(No Model.)

H. G. FARR.

CAR AXLE LUBRICATOR.

No. 348,728. Patented Sept. 7, 1886.

Fig: 1.

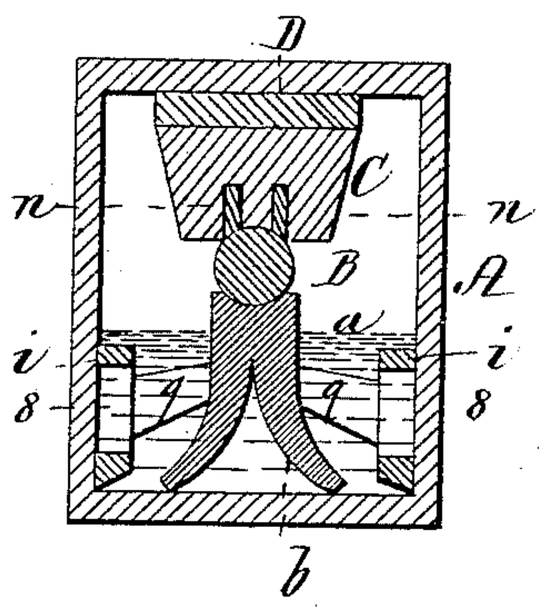


Fig: 2.

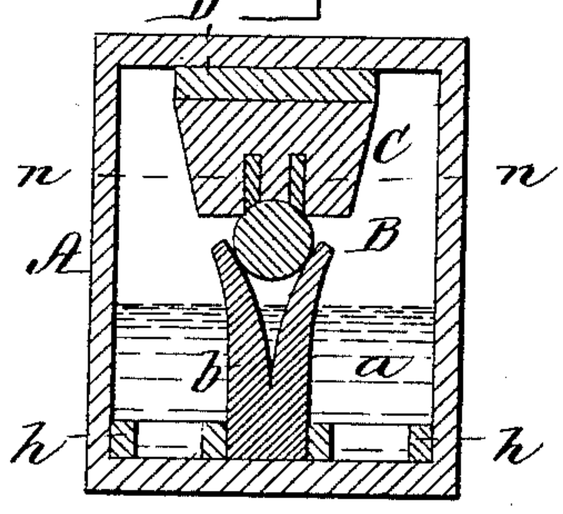


Fig: 3.

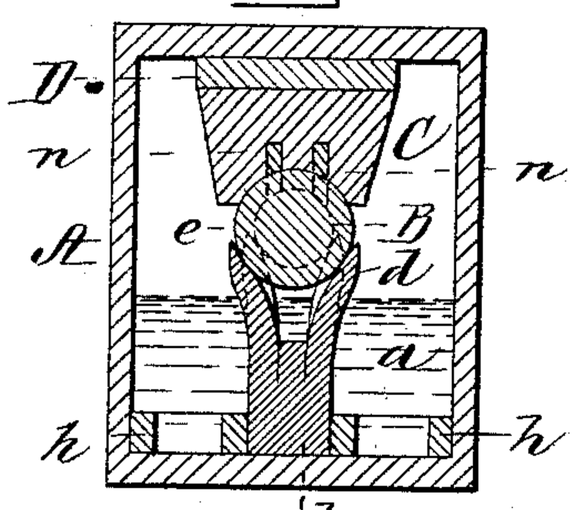


Fig: 4.

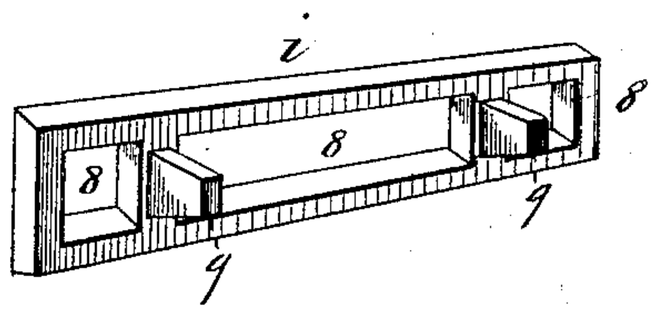


Fig: 5.

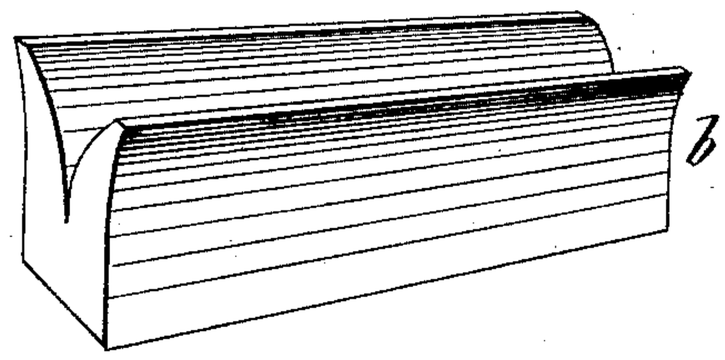
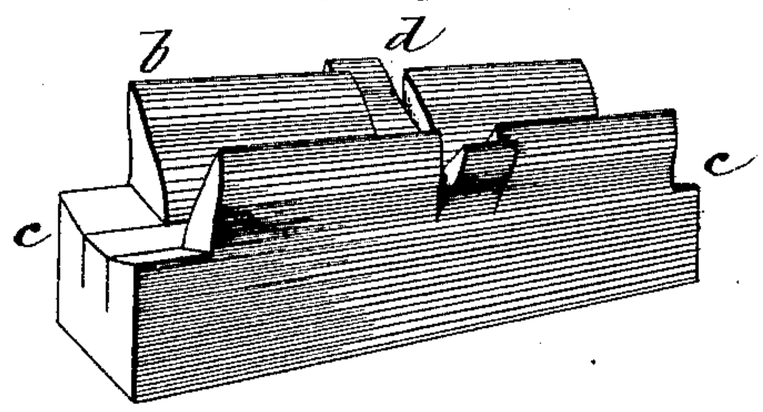


Fig: 6.



Witnesses.

H. W. Stearns

W. P. Clough.

Inventor.

Hiram G. Farr,

per Norman W. Stearns,

Atty.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

HIRAM G. FARR, OF BOSTON, ASSIGNOR OF ONE-HALF TO THEOPHILUS KING, OF QUINCY, MASSACHUSETTS.

CAR-AXLE LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 348,728, dated September 7, 1886.

Application filed February 5, 1886. Serial No. 190,889. (No model.)

To all whom it may concern:

Be it known that I, HIRAM G. FARR, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Automatic Lubricators for Car-Axles, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a transverse section through an axle-box with a journal interposed between its bearing above and my improved lubricator in an inverted position thereunder. Fig. 2 is a transverse section of the same, my lubricator being represented in its upright or normal position; Fig. 3, a transverse section representing the application to an axle-journal of a modification of my invention. Fig. 4 is a view of one of a pair of supports for holding my improved lubricator in its desired position within the axle-box. Figs. 5 and 6 are two perspective views of two forms of my improved lubricating device.

My present invention is briefly alluded to in an application for patent made simultaneously herewith, the prominent feature of this invention being a block of felt or similar absorbent material located within an axle-box under and in contact with the journal of the axle, and of a form adapted thereto, and to any annular shoulder or shoulders with which the latter may be provided, said block of felt, &c., being supplied with a suitable lubricant, which is taken up by the revolving journal and distributed upon the bearing of the latter located above it, thus reducing in a great measure the friction and consequent wear of the parts.

In the said drawings, A represents an axle-box, in which is located the journal B of an axle in contact with a bearing, C, above the same, a key-plate, D, being interposed between the under side of the axle-box and the bearing C to prevent any independent vertical play between them. The lower portion of the interior of the box forms a receptacle or reservoir, *a*, for the oil or other lubricant, and resting on the bottom of said reservoir, immediately under the longitudinal axis of the journal, is a block, *b*, of felt or other absorbent material of the proper capacity for taking up the lubricant and supplying it to the rotating journal in contact therewith. This block may be of the form shown in Figs. 3 and 6, being cut away at each end *c* and split at its center *d* to accommodate a journal having three annular flanges or shoulders, only the intermediate one, *e*, of which is shown, Fig. 3, the absorbent block being supported within the axle-box A under and in contact with the revolving journal by supports *h h i i*, those *h h* being employed when the block is in an upright position, (see Figs. 3 and 6,) said supports *h h* being made hollow for sake of lightness, and resting on the bottom of the axle-box A on each side and in contact with the upright block. When the block of felt, either of the form shown in Fig. 6 or of that shown in Figs. 1 and 5, is employed and located in an inverted position, the supports *i i* answer best for keeping it in this position, each support *i* having rectangular recesses 8 8 to render it light, and a pair of projections, 9 9, which abut against the slant sides of the block and maintain it perpendicularly in this its inverted position, the ends of these projections 9 9 being of such form as to continue to bear against and support the felt block as it becomes worn away and is reduced in height thereby. The lower edge of each support *i* is beveled downwardly and outwardly, so as to give it a tendency to cant forward toward the block, thus further insuring the desired support thereto. The felt block, whether formed as shown in Fig. 5 or Fig. 6, when employed either in an upright or an inverted position, is hollowed or cut out in the direction of its length, the cut-away portion snugly fitting the under side of the journal when said portion is placed uppermost and contiguous thereto, Figs. 2 and 3, and when inverted, with its recessed portion downward, its ends are spread apart and rest upon the bottom of the axle-box, Fig. 1, the resiliency of the felt block in either position causing it to be always kept snugly up in contact with the under side of the journal. The block *b*, when in the position shown in Fig. 1, is preferably rounded longitudinally to conform to the periphery of the journal; but when located as shown in Fig. 2 this rounding may be omitted.

The block of felt constituting the leading feature of this invention produces good results

when used in connection with any of the ordinary forms of bearings located above the journal; but I prefer to use my lubricating-block when associated with a bearing having longitudinal grooves filled with strips *n* of felt, (seen in section, Figs. 1, 2, and 3,) similar to that fully described and shown in my other application filed contemporaneously herewith.

I claim—

1. The block of felt *b*, in combination with and located under a car-axle journal, B, and a bearing having grooves for the reception of strips of felt located thereover, for the purpose stated.

2. The supports *h h*, in combination with and located on the opposite sides of the felt block *d* when in an upright position, as described.

Signed this 2d day of February, 1886.

HIRAM G. FARR.

In presence of—
N. W. STEARNS,
H. W. STEARNS.