

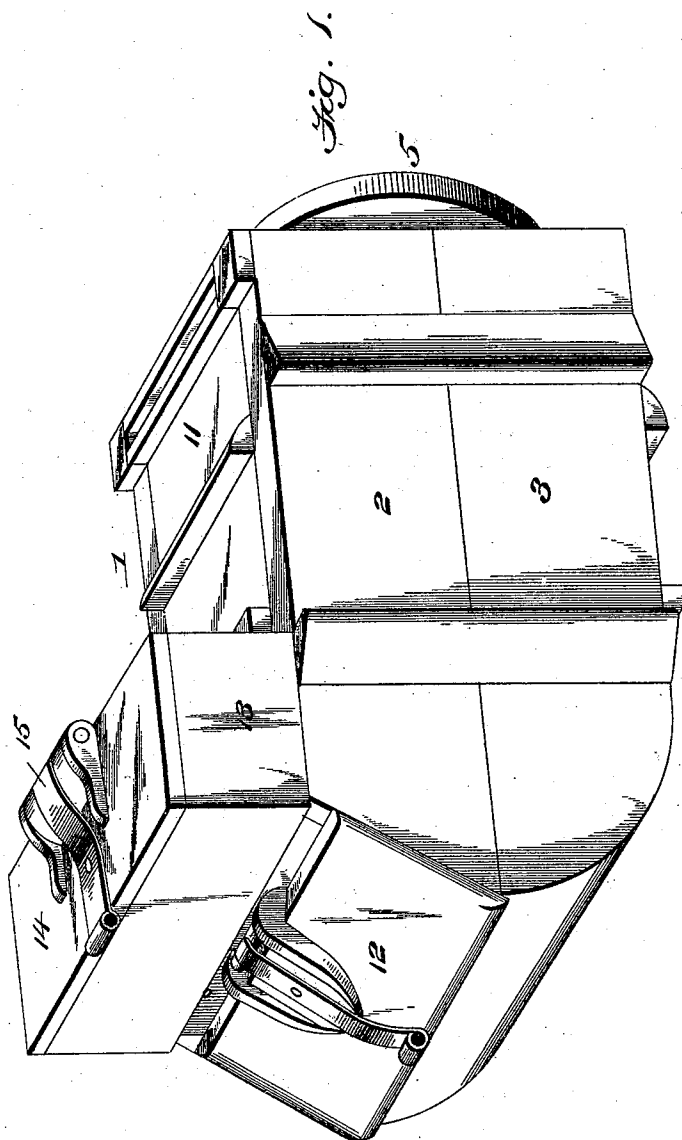
(No Model.)

2 Sheets—Sheet 1.

H. V. CONWAY.
AXLE LUBRICATOR.

No. 503,074.

Patented Aug. 8, 1893.



Harrison V. Conway.

Witnesses:

Wm. C. Smith,
May E. Moore,

Inventor:

Wm. V. Moore,
Att'y.

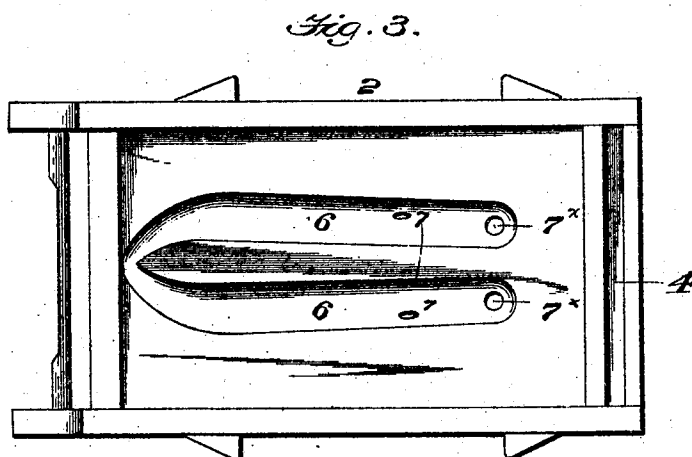
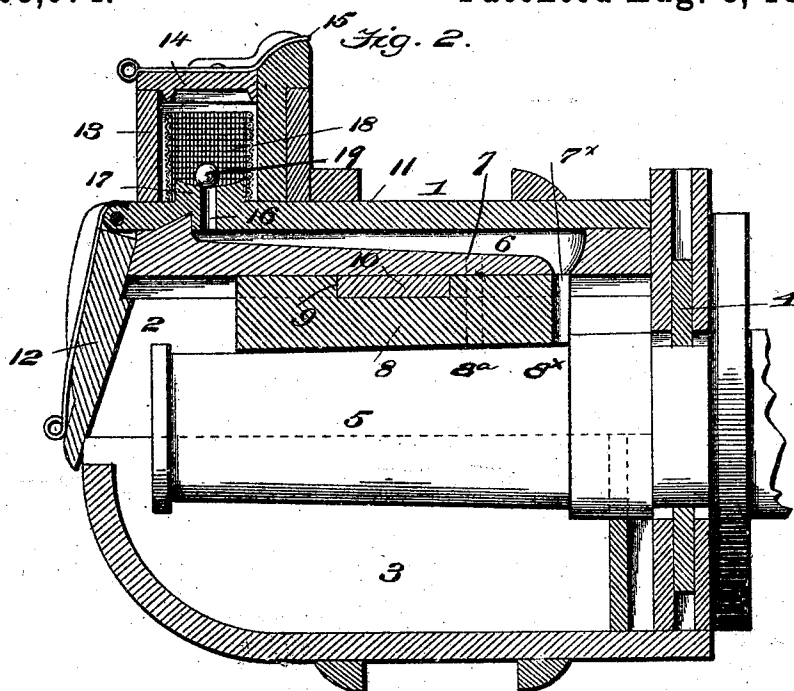
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H. V. CONWAY.
AXLE LUBRICATOR.

No. 503,074.

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Harrison V. Conway.

Inventor:

Witnesses:
Wm. C. Shields,
May E. Moore.

By *Wm. C. Shields*
Att'y.

UNITED STATES PATENT OFFICE.

HARRISON V. CONWAY, OF BOONE, IOWA, ASSIGNOR OF ONE-HALF TO
ISAAC N. THROCKMORTON, OF SAME PLACE.

AXLE-LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 503,074, dated August 8, 1893.

Application filed June 13, 1892. Serial No. 436,507. (No model.)

To all whom it may concern:

Be it known that I, HARRISON V. CONWAY, a citizen of the United States, residing at Boone, in the county of Boone and State of Iowa, have
5 invented certain new and useful Improvements in Car-Axle Boxes and Lubricators; and I do declare the following to be a full, clear, and exact description of the invention, such as
10 it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

15 My invention relates to improvements in car axle boxes and lubricators, and one of the leading objects of my invention is the provision of a lubricator which will distribute or supply the oil to the axle when the car is
20 in motion but will cut off the supply when the car is at rest, thus preventing any waste of oil.

Another object of my invention is the provision of a car axle box and lubricator which
25 will supply only sufficient oil to properly lubricate the axle, which can be easily filled when necessary and which will permit ready access to all parts for purpose of inspection, cleaning or repair.

30 Another object of my invention is the provision of a car axle box and lubricator which will possess merit in points of simplicity, durability and cheapness and which can be easily applied thus rendering the improve-
35 ment practical and useful.

To attain the desired objects the invention consists of a car axle box and lubricator embodying novel features of construction and
40 arrangement of parts which will be readily understood from the drawings and description and particularly noted in the claim.

Figure 1 represents a perspective view of my improved car axle box and lubricator. Fig. 2 represents a vertical longitudinal section thereof, and Fig. 3 represents a detail
45 view.

Referring by numerals to the drawings the numeral 1 designates the axle box proper, preferably comprising the two sections 2 and
50 3 secured together, and at the inner portion of

the box is located the sand band 4, all these parts being of ordinary or any preferred construction. In the box is mounted the axle 5 having the usual shoulders, and the closed portion of the section 2 of the box is provided with the substantially horse shoe shaped oil
55 channel 6 on the upper side, leading to the oil ducts or outlets 7 and 7^x, thus feeding the oil to the inner portion of the axle near the shoulder thereof. Mounted on the axle is the
60 brass 8 having the recess 9 on the upper side to receive the lug 10 for retaining the brass in proper position and oil ducts 8^a and 8^x are also provided on the brass for directing the
65 oil to the axle, as is evident.

Fitting on the top of the box is the plate 11 having the cover 12 for closing the end of the box and on the plate is supported the oil reservoir 13, having the cover 14 provided with
70 a spring 15 bearing on the hinge of the cover to normally retain the cover closed to prevent the entrance of foreign matter to the oil. The oil reservoir is provided with an oil feed or supply opening 16, which leads to the closed
75 end of the horse shoe shaped oil channel, and is preferably countersunk in a raised lug 17, around which is a screen 18, the purpose of which is to filter or strain the oil before it is
80 fed to prevent dirt or other matter from entering the oil or the feed opening to the detriment of the operation of the lubricator.

The operation of my improvement will be readily understood from the drawings and description and it will be seen that the oil passes from the reservoir through the feed
85 opening, which is normally closed by the ball 19, except when the car is in motion which rolls the ball from the opening allowing the oil to pass through said opening to the closed end of the channel from which it passes to
90 the outlets therein, thence through the ducts of the brass and finally upon the axle thus insuring a steady and perfect oiling but preventing any waste of oil, which is an essential feature.

Another important feature of my invention
95 is the provision of the oil ducts 7^x near the shoulder of the axle which has its skein tapering from said shoulder to its outer end, whereby the same is lubricated throughout
100

its entire length. The channel 6 is moreover, gradually deepened from its outer to its inner end where said oil ducts are situated whereby the oil is caused to flow properly
5 along the same.

I claim as my invention—

In a car axle box and lubricator, the combination with the axle, of the brass mounted thereon and having oil ducts leading to the
10 inner portion of the axle, the box or casing inclosing the axle having the oil channel or feeding groove of substantially horse shoe shape with the closed or toe end arranged at the forward end of the box and the channels
15 leading from the closed end to the inner end

of the box for directing the oil to the inner portion of the axle and having the ducts communicating with the ducts of the brass, the oil reservoir mounted on the forward end of the box having the feed opening directly over
20 the closed or toe end of the feeding groove of the axle box and the ball for controlling the flow of oil through said opening, as shown and described.

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

HARRISON V. CONWAY.

Witnesses:

J. M. GOODSON,
H. C. FRENCH.