No. 649,671. Patented May 15, 1900.

J. F. McENTEE.

AUTOMATIC OILER.

(Application filed Sept. 6, 1898.)

(No Model.)

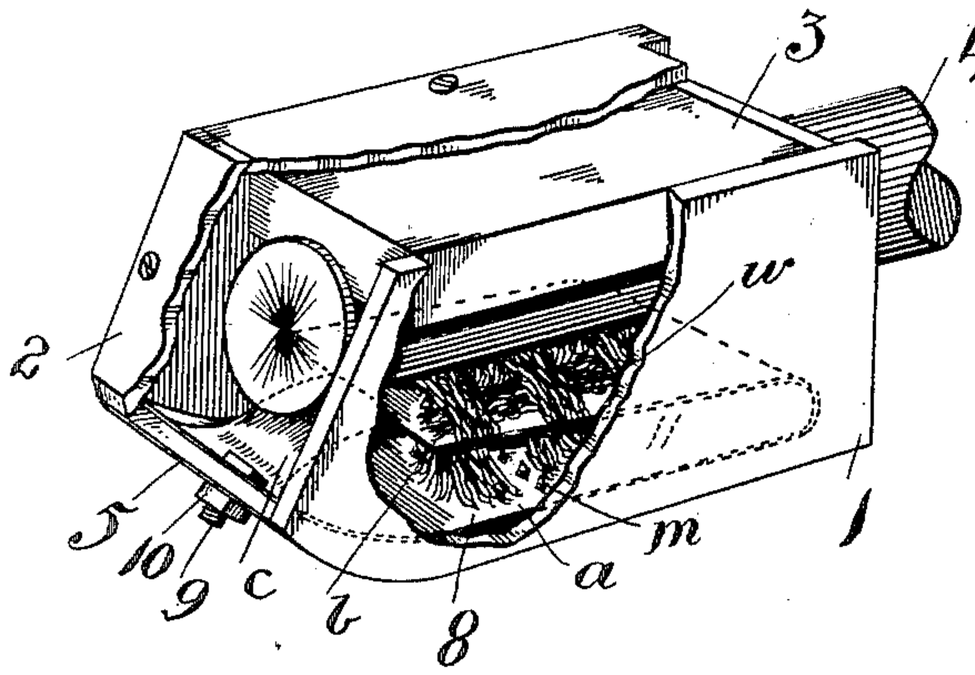

Fig. 1

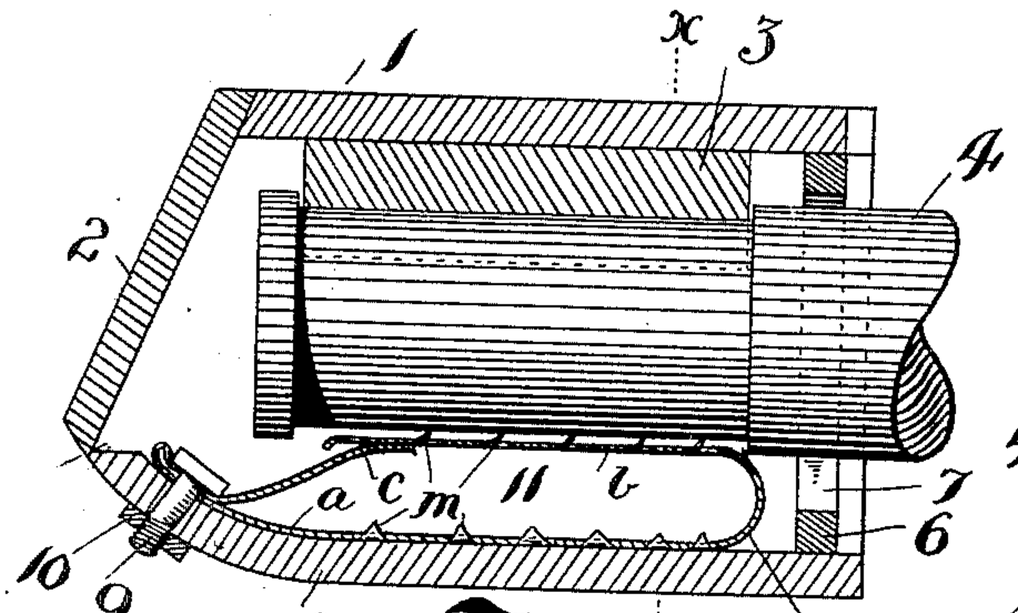

Fig. 2

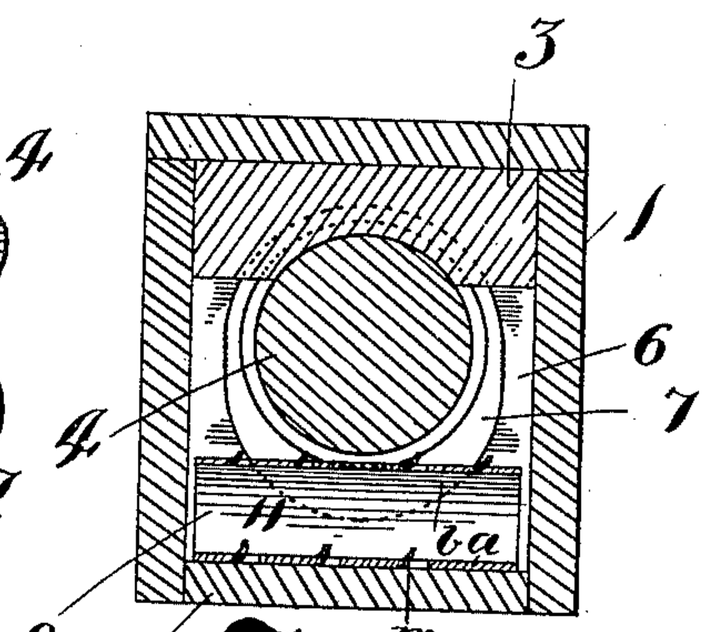

Fig. 3

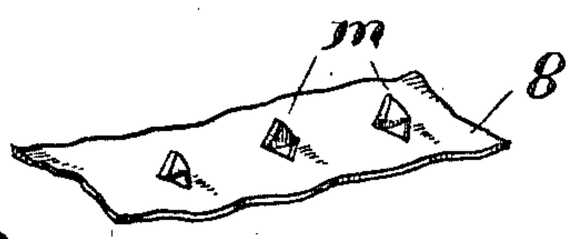

Fig. 4

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN FRANCIS McENTEE, OF KAHULUI, HAWAII.

AUTOMATIC OILER.

SPECIFICATION forming part of Letters Patent No. 649,671, dated May 15, 1900.

Application filed September 6, 1898. Serial No. 690,353. (No model.)

To all whom it may concern:

Be it known that I, JOHN FRANCIS MCENTEE, a citizen of the United States, residing at Kahului, in the island of Maui, Hawaii, have invented certain new and useful Improvements in Automatic Oilers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates generally to automatic oilers, and more particularly to devices for automatically oiling the journals in car-axle boxes; and it has for one object to produce a device of this class which will possess the requisite of compactness and durability and which will be especially simple and inexpensive in construction and efficient in operation.

Besides the usual contents of the box or chamber—namely, the journal of the car-axle, the lubricant, and brasses—there is always provided a vehicle for the lubricant in the form of waste, tow, or cotton. Now to perfect this delivery or conveying of the lubricant to the journal and insure its constant and even motion, and at the same time in an automatic manner, is the prime object of my invention.

Other objects and advantages of my invention will hereinafter appear, and the novel features thereof will be particularly set forth in the appended claim.

The objects of my invention I am enabled to accomplish by the means illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a car-axle box, the cover, head, and side wall being purposely broken away to show the relative arrangement of the contained parts. Fig. 2 is a longitudinal vertical section of the box and contained parts. Fig. 3 is a section through the line *x x*, Fig. 2; and Fig. 4 is a view of a portion of the spring employed.

Referring now to the above views by numerals and ietters, 1 represents an ordinarily-formed car-axle box adapted to rest in the usual hanger or pedestal of a car and within which the journal portion of the axle 4 is held in place by the "brass" or "saddle" 3, the latter being formed as in ordinary boxes. It is manifest that the vertically-elongated perforation 7 in the rear end 6 of the box is for the purpose of permitting frictional wearing.

The usual method of accomplishing the oiling of the journal is through the medium of a vehicle situated beneath the journal and saturated through the front inclined cover 2. The employment of this method necessitates constant inspection to guard against a "hot box" and its dangerous and expensive results. Now to guard against this objection and provide simple, durable, and efficient means for automatically lifting the oil to the bottom of the journal I have constructed the spring 8, which is situated beneath the journal and is formed of a thin sheet of metal one end of which is bent to form the upper spring-leg *b*, while the opposite extremity *c* is carried upward and backward to rest beneath the outer end of this leg. The lower portion *a* rests against the bottom 5 of the box. It is manifest from this construction that between the leg *b* and bottom *a* is formed a reservoir or cavity 11.

Within the cavity 11 I have arranged the tow or other oil-vehicle *w* and caused its strands to protrude through perforations in the leg *b*. These perforations are formed with a turned-up or jagged edge *m*, which besides holding the tow in place affords the additional function of preventing the journal from wearing away the wick.

In order to hold the spring 8 in place, I have caused the headed bolt 9 to pass through it and the bottom 5 of the box, where it is held by the nut 10.

Having thus fully described the general construction of my invention, I will now explain its operation.

Accepting the assumption as an established fact that no matter how well built a railroad may be there are varying irregularities in the elevation of abutting rails as well as gaps between the ends thereof. This latter condition is absolutely necessary to compensate for the expansion and contraction of the rails. Now as the wheels of the train meet these irregularities or gaps there occurs the familiar jarring or concussion, which consequently I have utilized in affording the automatic action of my oiler. It is manifest that simul-

taneous with this jarring effect the upper leg *b* of the spring 8 will spring downward and immediately return to its normal position and in so doing cause the oil to move upward through the saturated vehicle to the journal, thereby accomplishing the desired result. It is further manifest that the relative arrangement of the spring and box effectively prevents the packing from gradually working out of place and carrying the oil outside the box.

I am aware that various changes in the form, number, and proportion of parts of the devices shown and described can be made without departing from the spirit of my invention or sacrificing any of its advantages, and I therefore reserve the right to make such changes and alterations as fairly fall within the scope of my invention.

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

An automatic oiler for journal-boxes comprising a U-shaped resilient member, one leg of said member being adapted to rest against the under surface of said journal, while the other leg rests on the bottom of said box, a series of spurs being turned upward and forming openings in said legs, an oil-vehicle between said legs and protruding through the openings in said upper leg and a projection formed integral on said lower leg and turned backward toward said upper leg, substantially as and for the purpose set forth.

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

JOHN FRANCIS McENTEE.

Witnesses:

J. McANDREWS,

CHAS. A. KIBLING.