

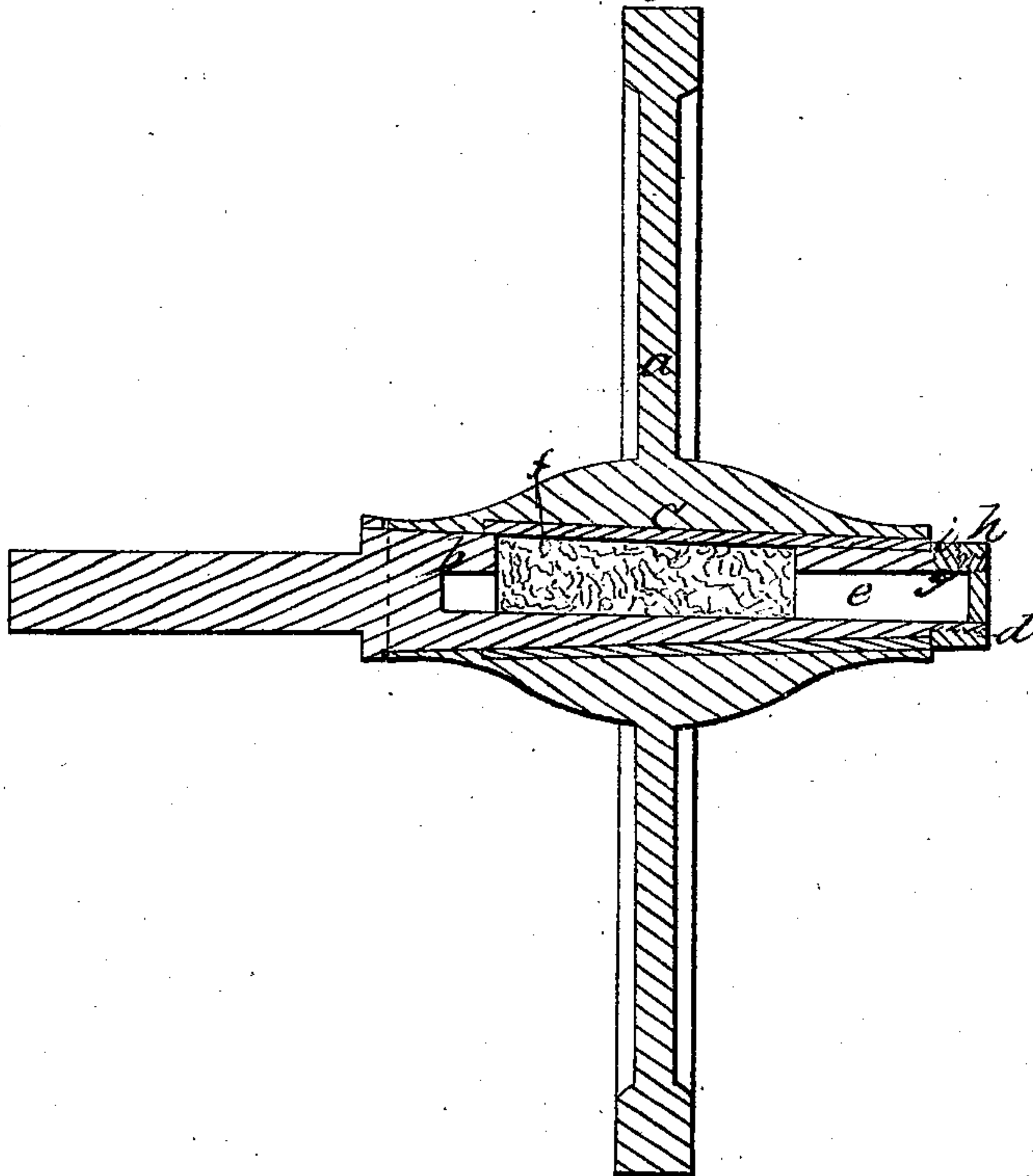
*S. Nash.*

*Journal Lubricator.*

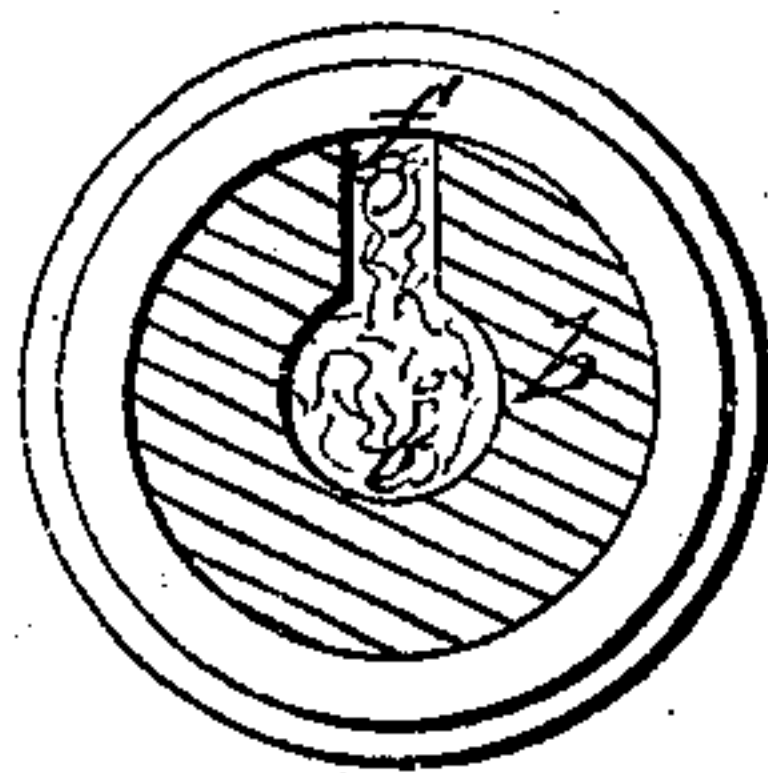
*Nº 95,716.*

*Patented Oct. 12, 1869.*

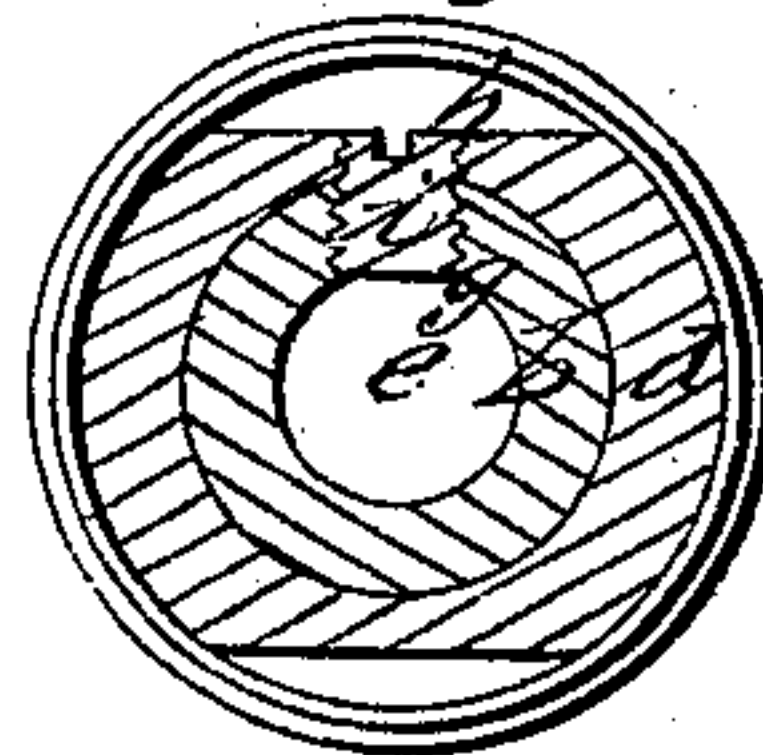
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses:*

*Geo A. Loring.  
Edward Griffith*

*Inventor:*

*Samuel Nash.  
by his Attorney,  
Frederick Ellis.*

# United States Patent Office.

SAMUEL NASH, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND JOHN M. DUNCAN, OF SAME PLACE.

*Letters Patent No. 95,716, dated October 12, 1869.*

## IMPROVED MODE OF LUBRICATING JOURNALS.

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

*To all to whom these presents shall come:*

Be it known that I, SAMUEL NASH, of Boston, in the county of Suffolk, and Commonwealth of Massachusetts, have made an invention of a new and useful Mode of Lubricating Stationary Journals; and do hereby declare the following to be a full, clear, and exact description thereof, due reference being had to the accompanying drawings, making part of this specification, and in which—

Figure 1 is a longitudinal, and

Figures 2 and 3, transverse sections of a carriage-wheel, and axle-journal, and journal-box, showing the embodiment of my invention in one example of adaptation.

This invention is an improved mode of lubricating the journals and boxes of the axles of wheeled vehicles, of connecting-rod bearings of steam and other engines, or loose pulleys, and, in fact, any stationary journal about which a body is in revolution, and relates to means whereby a greater quantity of lubricating-material may be introduced and held in reserve, without the necessity of replenishing, except at long intervals of time.

In the drawings before alluded to, and which are hereto annexed, I have shown, as one form of applying the principle of my invention, a carriage-wheel and axle-journal, such wheel being denoted by the letter *a*, the journal at *b*, and the journal-box at *c*, the nut of such journal being seen at *d*, as screwed there-upon and against the end of the journal-box, in the usual manner.

In pursuance of my invention, I bore, or otherwise form in the interior of the journal *b*, a longitudinal chamber or reservoir, *e*, such reservoir being preferably scored at both ends, in order to prevent leakage therefrom.

This reservoir, for obvious reasons of utility, should be of as large capacity as will be possible, consistent with safety, and may be of somewhat greater area, if considered desirable, as it approaches the outer end of the journal.

An orifice, *f*, of attenuated width, but of considerable length, is cut through the journal and opening into the reservoir or well, *e*, this orifice, as well as a portion, or the whole of the reservoir, being packed

with a suitable absorbent and attractive material, such as cotton, tow, flax, or other fibrous or porous substances.

This substance serves, by capillary or other attraction, to absorb and convey the lubricating-material from the reservoir to the movable surfaces in contact with the journal, and effectually lubricate the parts in contact, the size of the reservoir being capable of containing such a large quantity of lubricating-material, in comparison to any device for the purpose heretofore devised, as to render the act of refilling it necessary only at corresponding long intervals of time.

For convenience in replenishing the reservoir *e*, I bore a small hole, *g*, through the periphery of the outer end of the journal, and leading into the oil-chamber *e*, a hole, *h*, of similar size, being also bored radially through the nut *d*, to coincide with and prolong the said hole *g*, when such nut is screwed up to its place against the shoulder of the journal, or against the journal-box *c*.

The hole *h* should be filled by a screw, *i*, such screw serving not only as a removable plug, to allow of entrance of oil to the oil-chamber, but as a safety-stop against unscrewing and loss of the nut, which, in case of wheeled vehicles, not unfrequently occurs.

The orifice *f* may be multiplied to any extent found necessary. It is believed, however, that for the majority of journals, one will be found to possess a liberal oil-discharging area.

I am aware that it is not new to form a lubricating-chamber within an axle, and I make no claim to this; but

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with the hollow journal perforated at *g*, and the retaining-nut *d*, with its corresponding perforation *h*, of the pin or screw *i*, which is inserted in said perforation, and serves not only as a plug to close the lubricating-chamber, but also as a stop to hold the nut in its proper position, as herein shown and set forth.

SAMUEL NASH.

Witnesses:

FRED. CURTIS,

EDWARD GRIFFITH.