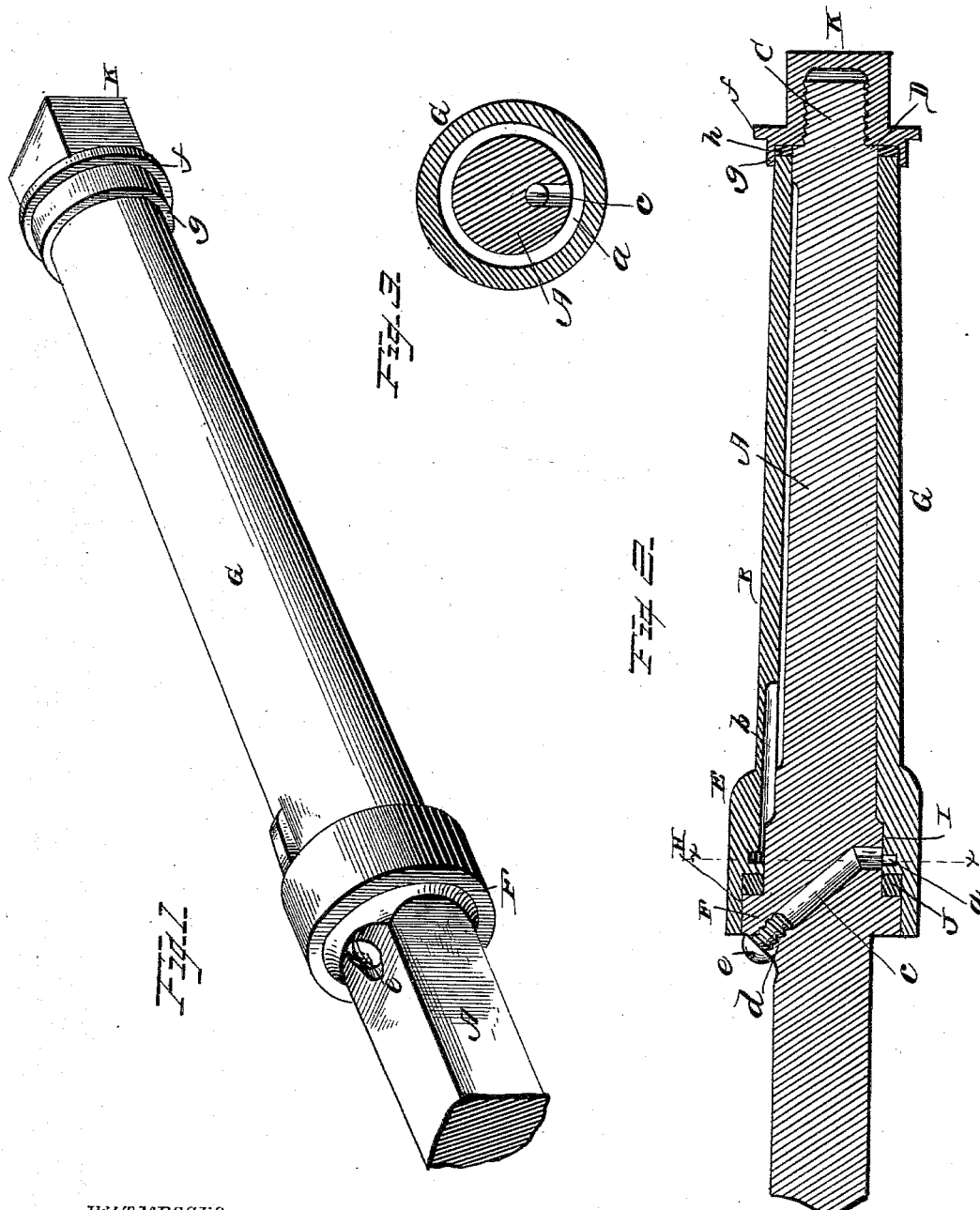


(No Model.)

A. D. HOWE.
AXLE LUBRICATOR.

No. 303,283.

Patented Aug. 12, 1884.



WITNESSES

J. L. Durand

Y. B. Harris

INVENTOR

A. W. Rowe
 by Let Snowles
 Attorneys

UNITED STATES PATENT OFFICE.

ALBERT D. HOWE, OF COSHOCTON, OHIO.

AXLE-LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 303,283, dated August 12, 1884.

Application filed January 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, ALBERT D. HOWE, a citizen of the United States, residing at Coshocton, in the county of Coshocton and State of Ohio, have invented a new and useful Axle-Lubricator, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to axle-boxes, and to that class shown and described in Letters Patent No. 280,826, granted to me July 10, 1883; and it has for its object to improve the details of construction of the same.

The invention consists in the improved construction and combination of parts hereinafter fully described, and pointed out in the claim.

In the drawings, Figure 1 is a perspective view of my improvement. Fig. 2 is a longitudinal section of the same, and Fig. 3 is a transverse section on the line *x x* of Fig. 2.

A represents the spindle, which is formed with a straight longitudinal groove, B, and with a screw-threaded end, C, having a shoulder, D. The spindle A is formed with a raised portion, E, at its inner end, and with a collar or flange, F, just in rear of said raised portion.

G represents the axle-box, which is formed with an interior depressed portion, H, and with a further depressed portion, I, adjacent thereto and corresponding to the raised portion E and collar F, respectively. A washer, J, is placed against the shoulder of the depressed portion I, and against which the collar or flange F bears. The inner side of the axle-box is provided with a circumferential groove, *g*, formed upon the inner side of the depressed portion H, and also with an interior horizontal groove communicating with the groove *a*.

The spindle A is formed with an oil chamber or reservoir, the opening *d* of which is formed with a screw-thread to receive a screw-threaded pin, *e*. This oil-chamber *c* is cut diagonally through the axle-spindle, so that while the opening to the same is outside or beyond the end of the axle-box, the outlet is on the under side of the spindle and within the axle-box, and is so situated as to feed the lubricant into the groove *a*, and from thence it flows to the groove *b*, and by the revolution of the axle-box the spindle is thoroughly lubricated.

K is a nut, which is formed with a flanged portion, *f*, and a collar, *g*. A washer, *h*, is placed within said collar, and bears against the flanged portion *g*. This nut is adapted to receive the screw-threaded end of the spindle, the collar *h* embracing or inclosing the end of the box, thus preventing any dust or sand from entering the axle-box.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The herein-described axle A, provided with a diagonal oil-passage, *c*, and having a longitudinal groove, *b*, in combination with an axle-box, G, provided with an annular groove, *a*, and a longitudinal groove, said groove *a* registering with the groove *b*, whereby the axle is lubricated, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ALBERT D. HOWE.

Witnesses:

GEORGE A. HAY,
WM. WARD.