

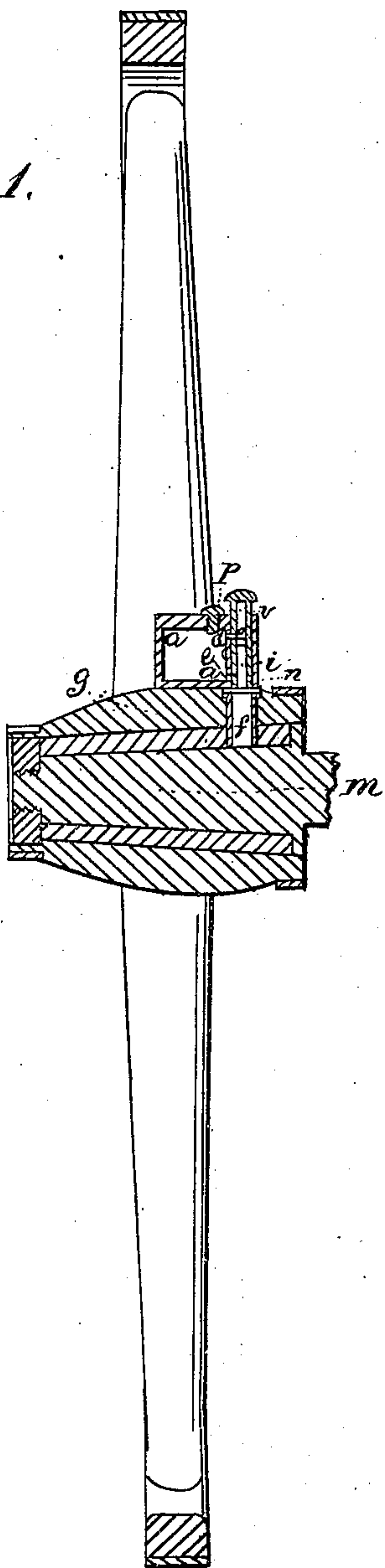
*J.C. Fish.*

*Axle Lubricator.*

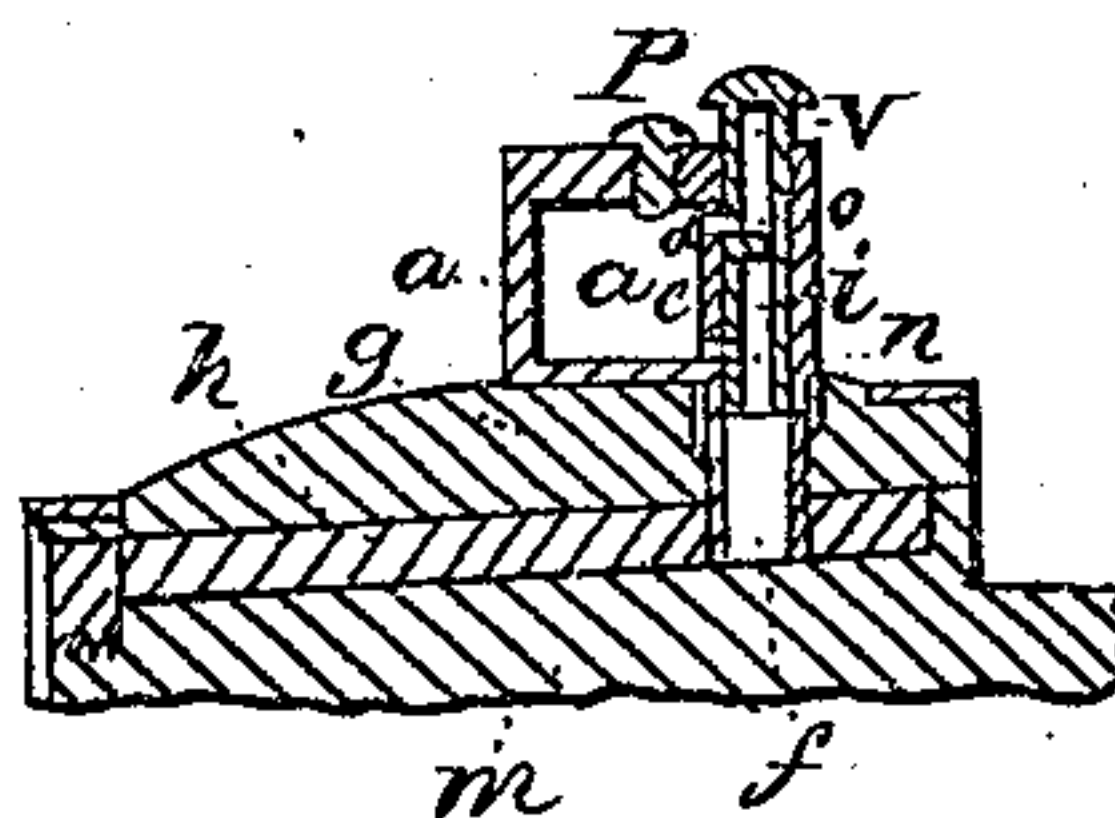
*N<sup>o</sup> 64,961.*

*Patented May 21, 1867.*

*Fig. 1.*



*Fig. 2.*



Witnesses;

*W B Crosby*  
*F L Gould*

Inventor;

*John C. Fish*

# United States Patent Office.

JOHN C. FISH, OF BARNSTABLE, MASSACHUSETTS.

*Letters Patent No. 64,961, dated May 21, 1867.*

## IMPROVEMENT IN DEVICE FOR LUBRICATING WHEELS, &c.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN C. FISH, of the town and county of Barnstable, and State of Massachusetts, have invented a new and improved Device for Oiling Rotating Bodies; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practise it.

This invention I illustrate herein in its application to the hubs of carriage-wheels, though it may be applied in a similar manner and with similar results to other bodies rotating or moving on or about shafts, axles, or pins. In the drawings—

Figure 1 shows in sectional elevation a wheel for a wagon or carriage, having applied to its hub my improved oiling device.

This consists of a reservoir, *a*, provided with a tube, *c*, extending through it and secured therein, said tube having two openings from its side into the body of the reservoir, an upper one at *d*, and a lower one at *e*. The top and bottom of this tube *c* are open, the bottom connecting with a tube, *f*, set into the hub *g* and the box *h* of the wheel, and the top being provided with the threads of a nut. Closely fitting in the tube *c* is a tube, *i*, closed at its top, and provided with screw-threads, which, fitting the nut-threads at the top of tube *c*, cause tube *i* to rise and fall therein whenever tube *i* is rotated. In the sides of tube *i* are three openings, two of which, *n* *o*, correspond with the openings *e* *d* in the tube *c* when the tube *i* is raised sufficiently in tube *c* for the upper opening *v* in tube *i* to communicate with the atmosphere. In the tube *i*, and between its openings *n* and *o*, I prefer to locate a plug or partition for a purpose to be hereafter referred to. In the reservoir there is a removable screw-plug, *p*, serving to close the orifice through which the supply of oil is delivered to the reservoir. The tube *i* is provided with means by which it can be rotated, and thus raised and lowered in tube *c* by the employment of a wrench or screw-driver. If the reservoir is filled or partly filled with oil, and the parts are in the position shown in the drawing, it will be obvious that oil must gravitate upon the axle *m* from the reservoir, as air will flow through the opening *v*, tube *i*, openings *o*, and *d*, to supply the place of the oil flowing upon the surface to be lubricated. But if the tube *i* is screwed down into tube *c*, so that the opening *v* no longer admits the passage of air, the flow of oil will be stopped, as the oil will not run out of the reservoir and produce a vacuum therein. The oil will also be prevented from flowing, because the passages *n* and *e* will no longer open into each other, the solid metal of the tube *i* closing the passage *e*. The purpose of the plug or partition before mentioned as in the tube *i*, is to act as the piston of a syringe in forcing the oil before it upon the surface to be lubricated, as the tube *i* is moved inwards into tube *c*. The joint between the tube *c* in the reservoir and the tube *f* in the hub may be made, as in fig. 1, by a washer of suitable yielding material, or by a thimble, as seen in fig. 2, the thimble enclosing the adjacent ends of the tubes *c* and *f*. In applying this oiling device to carriage-wheels, the size, shape, and location of the reservoir may be varied to suit circumstances, and in some instances it may be wholly embedded in the wood of the hub. An amount of lubricating material can be easily contained in the reservoirs of a set of wheels sufficient to last a carriage in constant use for several weeks; no oil is lost or wasted, neatness is preserved, and the oiling is easily effected by the simple operation of rotating the tubes *i*, instead of by propping up each end of each axle and removing the wheels therefrom in the usual way.

I claim a lubricating apparatus, constructed of a reservoir in which is located the tube *c*, provided with openings as described, and with a perforated movable tube, *i*, operating substantially as described.

JOHN C. FISH.

Witnesses:

J. B. CROSBY,  
F. GOULD.