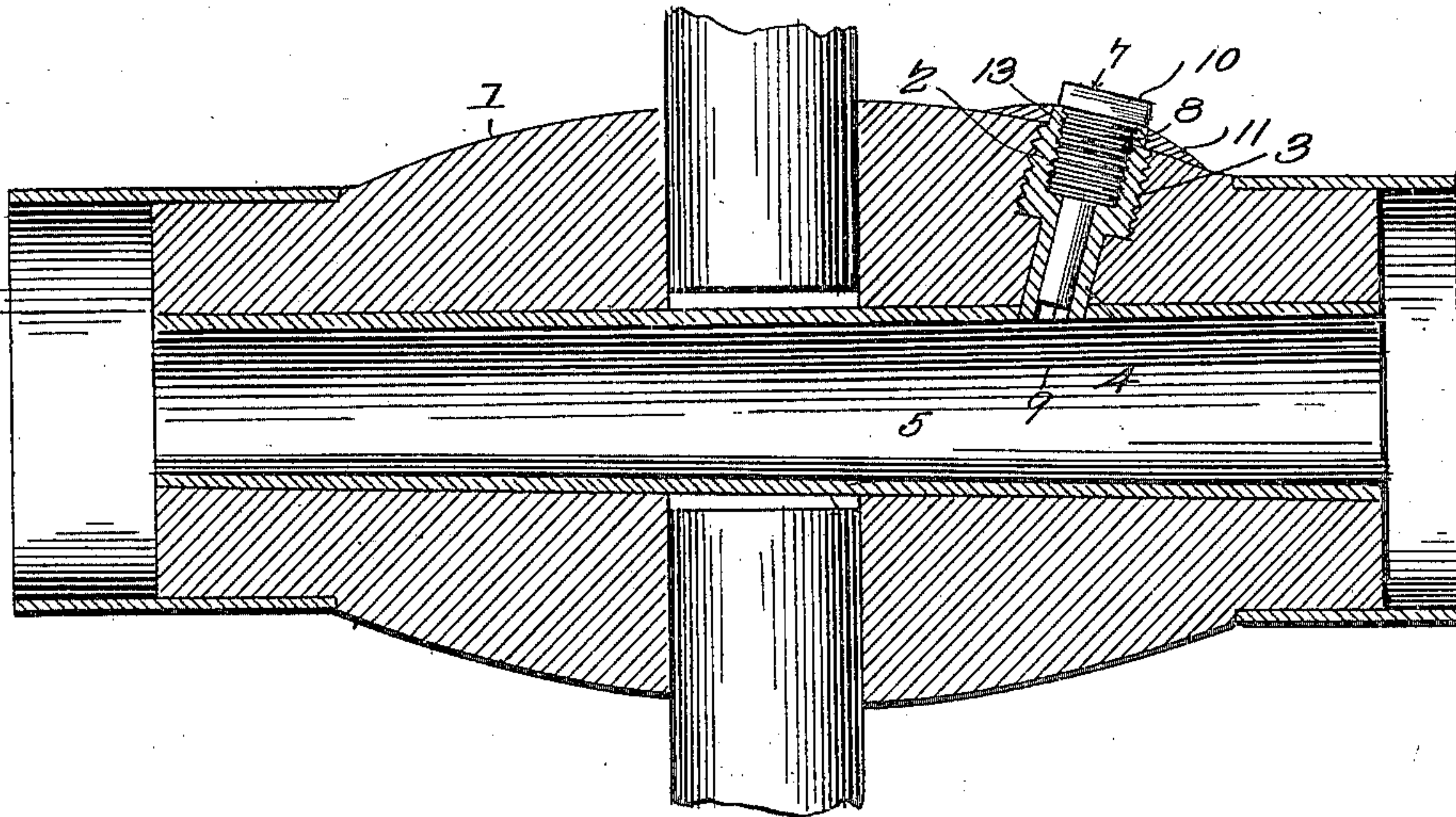


Fig. 1.

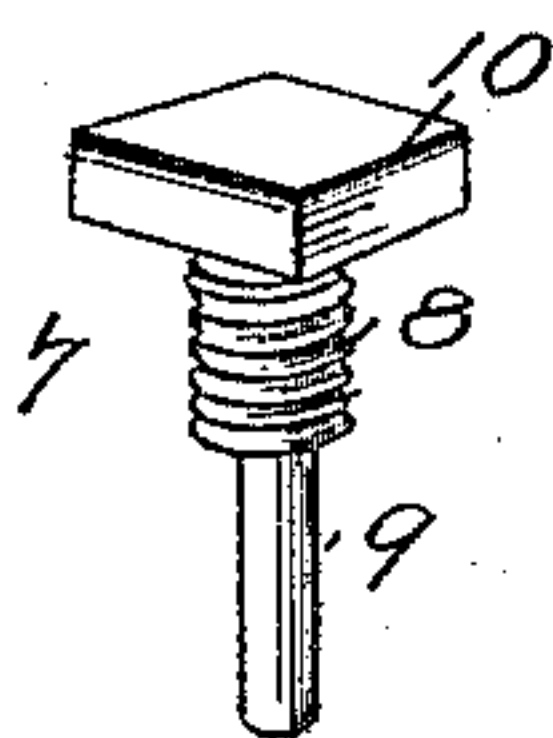


Fig. 4.

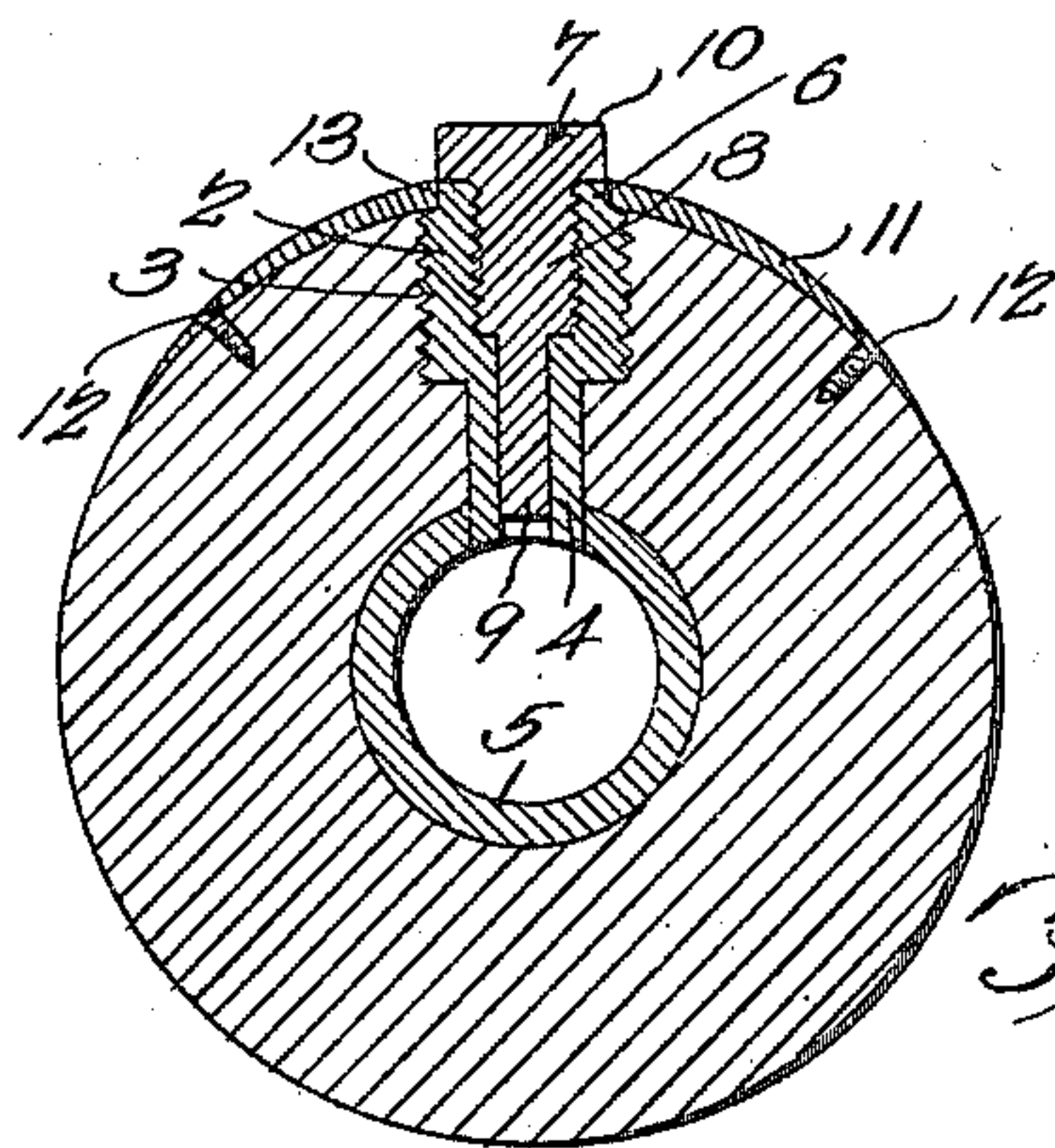


Fig. 2.

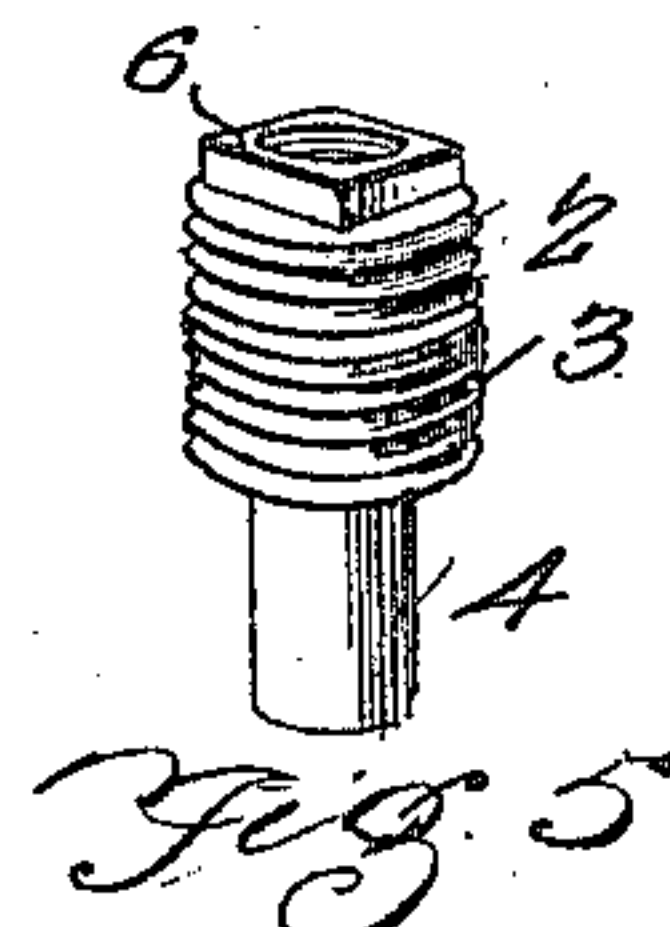


Fig. 5.

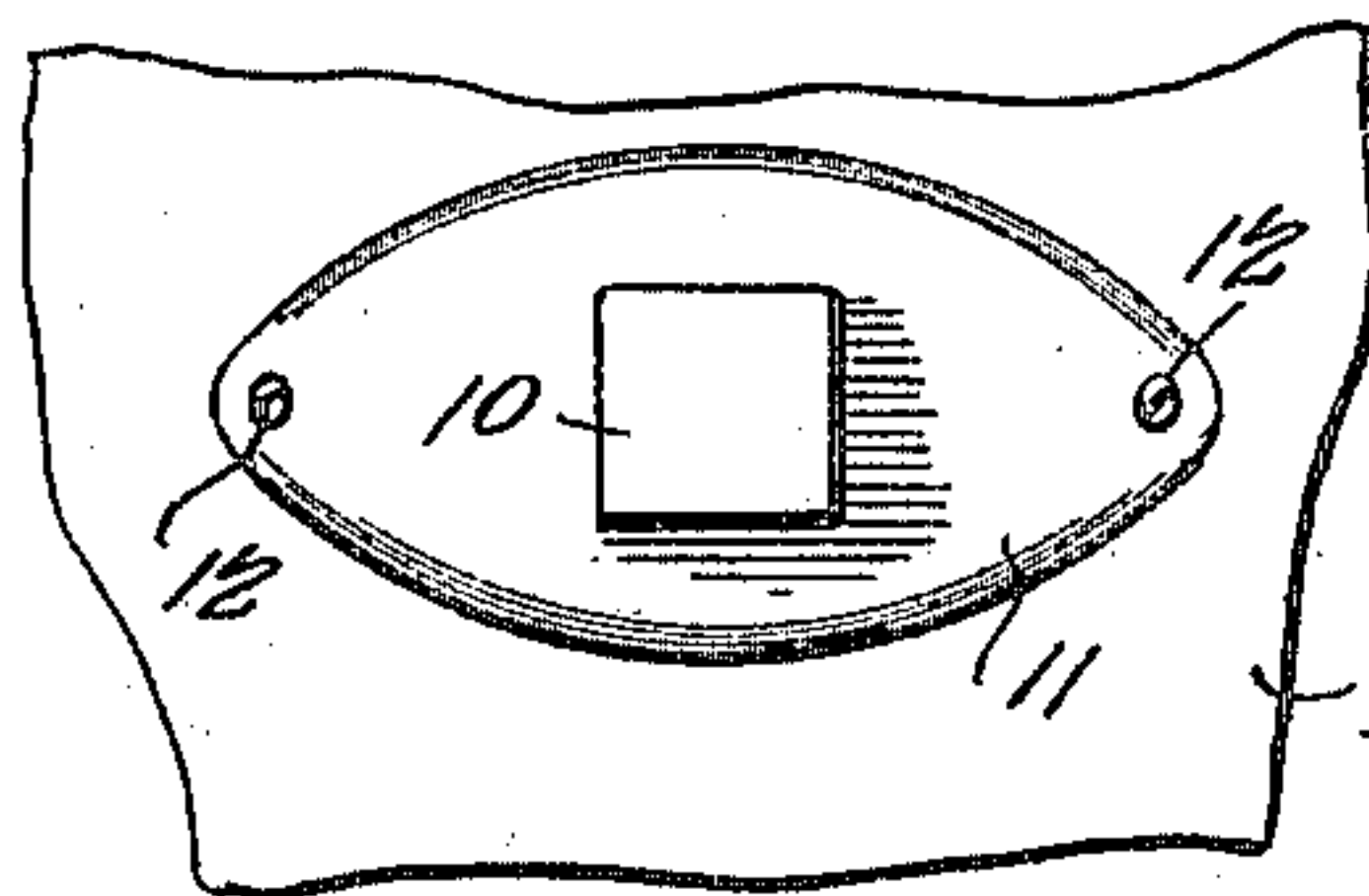


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

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LUBRICATOR ATTACHMENT FOR WHEEL-HUBS.

SPECIFICATION forming part of Letters Patent No. 680,850, dated August 20, 1901.

Application filed June 3, 1901. Serial No. 63,015. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. FERGUSON, a citizen of the United States, residing at Colorado, in the county of Mitchell and State of Texas, have invented a new and useful Lubricator Attachment for Wheel-Hubs, of which the following is a specification.

This invention relates to lubricators for the axles of buggies, wagons, and other vehicles; and it consists in the construction, combination, and arrangement of parts, as hereinafter shown and described, and specifically pointed out in the claims.

In the drawings, Figure 1 is a longitudinal sectional elevation. Fig. 2 is a transverse sectional elevation. Fig. 3 is a plan view of a portion of the hub at the point where the lubricator is inserted. Figs. 4 and 5 are perspective details of the plug and screw-pin parts of the device.

This invention may be applied to any form of buggy, wagon, or carriage hub, and for the purpose of illustration I have shown it applied to an ordinary form of hub 1.

The improvement consists in a metal plug 2, screw-threaded on its exterior at the outer part, as at 3, and preferably reduced in size at the lower part 4 and adapted to be fitted into a cavity formed for it through the hub, preferably in the rear of the spokes, with the lower end of the plug passing through the lining 5 of the hub or ending opposite a perforation through the lining. The screw-threads on the exterior of the plug 2 will be formed with special reference to engaging the wood of the hub, so as to be firmly embedded therein, and the plug will be formed slightly projecting beyond the outer surface of the hub and with the projecting part square or oblong, as at 6, to provide for receiving a wrench, whereby the plug may be inserted and removed. A perforation is formed centrally through the whole length of the plug, this perforation being internally screw-threaded at the outer part and adapted to receive a stud 7, the stud having a screw-threaded portion 8 to engage the screw-threaded part of the perforation through the plug 2, and with a cylindrical portion 9 adapted to engage the unthreaded part of the perforation. The stud thus completely fills the perforation through the plug. The outer end

of the stud is formed with an enlarged square head 10 to afford means for the action of a wrench to insert and remove the stud.

To protect the plug 2 and also to form a lock thereto to prevent it from working loose, a plate 11 is secured over the outside of the plug and extended at the ends to provide for its being secured to the hub, as by screws 12, and with a square central perforation 13 engaging the portion 6 of the plug. The plate 11 will preferably be formed thicker at the point where the perforation 13 occurs, so as to strengthen the plate where the greatest strains occur. The plate 11 will project sufficiently beyond the plug 2 and engage the surface of the hub immediately around the plug closely enough to effectually prevent the entrance of moisture between the plug and the part of the hub with which it engages, so that no danger exists of the deterioration of the hub from that source. This is an important feature of my invention and effectually overcomes any objection that might exist to forming cavities through the hub. By this simple arrangement a lubricating material may be inserted through the perforation in the plug 2 and find its way to the axle-bearing and without removing the wheel.

If the lubricating material is a liquid, it will freely flow into the interstices between the axle and hub lining; but if any of the semisolid lubricating compounds are employed, then the perforation in the plug 2 will be filled with the compound and the stud 7 utilized to force the compound down against the axle when set down into its seat in the perforation in the plug.

Thus a very complete, simple, and convenient device is produced, which provides for lubricating the vehicle in a very thorough manner and with very little trouble and without the necessity of removing the wheel from the axle.

What I claim as new is—

1. In a device of the class described, a plug fitting through the hub transversely of the axle-bearing and having the outer end projecting and formed with means for attaching a wrench or other operative implement and with a longitudinal aperture through the plug, a plate fitting the hub closely around said plug and with an aperture engaging said wrench-

receiving means, and a closure for said aperture in said plug, substantially as shown and described.

2. In a device of the class described, a plug
5 having a square or oblong outer end and screw-threaded exteriorly and interiorly at its upper part, and having a hollow cylindrical portion forming its lower part, a stud having a screw-threaded upper part and a
10 cylindrical lower part and adapted to engage the interior of said plug, and a plate fitting

said hub closely around said plug and having an aperture engaging said square or oblong projection on said plug, substantially as shown and described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM P. FERGUSON.

Witnesses:

H. W. HALL,
L. E. LASSETER.