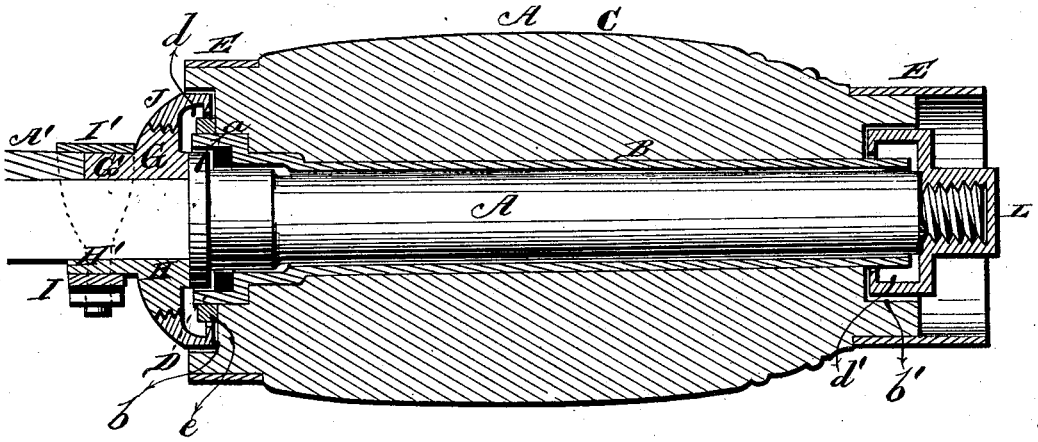
M. D. GOLDER.
Wagon-Hub.

No. 200,049. Patented Feb. 5, 1878.

Fig. 1



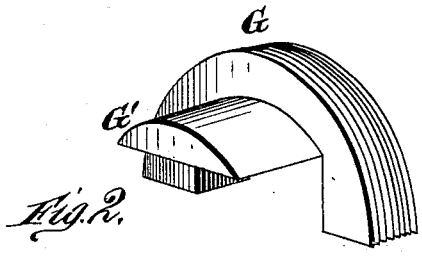


Fig. 2.

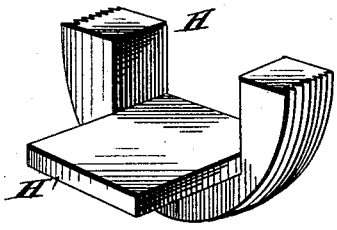
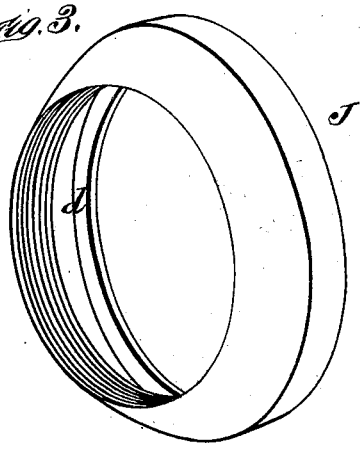


Fig. 3.



WITNESSES

Robt Everett

George E. Upham

INVENTOR.

Moses D. Golder.

Gilmore Smith & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

MOSES D. GOLDER, OF LEWISTON, MAINE.

IMPROVEMENT IN WAGON-HUBS.

Specification forming part of Letters Patent No. **200,049**, dated February 5, 1878; application filed November 17, 1877.

To all whom it may concern:

Be it known that I, MOSES D. GOLDER, of Lewiston, in the county of Androscoggin and State of Maine, have invented a new and valuable Improvement in Wagon-Hubs; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal vertical section of my wagon-hub, and Figs. 2 and 3 are perspective details thereof.

The nature of my invention consists in the construction and arrangement of a grease and grit box and nut, to be used on vehicles as a protection to keep grit from the spindle of the axle, and to keep the grease from coming out, all as hereinafter more fully set forth.

The annexed drawings, to which reference is made, fully illustrate my invention.

A represents the axle, with spindle B, and the usual collar *a* at the inner end of the spindle. C is the ordinary hub, with axle-box D, and E E are the metal bands surrounding the ends of the hub.

The grease and grit box is constructed in the following manner: G and H are two semicircular pieces, nearly of the same shape, and made to fit, close together, tight around the axle A back of the collar *a*. These pieces vary in size according to the size of the axle. The upper part, G, is provided with an arm, G′, made half-round or other suitable shape, to fit the shape of the axle-stock A′. The lower part, H, is also provided with an arm, H′, which, however, is made flat, so as to fasten under the clip-yoke I′, and both be fastened firmly together by the clip I. On the circle formed by the pieces G and H are cut suitable screw-threads.

J represents a circular piece or box, with threads cut in the thick or back part, so as to fit on the threads of the parts G H. When in its place, this box J sits forward into the inner end of the hub C, in which is cut an annular recess, *b*, around the projecting end of the axle-box D, of such depth as to admit about one-fourth of an inch of said box J. This box J is constructed to form an interior groove, *d*, around its periphery, so that all grit that comes in over the box must fall on the outer side of the projecting end of the axle-box or pass into the groove *d;* and all grease that works from the axle must run into said groove *d*, and can be taken out when the wheel is off.

Upon the projecting end of the axle-box D, within the recess *b*, is placed a washer, *e*, made of wrought or malleable iron, or soft metal, which strengthens the box, as it prevents the box from crumbling off from the collar.

In the outer end of the hub C is also made an annular recess, *b′*, around the outer end of the axle-box; and upon the end of the spindle is screwed a nut, L. This nut is constructed with an interior circumferential groove, *d′*. This nut needs no leather, if properly applied, as it gets its bearing against the wood, which is far better and more durable than leather; but if it should require a leather washer, this should be applied against the end of the box D.

It must, of course, be understood that the screw-threads must be made right and left, according to the right or left side of the vehicle.

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

1. The box J, formed with an interior circumferential groove, *d*, secured on the axle, and fitting in an annular recess in the inner end of the hub, as and for the purposes set forth.

2. The combination of the semicircular pieces G and H, provided with exterior screw-threads, and having rearwardly-projecting arms G′ H′, and the box J screwed thereon, and provided with interior circumferential groove *d*, substantially as and for the purposes set forth.

3. The axle-nut L, formed with an interior circumferential groove, *d′*, substantially as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

MOSES D. GOLDER.

Witnesses:

CHAS. E. WING,

E. Y. TURNER.