

UNITED STATES PATENT OFFICE.

THOMAS M. UNDERWOOD, OF MAY, TEXAS.

SAND-BOX.

No. 885,110.

Specification of Letters Patent.

Patented April 21, 1908.

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To all whom it may concern:

Be it known that I, THOMAS M. UNDERWOOD, a citizen of the United States, residing at May, in the county of Brown and State of Texas, have invented a new and useful Sand-Box, of which the following is a specification.

This invention relates to sand guards for vehicle wheel hubs, and has for its principal object to provide a guard of very cheap and simple construction which may be quickly applied to buggies and other vehicles already in use, the device being of such nature that it may be made and placed on the market as an article of manufacture and attached to existing vehicles without the employment of any special mechanical skill.

A further object of the invention is to provide a guard comprising members attached to the axle and wheel hub, respectively, and so arranged as to form a very close tight fitting joint that will prevent the entrance of sand or other foreign matter.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings:—Figure 1 is a sectional elevation of a sand guard constructed and arranged in accordance with the invention, showing the same applied to a vehicle wheel. Fig. 2 is a detail perspective view of the parts detached.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

On the inner end of the hub of the vehicle wheel is placed a tubular guard or sleeve 10 that is formed of any suitable metal, and the inner end of which is split, as indicated at 11, in order that it may be forced onto hubs of different diameter. When forced into place the guard or sleeve is secured by screws or similar fastenings 12.

The end of the guard sleeve 10 projects a considerable distance beyond the inner end of the hub, and is flaring or bell shaped, so that any sand or other foreign matter which

may be blown thereinto will tend to work out by gravity.

On the axle is secured the second member of the guard, this member comprising a sheet metal disk 15 which is stamped or cut out to form a recess 16 of a width equal to the width of the wheel axle x , the axle of the vehicle being usually square in cross section. The central tongue formed by the cutting of the recess is bent outward at a right angle to the face of the disk, and this tongue 17 is arranged to be held by the axle clip y . The opposite edges of the tongue are provided with recesses 18 which receive the clip, so that the latter will hold the tongue from end-wise movement.

The disk 15 may be placed in position on the axle by reason of the open ended recess 16, and the end of the recess is then closed by an arm 19 which is pivoted at one end to the disk, the arm moving down against the top wall or surface of the axle, so that all sides of the axle are engaged and a close joint is formed to prevent the passage of sand or other foreign matter.

Secured to the inner face of the disk 15 is a washer 20, that preferably is formed of leather, rubber or similar material, the washer being split, and a portion of its length being detached to form a tongue 21 in alignment with the open end of the recess 16, while the body portion of the washer is riveted or otherwise secured to the disk 15. This tongue member may be readily moved outward when the disk is being placed in position on the axle, and then may be turned back into place, and if necessary secured in position by an auxiliary fastening means.

The disk and the washer extend slightly within the mouth of the guard sleeve 10, and the periphery of the washer fits snugly against the inner surface of the guard sleeve, forming a closed dust proof joint that will prevent the passage of sand to the spindle.

The device may be made very cheaply and in various sizes for application to vehicles of all classes.

I claim:—

1. In a sand guard, a bell mouth sleeve arranged to fit on the inner end of the vehicle wheel and provided with slits to permit adaptation to hubs of different diameter, and an axle carried member fitting within said sleeve.

2. In a sand guard, a hub carried tube or sleeve, an axle carried disk having an open

ended recess, and a washer of flexible material carried by the disk and having a free end tongue arranged to extend across said recess.

3. In a sand guard, a hub carried sleeve, a
5 disk, the central portion of which is cut away to form an open ended recess, the metal being bent down to form a tongue, the sides of the tongue being recessed to receive an axle clip, a pivoted metallic tongue for closing the
10 open end of the recess, and a slit washer of

flexible material secured to the disk and having a free tongue extending across the recess.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

THOMAS M. UNDERWOOD.

Witnesses:

C. R. PARKER,
B. H. BETTIS.