

W. F. BARCAFER.
SAND DISTRIBUTING DEVICE FOR AUTOMOBILES.
APPLICATION FILED JAN. 13, 1913.

1,066,698.

Patented July 8, 1913.

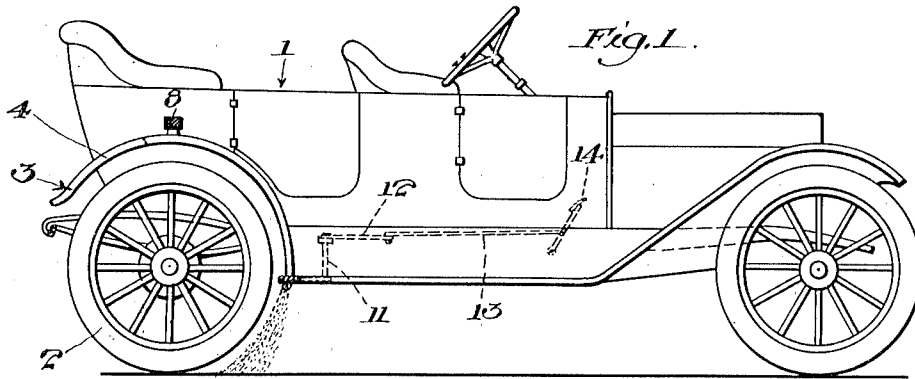
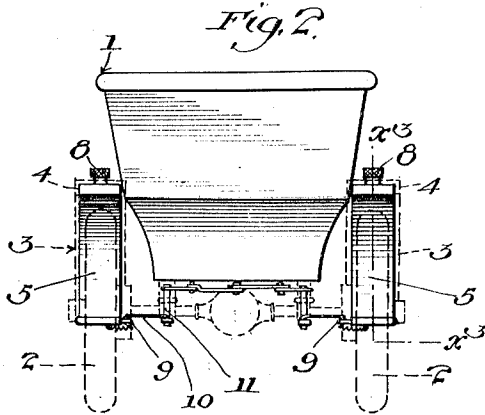
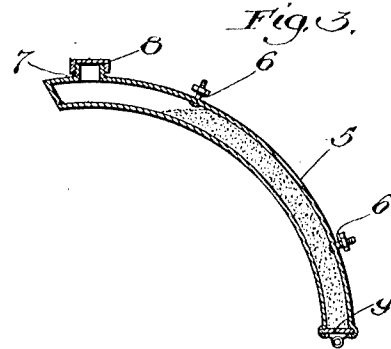


Fig. 4.



Fig. 6.

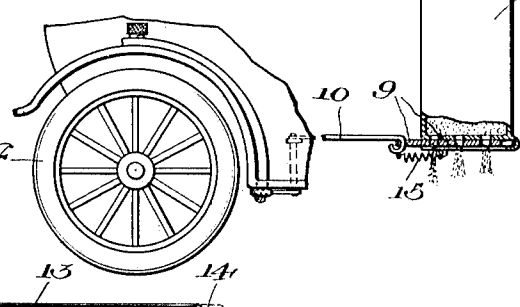
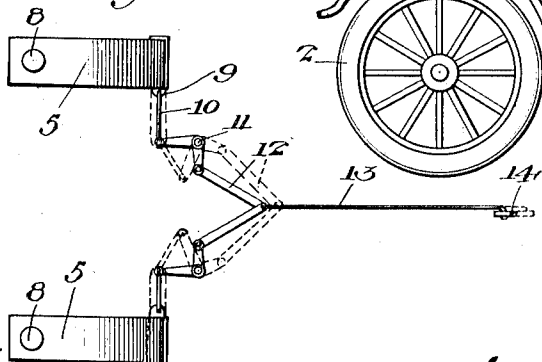


Fig. 5.



Witnesses:
L. A. Allen,
Sully Russo.

Inventor:
William F. Barcafer
by S. A. Haeckel
attys.

UNITED STATES PATENT OFFICE.

WILLIAM F. BARCAFER, OF LOS ANGELES, CALIFORNIA.

SAND-DISTRIBUTING DEVICE FOR AUTOMOBILES.

1,066,698.

Specification of Letters Patent.

Patented July 8, 1913.

Application filed January 13, 1913. Serial No. 741,894.

To all whom it may concern:

Be it known that I, WILLIAM F. BARCAFER, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles, State of California, have invented a new and useful Sand-Distributing Device for Automobiles, of which the following is a specification.

This invention relates to those sand distributing devices which are adapted to be applied to mud guards of automobiles, and operated by a suitable foot lever or other means for distributing the sand to the pavement directly in front of the propelling wheels to prevent the wheels from skidding.

Referring to the drawings: Figure 1 is a side elevation of my improved sand distributing device as applied to an automobile. Fig. 2 is a rear view of the automobile as equipped with the device. Fig. 3 is an enlarged vertical section through one of the sand boxes of the device on line x^3-x^3 , Fig. 2. Fig. 4 is a rear elevation of one of the sand boxes of the device on a larger scale, showing the slide in detail. Fig. 5 is a plan view of the lever system for operating the slides. Fig. 6 is a side elevation of a portion of an automobile, showing a modified construction.

1 designates the automobile having rear driving wheels 2. Extending partly around each rear wheel 2 is the usual form of mud guard 3 provided with a side flange 4.

5 designates a sand box which is curved to conform to the shape of the mud guard and in one form of my invention, is located underneath the mud guard directly over the rear wheel, as shown in Fig. 1. The sand box 5 has a perforated bottom and may be secured to the mud guard in any desired manner, as for example, by the bolts 6. A filling spout 7 extends from the sand box through the mud guard and has a removable cap 8 to permit the sand box to be filled with sand. The lower end of the sand box is provided with valve means adapted to be opened to discharge the sand. This valve means consists of a transversely arranged perforated slide 9, which is connected by a link 10 with one arm of a bell crank lever 11, the other arm of the bell crank lever 11 being connected by a link 12 with a link 13, which extends forward to a pivoted foot

lever 14. As clearly shown in Fig. 4 a spring 15 is provided for closing the slide, one end of the spring being fixed to the sand box and the other end to the link 10.

In operation, when the foot lever is pushed forward, it draws on the link 13 and the latter acting through links 12 swings both bell crank levers 11 and draws the links 10 inwardly, thereby opening both slides 9 and allowing sand to run out of the sand box through the perforated bottom thereof and through the perforated slide and fall upon the pavement directly in front of the rear wheels, so that they are prevented from skidding. The flow of sand through the valve is regulated by the amount of pressure imparted to the foot lever 14 which controls the extent to which the valve is opened.

The sand boxes when arranged underneath the mud guards are almost entirely concealed by the side flanges 4 of the mud guards, and thus do not detract from the appearance of the automobile. If desired the sand boxes could be located on the upper side of the mud guards as indicated in Fig. 6. The lower end of each sand box is provided with a flaring mouth to spread the sand directly in front of the wheels.

What I claim is:—

A sand distributing device for automobiles comprising a pair of sand boxes provided with means whereby they may be attached to the mud guards of the automobile, each having a filling spout at its upper end and a perforated bottom at its lower end, transversely arranged perforated slides beneath the perforated bottoms of the sand boxes, bell crank levers, alined inner links connected with the slides and with the inner arms of the bell crank levers, intermediate links connected with the outer arms of the bell crank levers, a foot lever, and an outer link coupling the intermediate links with the foot lever.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 7th day of January 1913.

WILLIAM F. BARCAFER.

In presence of—

G. T. HACKLEY,
MARTHA M. LANGE.