

(No Model.)

W. McKENZIE.

DUST GUARD FOR CAR AXLES.

No. 339,675.

Patented Apr. 13, 1886.

Fig: 1.

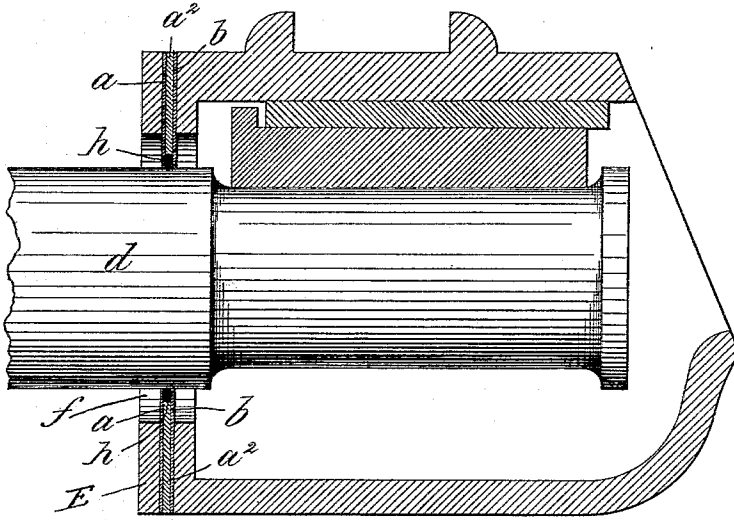
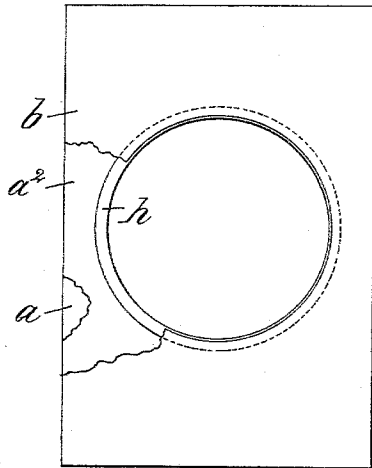


Fig: 2.



Witnesses.

Arthur Zipperlin.

John F. C. Prinslow

Inventor:

William Mc Kerzie.

by Crosby Gregory attys.

UNITED STATES PATENT OFFICE.

WILLIAM McKENZIE, OF EAST BOSTON, MASSACHUSETTS.

DUST-GUARD FOR CAR-AXLES.

SPECIFICATION forming part of Letters Patent No. 339,675, dated April 13, 1886.

Application filed February 11, 1886. Serial No. 191,554. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM McKENZIE, of East Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Dust-Guards for Car-Axles, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

As is commonly known, the back of an axle-box for railway-cars is provided with an oval or elliptical shaped opening, to allow the spindle of the car-axle to be passed into said box, and to permit more or less vertical play of the axle and box with relation to each other. To prevent the escape of oil through that portion of the oval opening not taken up by the cylindrical axle spindle in the movement of the car, and, further, to prevent the entrance of dust through such opening into the axle-box, it has heretofore been common to encircle the axle between the back of the axle-box and the adjacent wheel of the axle with a dust-guard made of wood or sole-leather.

The employment of a wooden dust-guard for the purposes intended is objectionable, for the reason that said dust-guard, being subjected to all kinds of weather, soon becomes warped, cracked, or broken, thereby rendering it unfit for use, or causing it to fall from the axle, thus exposing the opening in the back of the axle-box and permitting the entrance therein of dust.

In the use of a leather dust-guard it has been found that the oil that may escape from the axle-box softens the leather, and causes the dust-guard made therefrom to lose its shape and stiffness, and to become more or less flattened out by the "chuck" or lateral play between the axle and the axle-box, whereby the opening in said dust-guard becomes enlarged and increased in diameter, so as not to fit snugly around the axle, to prevent dust from entering the axle-box.

The object of this my invention is to provide a dust-guard which will overcome these evils, and at the same time have increased life or wearing qualities.

To these ends my invention consists, primarily, of a dust-guard composed, preferably, of

a pair of stiffening-plates and an interposed layer or thickness of rawhide, the whole being firmly united and provided with a cylindrical opening to snugly fit the axle upon which it is to be placed.

Figure 1 represents, partly in longitudinal vertical section and partly in elevation, so much of a railway-car axle-box and axle as is sufficient to illustrate my invention as applied thereto. Fig. 2 is a plan of my improved dust-guard, partially broken out.

My improved dust-guard consists of a pair of stiffening-plates, *a b*, of suitable size, and preferably composed of leather-board, paper-board, or the like, and having an interposed layer or thickness of wood, *a'*, and rawhide *b*, the whole being cemented or otherwise suitably united, and provided with a cylindrical opening, *c*, of a diameter sufficient to enable the dust-guard to fit snugly on the axle *d* with which it is to be employed.

As illustrated in Fig. 1, the dust-guard encircles the axle *d*, and is placed in the usual dust-guard slot at the rear end of the car-axle box *E*, so as to prevent the escape of oil out through the elongated opening *f* in the back of the said car-axle box not occupied by the cylindrical axle, which is inserted in said opening, and also prevent the entrance of dust and extraneous matter into the said box.

The rawhide may be of sufficient size to entirely fill the space occupied by the wood, or metal may be used for the wood, the function of the latter being, essentially, to stiffen the dust-guard.

I claim—

The dust-guard for the purposes specified, it consisting, essentially, of a pair of stiffening-plates and an interposed layer or thickness of rawhide, the whole being firmly united, and having a cylindrical opening to fit the axle on which it is to be placed, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WM. McKENZIE.

Witnesses:

G. W. GREGORY,
F. CUTTER.