E. GOLLIPHER.

Vehicle-Axle Lubricator.

No. 212,684. Patented Feb. 25, 1879.

Fig. 1.

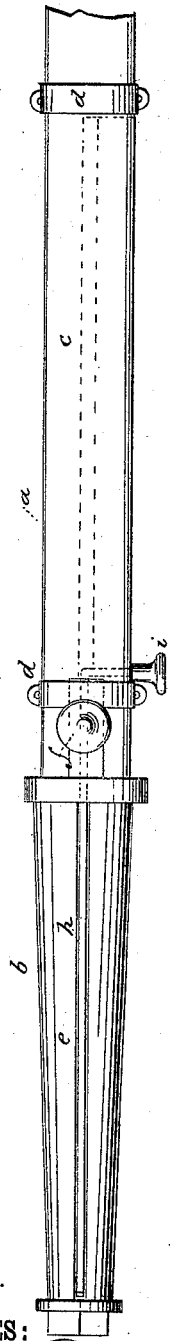

Fig. 2.

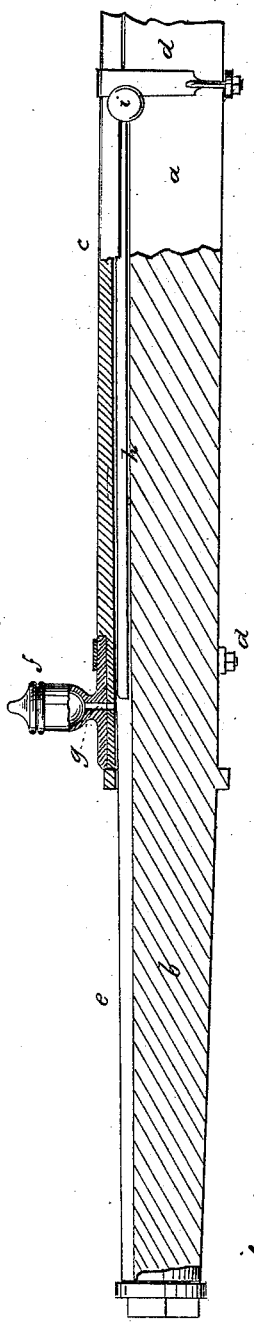

Fig. 4.

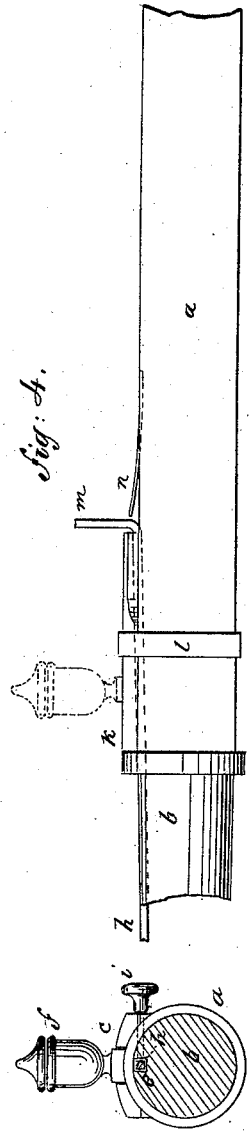

Fig. 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

ESPY GOLLIPHER, OF SCHELLSBURG, PENNSYLVANIA.

IMPROVEMENT IN VEHICLE-AXLE LUBRICATORS.

Specification forming part of Letters Patent No. **212,684**, dated February 25, 1879; application filed August 27, 1878.

To all whom it may concern:

Be it known that I, ESPY GOLLIPHER, of Schellsburg, in the county of Bedford and State of Pennsylvania, have invented a new and Improved Journal for Carriage-Axles, of which the following is a specification:

My invention relates to means for oiling the journals of carriages or other vehicles, and its object is to permit of their being oiled without removing the wheel.

My invention consists in an axle-journal having a groove lengthwise upon its upper side, which groove extends also upon the surface of the axle, and communicates with an oil-cup. A rod that may be slid by a knob occupies a portion of said groove, and when the rod is in one portion of said groove it permits the oil to fill the groove in the axle, and when slid into the groove in the axle the rod ejects the oil and cuts off the further supply.

In the accompanying drawings, Figure 1 is a plan of an iron and wood axle with my improvement applied thereto. Fig. 2 is a longitudinal section of said axle. Fig. 3 is a cross-section of the same, and Fig. 4 is a side elevation of an all-iron axle.

Similar letters of reference indicate corresponding parts.

a represents an iron axle, formed with a journal, *b*, for the wheel. In Figs. 1 and 2 the upper surface of the axle *a* is covered by a wooden strip, *c*, attached thereto by clips *d*. *e* is a dovetail groove cut lengthwise of the journal *b* in its upper surface, and extending upon the surface of the axle *a* a short distance. *f* is an oil-cup, secured in the wood *c* of the axle, in any desired manner, near the inner end of the journal *b*. The passage *g* from the oil-cup *f* communicates with the groove *e*. *h* is a rod, that fits snugly in the groove *e*, and so as to slide therein. The rod *h* is long enough to extend from the outer end of the journal *b* to a point a short distance behind the oil-cup *f*, where the rod *h* is bent at a right angle, and its end projects at the side of axle *a*, beneath the wooden strip *c*, and a knob, *i*, is secured on the projecting end of the rod. The strip *c* is recessed to form a space above the axle *a* for the bent end of the rod *h* to slide in lengthwise of the axle.

In Fig. 1 the rod *h* is shown as moved outward into the groove *e*. In this position the passage *g* from the oil-cup is closed by rod *h* to a greater or less extent. When the journal is to be oiled, the rod *h* is slid back by means of the knob *i* to the position shown in Fig. 2, which uncovers the passage *g*, and permits the oil to run into the groove *e* and upon the journal. The rod *h* is then to be slid back into the groove *e*, and it will eject the oil from the groove, and also prevent the groove from becoming clogged by dirt and grease, when the carriage is in use.

In an all-iron axle, such as shown in Fig. 4, the plate *k* supports the oil-cup, and is attached to axle *a* by a clip, *l*. The inner end of rod *h* is bent upward, as seen at *m*; and a flat spring, *n*, attached to the axle *a*, takes behind the end *m*, and prevents the rod *h* coming out of the groove *e*. This spring *n* may be depressed when it is desired to slide back the rod.

The above-described axle-journal permits the oiling of the axle without removing the wheel, and a supply of oil may be kept in the oil-cup by having it large enough to hold more than is required for a single oiling.

The invention may be applied to the axles and journals of any vehicle.

I am aware that it is not broadly new to place an oil-cup in a groove of axle, and to force out the oil by a fillet inserted from the end of axle; but in this case the oil works from point to shoulder, and does not flow at all except when forced, while in mine the oil flows automatically until the groove is filled its entire length, when the oil is forced out by the rod simultaneously around the whole spindle.

My device, having the oil introduced at the shoulder, avoids leakage, waste, and a greasy appearance at the point of spindle.

What I claim as new and of my invention is—

The axle *a*, having journal *b*, strip *c*, dovetailed groove *e*, oil-cup *f*, with passage *g*, and slide-rod *h*, arranged as shown and described.

ESPY GOLLIPHER.

Witnesses:

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