

(No Model.)

J. W. SKILTON.
AXLE BOX.

No. 578,949.

Patented Mar. 16, 1897.

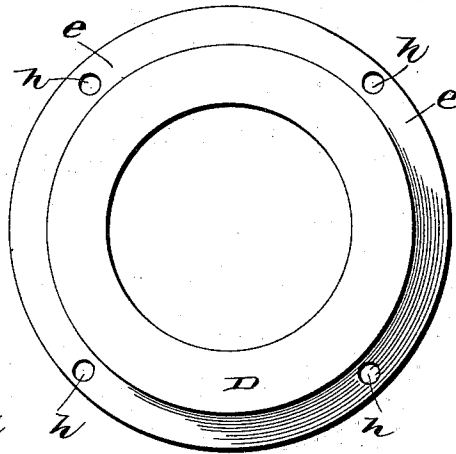
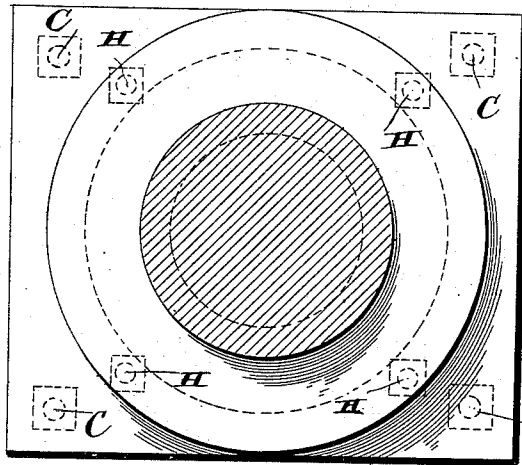
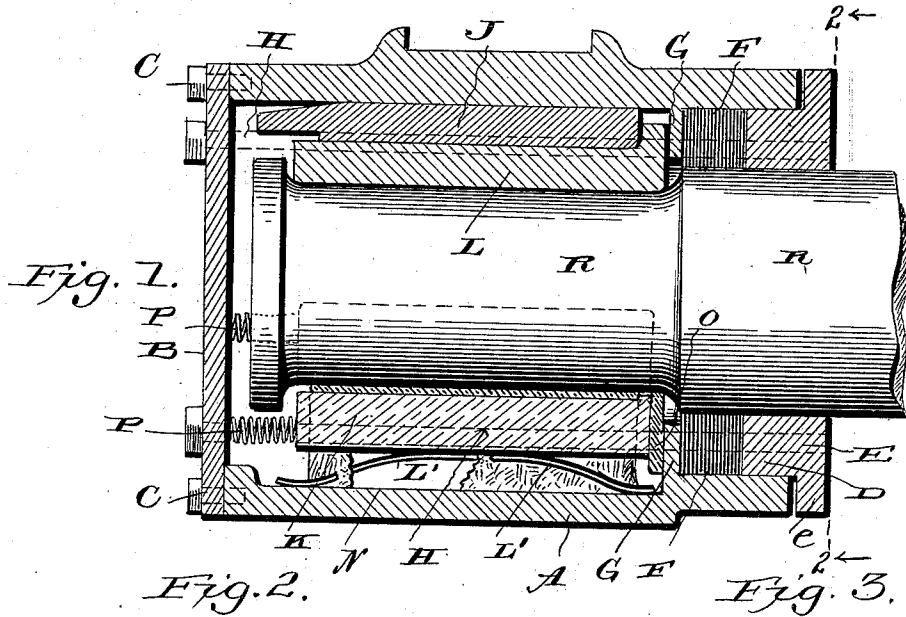
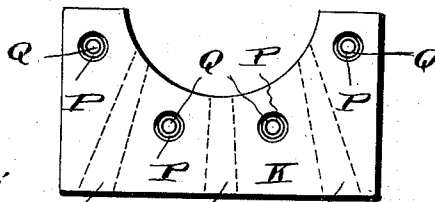


Fig. 4.



Witnesses:
L. C. Hills
E. A. Bond

Inventor:
J. W. Skilton,
By E. B. Stocking
Att'y.

UNITED STATES PATENT OFFICE.

JOHN W. SKILTON, OF MIAMI, FLORIDA, ASSIGNOR TO EMILY D. SKILTON, OF SAME PLACE, AND FRANK S. LEE, OF LINTON, FLORIDA.

AXLE-BOX.

SPECIFICATION forming part of Letters Patent No. 578,949, dated March 16, 1897.

Application filed August 29, 1896. Serial No. 604,275. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. SKILTON, a citizen of the United States, residing at Miami, in the county of Dade, State of Florida, have
5 invented certain new and useful Improvements in Axle-Boxes, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and
10 useful improvements in axle-boxes; and it has for its object, among others, to improve upon this class of devices in such a manner that the axle will be thoroughly lubricated, so as to run for a great length of time without being again oiled. I provide against the
15 waste of the lubricant and employ wicks, preferably of sponge, that serve by capillary attraction to supply the oil to the bearing and also to keep the journal thoroughly clean.
20 I employ a box at the bottom of the casing, supported upon springs and having openings for the passage of the wicks. The inner end of the casing is bored out larger than the axle and deep enough to receive packing and a
25 follower, which is drawn to place and held adjustably by bolts or rods. The wooden box within the casing is provided with a felt strip at the back end and also along its upper face, which corresponds with and fits the
30 under side of the axle, the box being held in position by springs bearing against the outer end thereof and the felt strip serving also as a means of keeping the axle supplied with oil.

Other objects and advantages of the invention will hereinafter appear and the novel
35 features thereof will be specifically defined by the appended claims.

The invention in this instance resides in the peculiar combinations and the construction, arrangement, and adaptation of parts,
40 all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part
45 of this specification, and in which—

Figure 1 is a central vertical longitudinal section showing the improved axle-box. Fig.
50 2 is a vertical cross-section on the line 2 2 of

Fig. 1, looking in the direction of the arrows. Fig. 3 is a view looking at the inner end of the follower, which is removed. Fig. 4 is an end elevation of the wooden box removed.

Like letters of reference indicate like parts
55 throughout the several views.

Referring now to the details of the drawings by letter, A designates the outer casing, which is similar to the standard box now in
60 general use except as hereinafter specified. Instead of the usual hinged door at the outer end this end is closed by the plate or cover B, which is secured to the end of the casing by screws C or analogous means. The inner
65 end of this casing is adapted to receive the flange D of the follower-plate E, as shown in Fig. 1.

F is packing of any suitable character, disposed between the inner end of the flange of the follower-plate and the inwardly-extending
70 annular flange G of the casing, the follower-plate having a flange e, which bears against the inner end of the casing, as indicated. The follower-plate is drawn in and
75 there held by means of the rods H, which pass through holes h in the flange e of the said plate and receive nuts upon their other
80 ends, which pass through the end plate B, as shown. By this means the packing can be compressed as may be required.

The bore of the follower-plate fits snugly
85 around the axle, as shown, and the packing also fits snugly about the axle and prevents waste of the oil or lubricant at the inner end of the casing. In fact, the construction is
90 such that there can be no waste at any point.

Upon the upper side of the axle within the casing is the bearing-block L and the wedge-
95 block J, of usual construction and mode of operation.

K is a wooden box supported upon elliptic
springs L', only one of which is shown, which
rest upon the bottom of the casing, as shown,
their ends being free for movement and their
arched portions bearing against the under
95 side of said box. This box is concaved upon its upper face to fit the curvature of the axle, and it has a plurality of channels M for the
passage of the wicks N, which are by preference of sponge, and which bear against the
100

under side of the axle and serve to conduct the oil thereto and also to keep the axle at all times thoroughly clean.

O is a thick piece of felt arranged at the inner end of this box and its upper edge shaped to fit the axle against which it bears. This felt is kept in position by the springs P, (only one being shown,) which are arranged at the front end of the box and between the same and the front end or plate B, and are preferably entered in holes Q in the front end of the box, so as to prevent their displacement. The number of springs employed for this purpose may be varied.

R is the axle.

Modifications in the details of construction may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What is claimed as new is—

1. The combination of the casing, the box therein with passages, the springs pressing upon the under side of the box, means interposed between the outer end of the box and the inner face of the end of the casing and the wicks in said passages and bearing against the under side of the axle, as set forth.

2. The combination of the casing, the box therein and having vertical passages, the springs beneath the box, and means acting on the outer end of the box to press its inner end

against said packing, the wicks located in said passages, and the packing at the inner end of the box, as set forth.

3. The combination of the casing, the box, the springs beneath the same, the wicks, the felt strip at the inner end of the box, and the springs acting against the outer end of the box, substantially as and for the purpose specified.

4. The combination, with the casing having a flange, and the follower-plate having an inwardly-extending flange, of the packing between said flanges, the box within the casing, the springs acting on the outer end of said box and the wicks of sponge passed through said box, substantially as specified.

5. The combination, with the box having vertical passages, and the wicks passed there-through, of the springs bearing upon the under side of said box, the felt strip at the inner end of the box, and the springs between the outer end of the box and the inner face of the end plate, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN W. SKILTON.

Witnesses:

J. TOME REYNOLDS,
C. ROONEY.