No. 653,574. Patented July 10, 1900.

D. C. GROVER.

MUD GUARD FOR VEHICLES.

(Application filed Apr. 12, 1900.)

(No Model.)

Fig. 1.

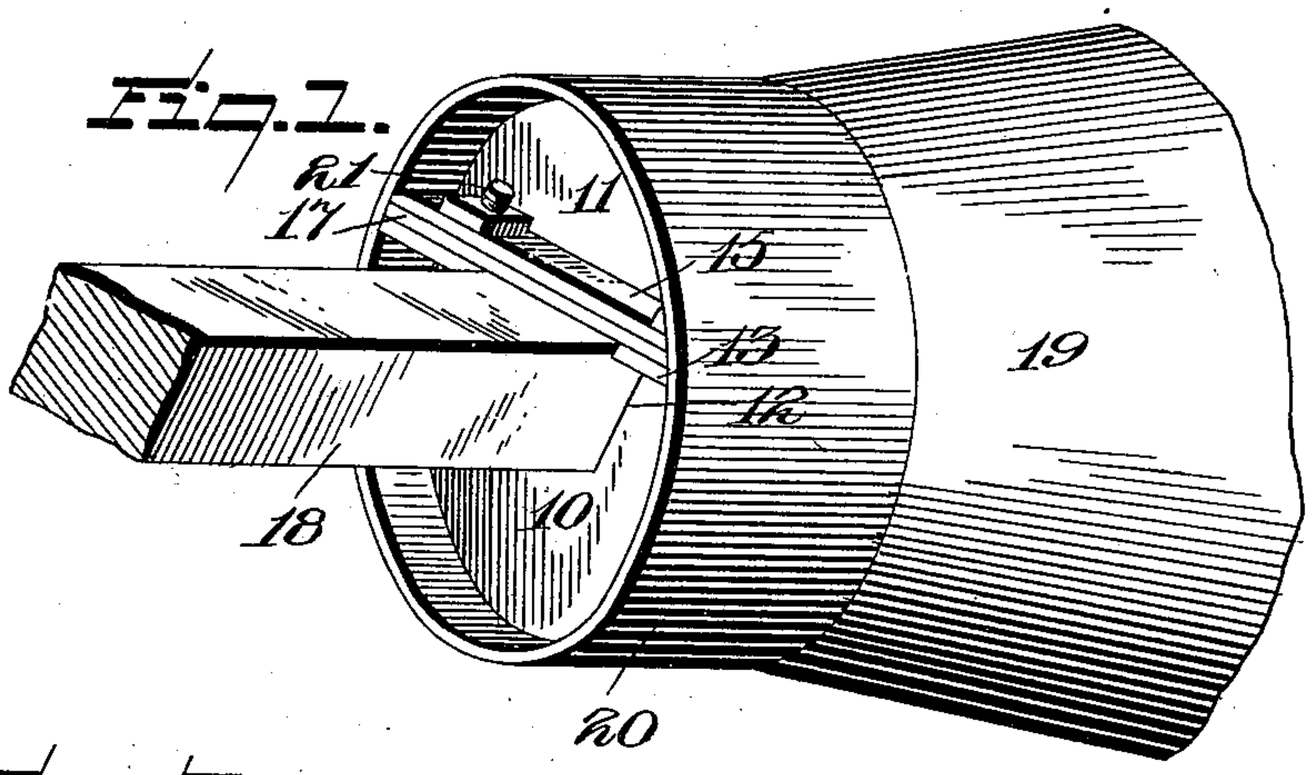


Fig. 2.

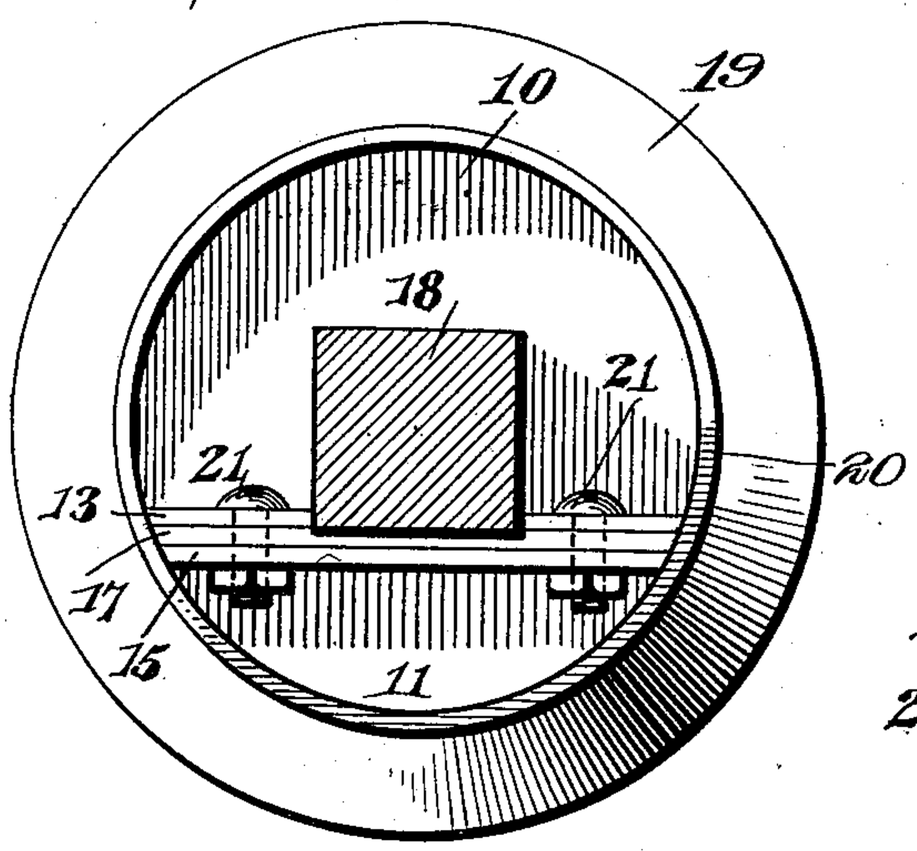


Fig. 3.

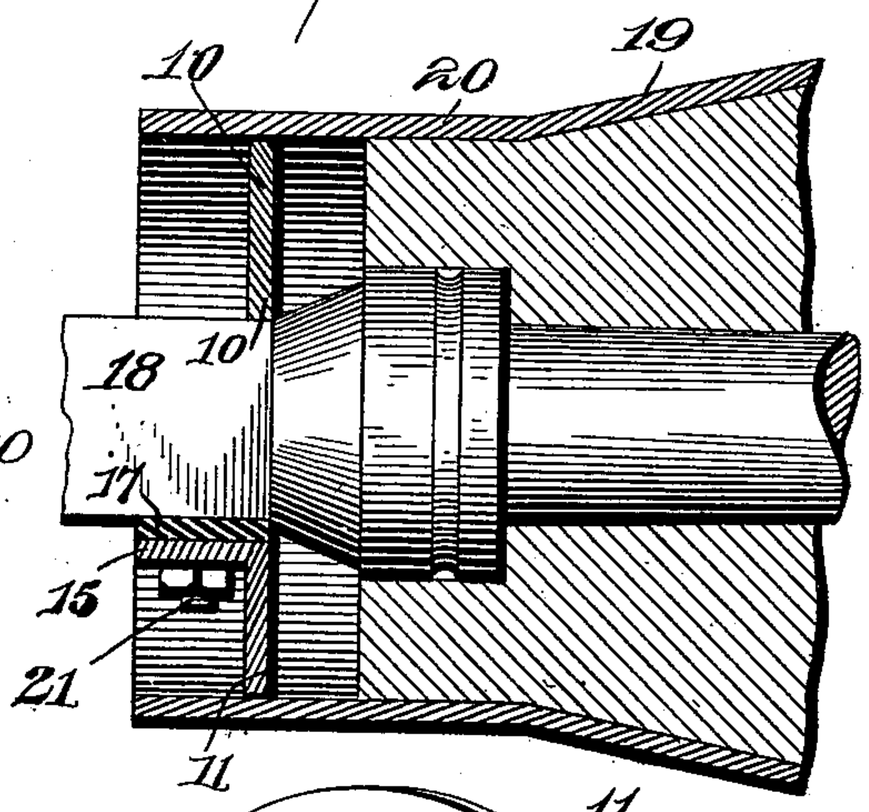
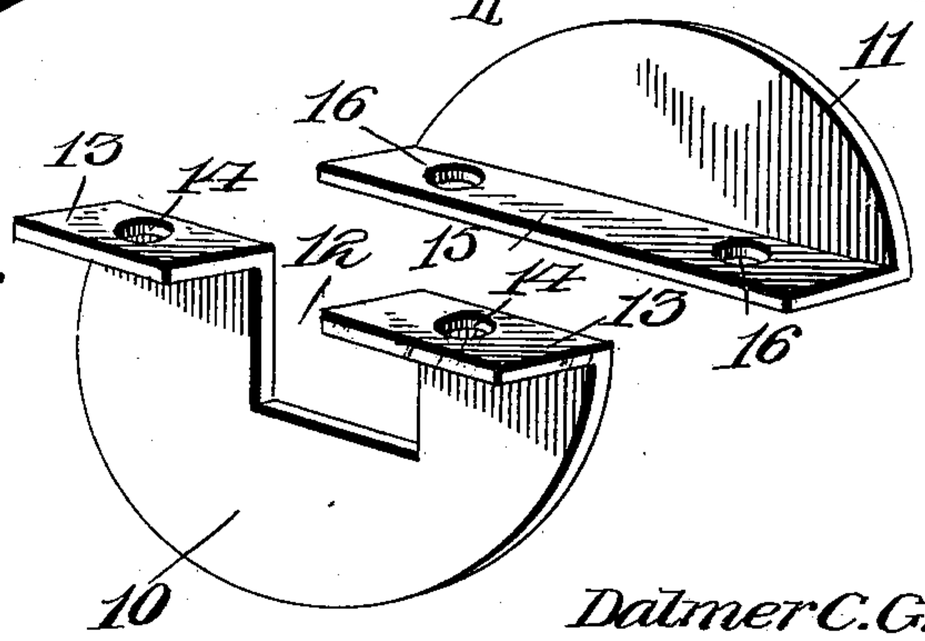


Fig. 4.



Witnesses
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MUD-GUARD FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 653,574, dated July 10, 1900.

Application filed April 12, 1900. Serial No. 12,628. (No model.)

To all whom it may concern:

Be it known that I, DALMER C. GROVER, a citizen of the United States, residing at Reading, in the county of Hillsdale and State of Michigan, have invented a new and useful Mud-Guard for Vehicles, of which the following is a specification.

This invention relates to sand and mud guards for vehicles; and one object is to provide a simple and inexpensive device that can be easily applied to the axle of a vehicle and prevent all grit or dirt entering between the axle and hub.

A further object is to so construct the device that all dirt and sand will be scraped from the inner side of the hub-band.

The preferred construction of the invention is fully described in the following specification and shown in the drawings which accompany and form a part of the same, and in which—

Figure 1 is a perspective view of a portion of an axle and hub-band, showing the improvement applied thereto and in an inverted position to expose the continuous flange which fits the under side of the axle. Fig. 2 is an elevation of the same in proper position. Fig. 3 is a longitudinal section. Fig. 4 is a view of the guard detached, showing the sections separated and inverted to better illustrate the construction.

Similar numerals of reference designate corresponding parts in all the figures of the drawings.

The device comprises two sections—the guard-plate 10 and the clamp-plate 11. The guard-plate 10 preferably comprises a semicircular plate made of a single piece of sheet metal and having a central rectangular axle-receiving opening 12. The ends on either side of the opening 12 are bent at substantially right angles to the main portion, forming ears 13, and these ears are each provided with a bolt-opening 14. The clamp-plate 11 preferably comprises a semicircular flat metal plate having its flat edge bent at substantially right angles to the main portion, forming a clamping-flange 15. This flange extends across the entire width of the clamp-plate and is provided with a pair of bolt-openings 16. When in assembled position, the flange 15 and the ears 13 fit together, and a suitable washer 17, of leather or other material, is placed therebetween. The two plates 10 and 11 when in applied position form a perfect circle.

To more clearly show the application of the device, an axle 18, a hub 19, and the inner hub-band 20 are illustrated. The guard-plate 10 is slipped over the axle, and the washer 17 and clamp-plate 11 are placed thereon. In this position the openings 14 and 16 will be alined, and suitable bolts 21 are passed therethrough and the nuts screwed tightly down upon the flange.

By reason of the device fitting snugly around the axle and the circular plate fitting snugly within the hub-band it is evident that all dirt and dust are excluded from the bearing portion of the hub and axle. Furthermore, the flange 15 forms a broad bearing-surface across the axle, whereby the device is held firmly and all wabbling is prevented. A further advantage of the invention lies in the fact that the ends of the flange and ears form scrapers which take off all mud that would otherwise collect upon the inside of the hub-band and which in cold weather often freezes and interferes with the removal of the wheel.

The washer 17 protects the paint of the axle, so that it is not scratched or marred by the application of the device.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description; and it is to be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A device of the class described, comprising two sections adapted to embrace an axle, one of said sections having a continuous clamping-flange which rests upon and projects beyond the edges of the axle, and means for fastening the two sections together, said

means engaging the projecting portions of the clamping-flange, substantially as described.

2. A device of the class described, comprising two sections adapted to embrace an axle, one of said sections being provided with a clamping-flange adapted to rest against the axle and present a broad bearing-surface to the same, said flange being also provided with scraping means engaging the hub-band, and means for fastening the two sections together, substantially as described.

3. A device of the class described, comprising two sections adapted to embrace an axle, one of said sections having a continuous clamping-flange which rests upon the axle and projects beyond the same, forming a scraper for the hub-band, the other section being provided with fastening-ears, and fastening-bolts connecting said flange and ears, substantially as described.

4. A device of the class described, comprising two sections adapted to embrace an axle, one of said sections having fastening-ears, the other having a continuous clamping-flange, a washer interposed between the flange and the ears, and coextensive with the former so as to bear against the axle, and bolts connecting the ears and flange, substantially as described.

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

DALMER C. GROVER.

Witnesses:

A. L. KINNEY,

GEORGE W. WORDEN.