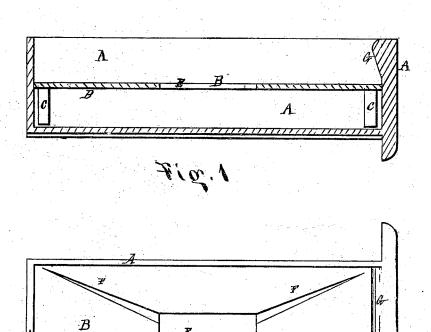
In Seinsen y McInnald,

Journal.

10. 113,599. Faiented Apr. 11. 1891.



Mitnesses

67. M. Smith Inventors

O. J. Hughes Same honroe hr. Danald

Fig.2

United States Patent

ERNEST VON JEINSEN AND JAMES MONROE McDONALD, OF SAN FRANCISCO, CALIFORNIA.

Letters Patent No. 113,599, dated April 11, 1871.

IMPROVEMENT IN OIL-RESERVOIRS FOR AXLE-BOXES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, ERNEST VON JEINSEN and JAMES MONROE McDonald, of San Francisco, in the county of San Francisco and State of California, have invented an Improved Oil-Reservoir for Axle-Boxes; and we do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

This invention relates to that class of oil-reservoirs that is placed under the journal or part to be lubricated, and from which the oil is conducted to the journal, by capillary attraction, through a wick or strips or sheets of felt; and consists of the combination, with such an open reservoir, of a plate or diaphragm fitting closely at the edges, and provided with a central opening, through which the wick is passed, whereby the oil is prevented from slopping or escaping over the upper edges of the reservoir, the object being to prevent the loss of oil occasioned by the slopping or spilling over, which usually takes place in axle-boxes when my invention is not employed.

In the drawing-

Figure 1 is a longitudinal section of an oil-reservoir having this improvement.

Figure 2 is a plan of the same.

Each part is distinguished by the same letter when-

ever it appears in the drawing.

To enable others skilled in the art or science to which it most nearly appertains to make and use my invention, I will proceed to describe fully its construction and operation.

A is a rectangular box, which is placed under the journal to be lubricated, and slides in and out of the axle-box like a drawer.

B is a rectangular plate, having legs C.

The box A may be made a little larger at the top than at the bottom, and the plate B may be made to fit the inside of the box about half-way down-that is to say, one of the ends or sides may be made in-

The legs C should not quite touch the bottom when the plate B is in its place.

By constructing the apparatus in this manner the shaking of the axle-box will settle the plate B down in the box A when the machine is in motion, and hold it tightly in its place. This result is accomplished by means of the inclined side, which causes the plate to wedge into place when motion is communicated to the car.

This reservoir should only be filled with oil below

the plate B.

In the center of plate B is a rectangular hole or opening, E, through which the wick or felt passes to

The upper face of plate B is provided with grooves F leading from the corner to the opening, and the wick or felt should nearly fill the said hole or opening E. If the box A be used without the plate B, the oil would be thrown out over the upper edges and a loss would result therefrom; but with this improvement very little, if any, oil will find its way above the plate B except what is carried up by capillary attraction through the wick; and any that does escape will find its way to the grooves F, and be immediately returned back under the plate through the center hole E.

At one end of box A is a projection, G, that pre-

vents the untimely escape of plate B.

The operation is as follows:

The box A is filled with oil to the lower surfaceline of the plate B. One end of a piece of suitable wicking or felt is inserted into the oil through the central opening in the plate B, the other end being carried up and turned over the shaft which revolves above. By the revolution of the shaft the oil is conducted longitudinally in each direction to the bearings.

Having thus described my invention,

What I claim, and desire to secure by Letters Pat-

1. The plate B, provided with an opening, E, and grooves F, substantially as described.

2. The combination of the box A with the plate B, as described and for the purpose set forth.

In witness whereof we have hereunto set our hands and seals.

> ERNEST VON JEINSEN. JAMES M. McDONALD.

Witn esses:

C. W. M. SMITH. H. S. TIBBEY.