No. 775,595. PATENTED NOV. 22, 1904.

W. H. BROWN.

DUST GUARD FOR AUTOCARS.

APPLICATION FILED MAR. 31, 1904.

NO MODEL.

Fig. 1.

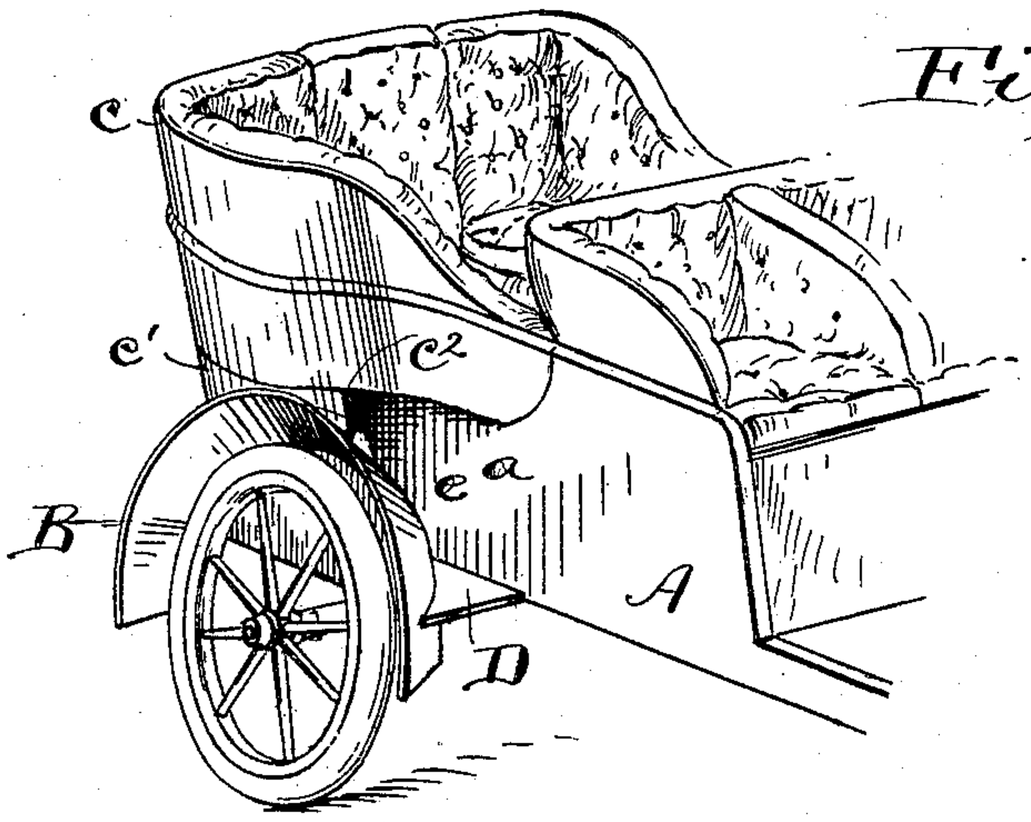



Fig. 2.

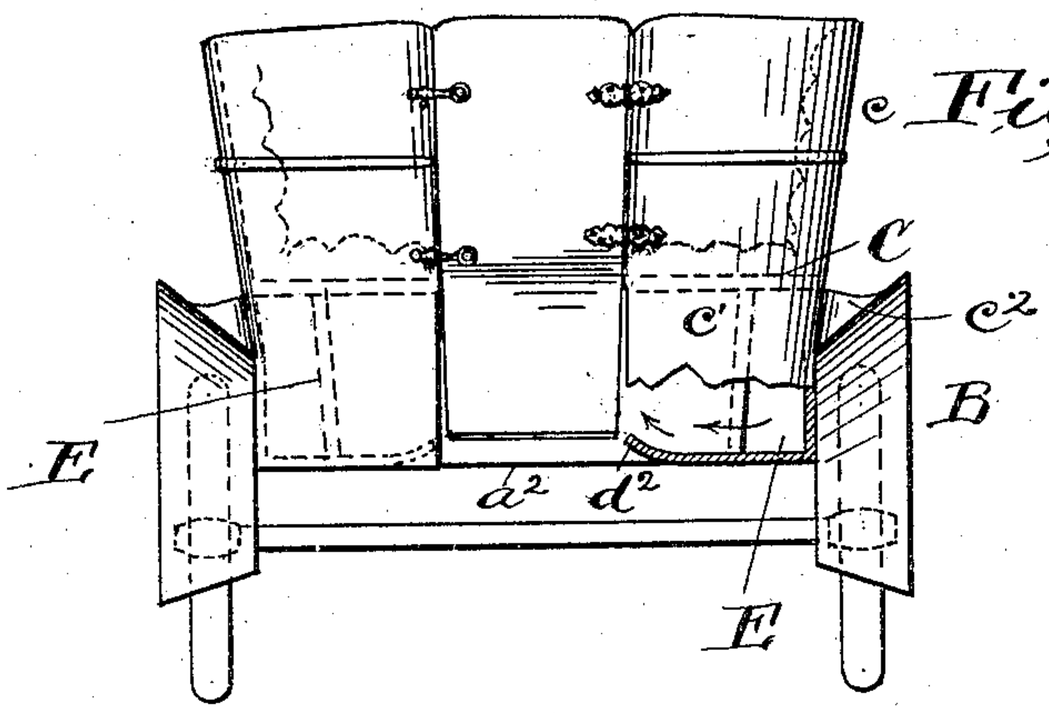



Fig. 4.

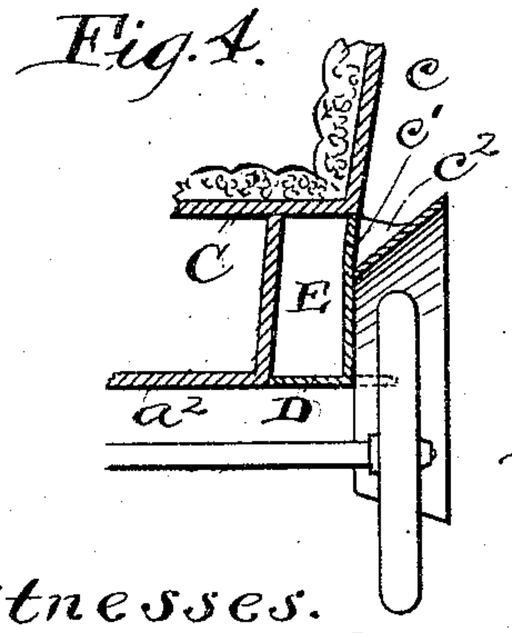
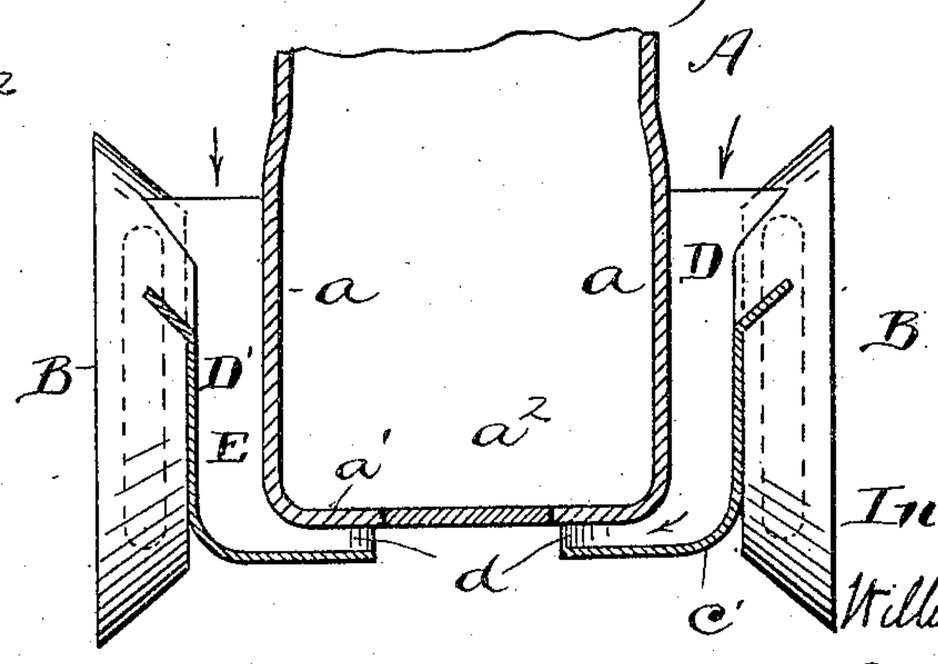



Fig. 3.




Witnesses.
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No. 775,595. Patented November 22, 1904.

# UNITED STATES PATENT OFFICE.

WILLIAM H. BROWN, OF CHICAGO, ILLINOIS.

## DUST-GUARD FOR AUTOCARS.

SPECIFICATION forming part of Letters Patent No. 775,595, dated November 22, 1904.

Application filed March 31, 1904. Serial No. 201,003. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. BROWN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Dust-Guards for Autocars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

This invention relates to dust-guards for autocars, and more particularly to the type of guard wherein a conduit is formed around the rear portion of the side and the back of the car, an example of such type being shown in my prior patent, No. 742,580, granted October 27, 1903.

The object of this invention is to provide a guard of the type shown in said patent, which guard shall effectively collect the clean air and discharge the same at the rear of the vehicle to prevent the dust-laden air at the rear of the vehicle from being thrown over the top edge of the same, which will not materially alter nor detract from the appearance of the vehicle nor interfere with the convenience or comfort of the passengers.

Referring to the drawings, Figure 1 represents a view in perspective of one side of the rear end of an autocar having my invention applied thereto. Fig. 2 represents a rear elevation of such autocar, the parts being broken away to show the internal construction of the conduit. Fig. 3 represents a horizontal sectional view of the rear portion of such autocar, said section being taken through the air-conduits, the mud-guards being shown in elevation. Fig. 4 represents a vertical sectional detail showing said conduit.

Describing the parts by letters, A represents the body of the autocar, said body being of the familiar tonneau form having the overhanging rear seats C.

B represents the mud-guards, which flare outwardly over the wheels. The rear portions of the sides *a* and the back *a'* of said body are preferably drawn in or contracted somewhat as compared with the ordinary autocar, so as to be overhung by the seats C, as shown particularly in Figs. 2, 3, and 4. The skirt *c'*, which forms the outer wall of the air-conduit, is made by extending the back of the seat *c*, at the rear of the side and at the rear of the end of the car, downwardly to about the level of the floor $a^2$. The upper front portion of such skirt is flared outwardly, as shown at $c^2$, to merge with the outwardly and upwardly flaring mud-guard B. The lower front portion of said extension is at about the level of the floor $a^2$. A bottom closure D in about the plane of the floor $a^2$ extends from the lower portion of the side and back of the car to the skirt. There is thus formed below each seat C a conduit E, open at its front and rear ends only and of which the body forms the inner wall and the seat the top wall. This conduit has a funnel-shaped opening *e* at its front end formed by the upwardly and outwardly flaring mud-guard B, the bottom D, the side *a*, and the flaring portion $c^2$ of the skirt or seat-back extension *c'*. The air is taken from a sufficient distance above the ground to prevent the same from being laden with dust, while the flaring mouth of the conduit insures the collection of a sufficient amount of relatively pure air to break up the partial vacuum at the back of the vehicle, and thus prevent the dust-laden air at the rear of the vehicle from flowing over the rear top edge of the same.

In order to insure that the air discharged from the relatively low conduits E E shall be effective to protect the rear top edge of the car from the dust-laden air behind the vehicle, I impart to such air discharged from the conduits an upward inclination by giving an upward flare to the bottom D at the discharge end of the conduit, as shown at *d*.

By the construction above set forth I have produced a dust-guard which is neat in appearance, which will effectively collect the relatively pure air employed to prevent the formation of a vacuum at the rear of the carriage, which will not materially alter nor detract from the appearance of the vehicle to which it is attached, and which will not interfere with the comfort and convenience of the occupants of the vehicle.

I claim—

1. The combination with an autocar, of a skirt extending from the lower portion of the

car-body as high as the seat, said skirt being spaced from the body and extending along the rear portion of the side of the body around the rear end thereof, substantially as described.

2. The combination with an autocar, of a pair of curved skirts, one on each side of said car, each of said skirts extending from the lower portion of the body as high as the seat, said skirts being spaced from the body and extending along the rear portion of the sides and around the rear end thereof, substantially as described.

3. The combination with an autocar, of a flaring mud-guard partially surrounding one of the rear wheels of said car, of a skirt extending around and spaced from the lower portion of the side and end of said car, the forward end of said skirt being secured to said mud-guard, substantially as described.

4. The combination with an autocar, of flaring mud-guards for the rear wheels, each of said guards extending partly around its respective wheel, of a skirt extending around and spaced from the lower portion of each side and its adjacent end portion, the forward end of said skirt being flared outwardly and secured to its corresponding mud-guard, substantially as described.

5. The combination with the side and end of an autocar, of a seat in the rear portion of said car, a back for said seat, said back extending along the rear portion of the side and around a portion of the end of the car and overhanging the body portion therebelow, a skirt constituting an extension for the back of said seat and extending near the bottom of the body and spaced from said body to form an air-conduit, substantially as described.

6. The combination with the side and end of an autocar, of a seat in the rear portion thereof, a portion of said seat projecting beyond the side and end, a back for said seat, a skirt, forming an extension for the seat-back, extending along the side and around the end of the car and spaced from the side and end to form an air-conduit, and a bottom for said conduit, substantially as described.

7. The combination with the side and end of an autocar, of a seat in the rear portion thereof overhanging said side and end, of a rear wheel, an outwardly-flaring mud-guard extending partly around said wheel, a back for said seat, a skirt forming an extension for said back and extending from the seat downwardly in proximity to the bottom of the car-body, said skirt also extending around a portion of the end of the car and flaring outwardly at its forward end to engage said dust-guard, substantially as described.

8. The combination with an autocar, of a curved skirt extending along the side and around the end of the car-body to form an open-ended conduit, and a closure for the bottom of said conduit, said closure flaring upwardly at the rear or discharge end of the conduit whereby the escaping air is directed upwardly, substantially as described.

9. The combination with the sides and end of an autocar, of a pair of upwardly and outwardly flaring mud-guards partially surrounding the rear wheels, of a sheet secured to each side of the body and extending along the rear portion of the side of the car and around the rear end thereof, said skirt being spaced from said side and end to form an air-conduit and having its upper edge flaring outwardly and secured to said mud-guard, and a closure for the bottom of said conduit, the forward end of said closure flaring outwardly and being secured to the mud-guard, substantially as described.

10. The combination with an autocar, of two curved skirts, each extending along a side of the car and a short distance around the rear end thereof to form an air-conduit, a bottom closure for each of said conduits, the portion of said closure adjacent to the rear or discharge end of each conduit flaring upwardly, substantially as described.

11. The combination with an autocar, of a curved skirt extending along the side and around the end of the car-body to form an open-ended conduit, said skirt extending from near the bottom of said body to the height of the rear seats thereof, a bottom closure for said conduit, the portion of said closure adjacent to the rear or discharge end of the conduit flaring upwardly, substantially as described.

12. The combination with the side and end of an autocar, of a seat in the rear portion of said car, said seat overhanging the rear portion of said side and a portion of said end, of a curved skirt extending from the level of said seat downward and forming an air-conduit around the rear portion of the side and the adjacent end portion of the car, and a closure for the bottom of said conduit, the portion of said closure adjacent to the rear or discharge end of said conduit flaring upwardly, substantially as described.

13. The combination of an autocar having rear seats which overhang the body at the sides and rear, with a skirt extending down from the side and rear of said overhanging seat, and a bottom closure connecting the lower end of said skirt with the car-body, substantially as described.

14. The combination of an autocar having rear seats which overhang the body at the sides and rear, with an air-conduit located below each seat, and extending along the side of the body and partly across the rear end thereof, said conduits being open at their front and rear ends, substantially as described.

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

WILLIAM H. BROWN.

Witnesses:

CARL D. STONE,

H. M. BROWN.