L. H. HINAMAN.

Vehicle Axle Lubricator.

No. 201,673. Patented March 26, 1878.

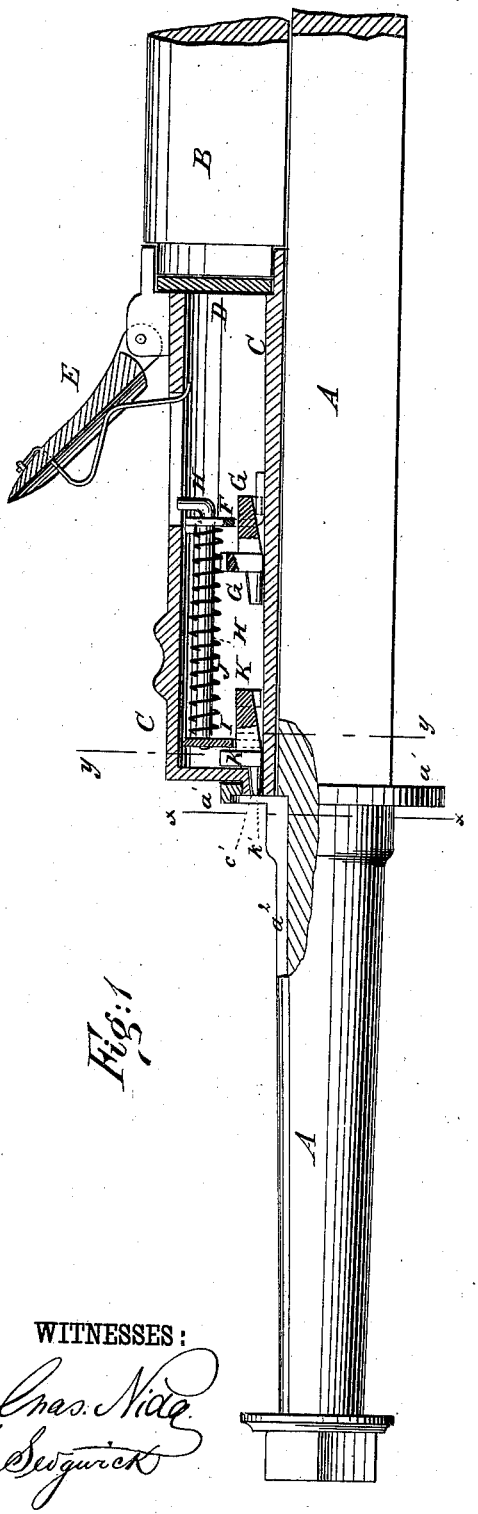

Fig: 1.

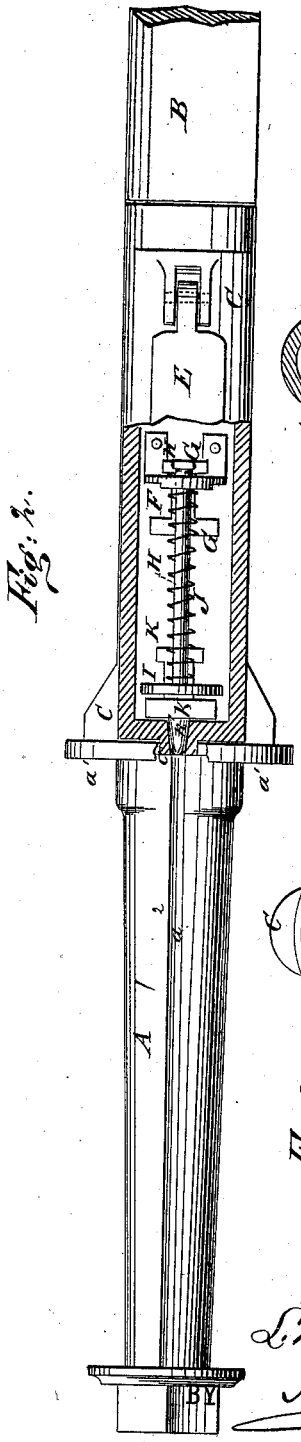

Fig: 2.

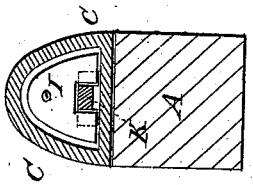

Fig: 4.

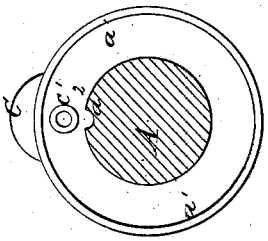

Fig: 3.

WITNESSES:

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LOUIS H. HINAMAN, OF LONG EDDY, NEW YORK.

IMPROVEMENT IN VEHICLE-AXLE LUBRICATORS.

Specification forming part of Letters Patent No. **201,673**, dated March 26, 1878; application filed March 1, 1878.

To all whom it may concern:

Be it known that I, LOUIS H. HINAMAN, of Long Eddy, in the county of Sullivan and State of New York, have invented a new and useful Improvement in Axle-Oilers, of which the following is a specification:

Figure 1 is a vertical longitudinal section of my improved device, shown as applied to an axle. Fig. 2 is a top view of the same, partly in horizontal section. Fig. 3 is a detail cross-section taken through the line *x x*, Fig. 1. Fig. 4 is a detail cross-section taken through the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved axle-oiler which shall be simple in construction, convenient in use, and effective in operation, holding the oil safely, and forcing it out to the axle-arm when desired.

The invention consists in the combination of the stationary notched plate, the sliding block, the rod, the movable notched plate, the coiled spring, and the sliding block provided with the point with each other and with the tube provided with the small discharge-tube, to adapt the device for use as an axle-oiler, as hereinafter fully described.

A represents the iron part, and B the wooden part, of an axle. C is a tube, placed upon the axle A close to the inner side of the collar *a'* of the said axle. The tube is flattened upon its lower side to fit upon the upper side of the axle A, to which it is secured, and has a small tube, *c'*, formed upon the lower part of the forward end, to pass through a hole in the collar *a'*, and discharge the oil into a groove in the upper side of the arm of the axle A.

The rear end of the tube C is made open, to allow the valves to be readily put in, which open end is closed by a packing, D, and the end of the wooden part B of the axle, so that the oil cannot escape through the said end. In the upper side of the rear part of the tube C is formed an opening, through which the oil is put in and the valves are operated, and which is closed oil-tight by a spring-cover, E. F is a plate, which is made of such a size and shape as to fit into the interior of the tube C, and is secured to said tube at the forward end of the feed-hole in the top of the tube C.

In the lower edge of the plate F is formed a notch, to receive the tapering neck of the block G. The block G has a small cross-head formed upon its rear end, and a larger cross-head formed upon its forward end. The lower side of the rear end of the block G is cut away, so that the oil may pass beneath it, and thus pass the plate F.

Through the upper part of the plate F is formed a hole, through which is passed a rod, H. The rear end of the rod H is bent upward, to serve as a handle for operating it, and to its forward end is attached a plate, I, exactly like the plate F, except that it is movable, and which is held forward by the coiled spring J, placed upon the rod H, with its ends resting against the plates F I.

The plate I is notched in its lower edge to receive the block K, which is made with a small cross-head upon its rear end, a larger cross-head upon its forward end, and with the lower part of its rear end cut away. The block K has a point, *k'*, formed upon its forward end, of such a size as to fit into and close the tube *c'*, and of such a length as to pass through the said tube *c'*, so as to push out any gum that might collect in the outer end of the said tube *c'*.

In using the oiler, the oil is poured into the rear part of the tube, and flows past the block G and plate F into the forward part of the said tube.

When the axle-arm is to be oiled, the rod H is drawn back, drawing with it the plate I and the block K, which movement causes the oil to press the block G back, closing the passage through the plate F, and causing the oil to flow past the block K and the plate I into the forward part of the tube C.

When the rod H is released, the tension of the spring J forces the plate I forward. As the plate I moves forward it strikes against the forward cross-head of the block K, which prevents the return of the oil, and the plate I and the block K then move forward together, forcing the oil through the tube *c'* to the axle-arm.

With this construction the oil will be forced out even when it may have become stiff from cold or other cause.

Having thus described my invention, I claim

as new and desire to secure by Letters Patent—

The combination of the stationary notched plate F, the sliding block G, the rod H, the movable notched plate I, the coiled spring J, and the sliding block K, provided with the point k', with each other and with the tube C, provided with the small discharge-tube c', to adapt the device for use as an axle-oiler, substantially as herein shown and described.

LOUIS H. HINAMAN.

Witnesses:
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