Jan. 23, 1951 D. L. SHAIN 2,538,804

CAR JOURNAL OILER

Filed March 15, 1948

Fig. 1.

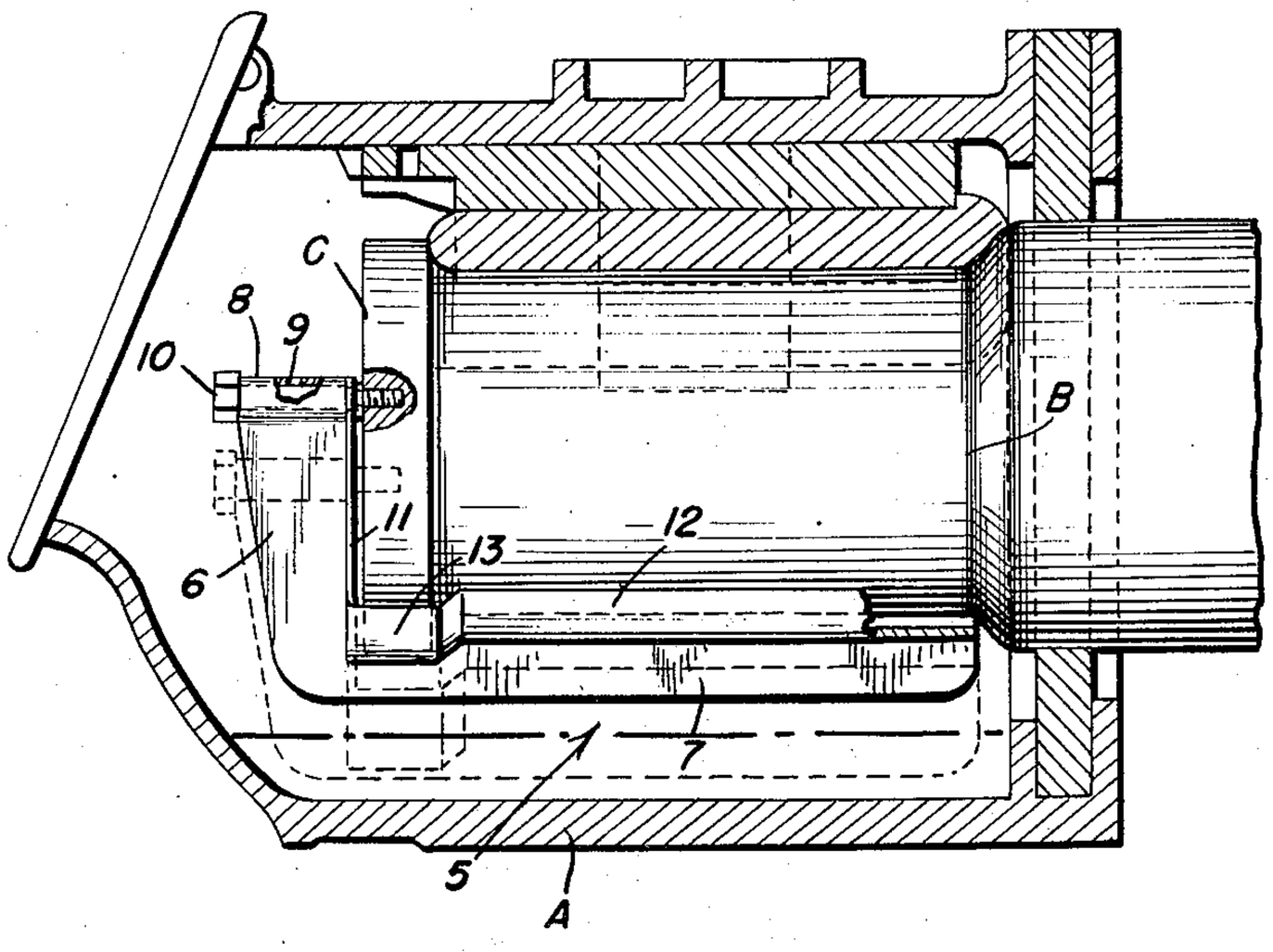


Fig. 2.

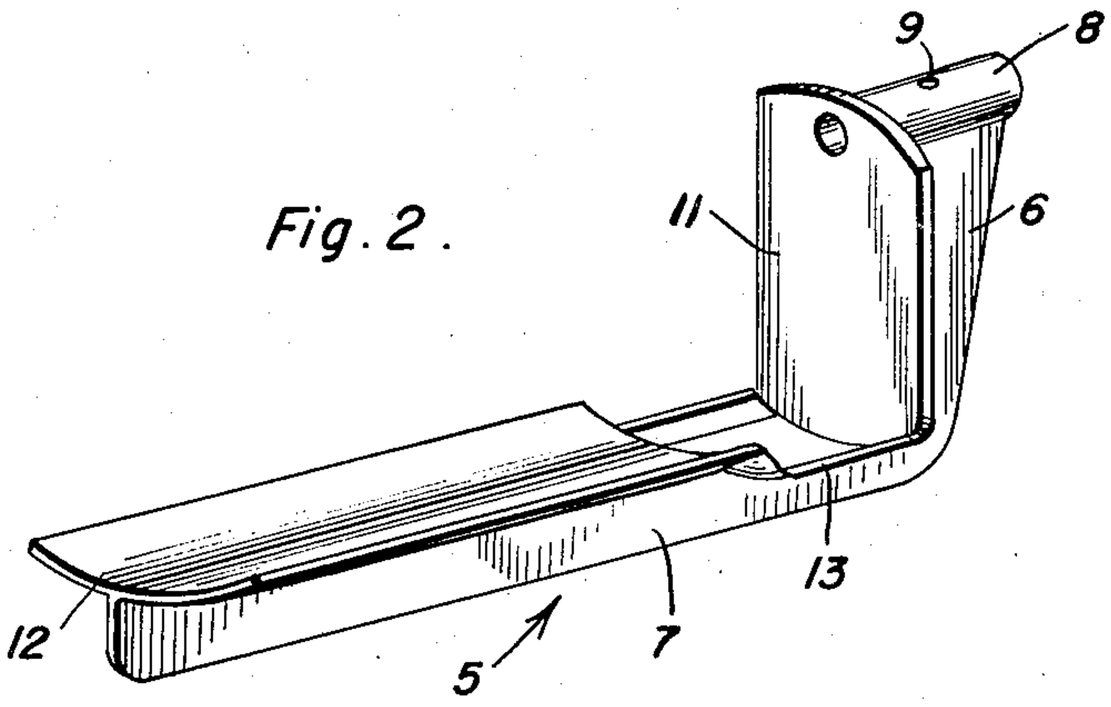
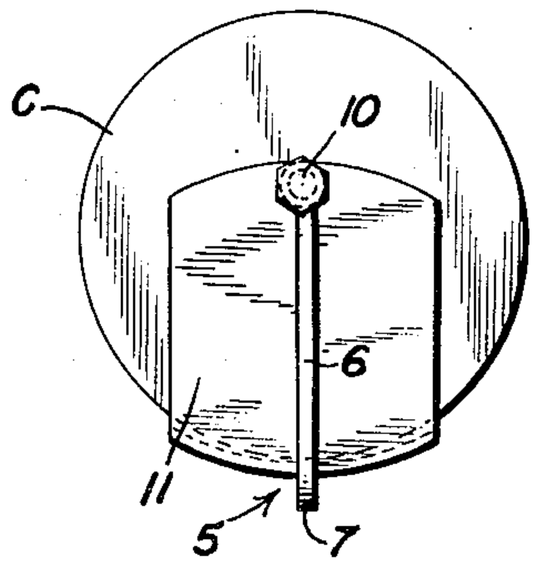


Fig. 3.



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2,538,804

CAR JOURNAL OILER

David L. Shain, Harrisburg, Ill.

Application March 15, 1948, Serial No. 14,981

3 Claims. (Cl. 308—85)

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The present invention relates to oil applicators such as are installed in journal boxes on railway cars, which are attached directly to an end of the journal and which, in dipper-like fashion, intermittently apply oil from the box to the surfaces of the journal, whereby to insure effective lubrication of the latter and to attain the desired ends with requisite certainty and efficiency.

As the introductory statement of the invention implies, I am conversant with the prior art to an extent to realize that a number of patents have been granted on so-called mechanical spoons and ladle-like dippers, that it is, therefore, generically old in this field of endeavor, to provide vertically reciprocable applicators which have eccentric connection with the end of the journal and which intermittently rise and fall in the oil sump of the journal box in well known ways, whereby to bring about the desired oiling results. In carrying out the principles of the present invention and with a view toward improving upon prior art oilers, I provide what is believed to be the simplest of oilers so far devised. More specifically, in reducing to practice the herein disclosed adaptation I provide a simple and effective unit which is attached solely to the rotatable journal and which is so designed and weighted that it relies on proper counter-balancing and the law of gravity, whereby it ascends and descends in a vertical line without the aid of special guides and restraining devices.

Stated more explicitly, the invention has to do with an L-shaped fixture which constitutes a hanger and which is provided with a horizontal, transversely curved plate portion which functions as a ladle-like dipper and applicator.

Other objects and advantages of the invention will become more readily apparent from the following description and the accompanying illustrative drawings.

In the drawings:

Figure 1 is a view in section and elevation illustrating a conventional type journal box, a journal in said box, and the improved automatically operable oil applicator in operating position;

Figure 2 is a perspective view of the oil applicator by itself;

Figure 3 is an end elevation of Figure 1, with the journal box omitted, observing the structure in a direction from left to right.

Referring now to the drawings by distinguishing reference characters the journal box, which is conventional, is denoted by the reference character A and the journal portion of the axle

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is denoted by the reference character B, said journal having the usual enlarged head or flange C at one end. The oiler or applicator attachment is denoted by the numeral 5 and comprises a one-piece unit which is characterized by a substantially L-shaped hanger, said hanger including a vertical short limb 6 and a horizontal relatively long limb 7. The limb 6 terminates at its upper end in a bearing 8 having an oil hole 9, said bearing being rockably mounted on the smooth shank portion of a hanger bolt 10. This bolt is threaded into a socket provided therefor in the journal head C and the point of connection of the bolt with the head is eccentric. The numeral 11 designates a vertical substantially rectangular plate portion which is attached to the shorter limb 6, which is vertically disposed and which functions as a counter-weight for normally centralizing and suspending the entire attachment in an approximately vertically hanging position. The device 5 also includes a horizontal plate portion which is centered on the horizontal arm 7 and is longitudinally bowed and is adapted to thus function as a sort of ladle-like dipper. This dipper actually is made up of main and auxiliary portions 12 and 13, the portion 12 underlying the main part of the journal and the portion 13 being on a slightly lower plane and properly curved to conform to and coact with the marginal edge portion of the head C.

It will be noted that the entire device is suspended from the single pivoting and attaching bolt which is eccentrically mounted on the headed end of the journal. The distribution of weighty portions which go to make up the device causes the latter to hang vertically of its own accord due to forces of counter-balance and gravity. Thus, as each revolution of the journal is made, the ladle and applicator portions dip down into the oil and intermittently bring the oil up close to and spill it against the surface of the journal. I am aware that similar splashing spoons and ladle-like applicators are covered in previous patents but none are of the gravity suspended self-hanging types. In fact, the patented devices I refer to have some mechanical connection whereby they are attached to both the journal and the journal box in order to bring about the desired vertical reciprocatory motion of the liftable and lowerable applicator. By contrast the present invention is simple, efficient, economical, reliable and otherwise aptly fitted to attain the wanted ends.

A careful consideration of the foregoing description in conjunction with the invention as

illustrated in the drawings will enable the reader to obtain a clear understanding and impression of the alleged features of merit and novelty sufficient to clarify the construction of the invention as hereinafter claimed.

Minor changes in shape, size, materials and rearrangement of parts may be resorted to in actual practice so long as no departure is made from the invention as claimed.

Having described the invention, what is claimed as new is:

1. In a car journal oiler, in combination, a journal box, a car axle having a journal portion journalled in said box, an eccentrically attached hanger pin carried by one end of said journal, an arcuately curved longitudinally elongated plate, said plate being adapted to serve as an oil dipper and applicator, and a vertical arm at the outer transverse end portion of said plate, said arm being hingedly suspended from said hanger pin and provided with a vertically disposed plate portion at right angles to said first named plate and functioning as a counterweight.

2. An attachment for a car journal of the class shown and described comprising an L-shaped member embodying vertical and horizontal arms, said vertical arm being provided at its upper end with a bearing for attachment to a detachable hinging pin to be carried by said journal, a horizontally disposed elongated plate attached to and carried by the long arm, said plate being transversely bowed and being adapted to function as a ladle-like dipper and applicator, a second plate at right angles to the first plate and attached to the short arm of said L-shaped member and adapted to function as a counterweight.

3. An attachment for a headed journal of the class described comprising an L-shaped member having horizontal and vertical arms, said vertical arm being provided at one end with a bearing for attachment to a journal head, a relatively rectangular plate attached to one edge portion of said vertical arm and constituting a counterweight, and a horizontally elongated plate attached to said horizontal arm, said latter plate being transversely bowed, and functioning as a ladle-like dipper and applicator, and including longitudinally spaced offset portions cooperable respectively with the journal proper and head provided on one end of said journal.

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