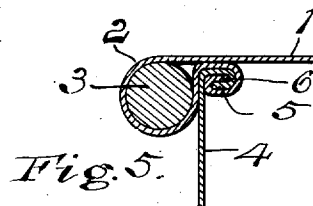
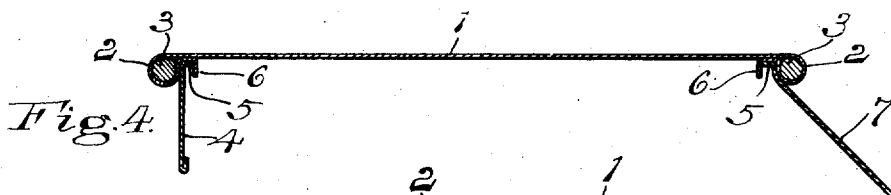
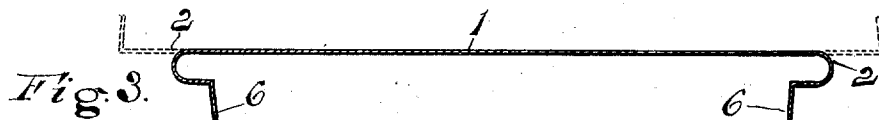
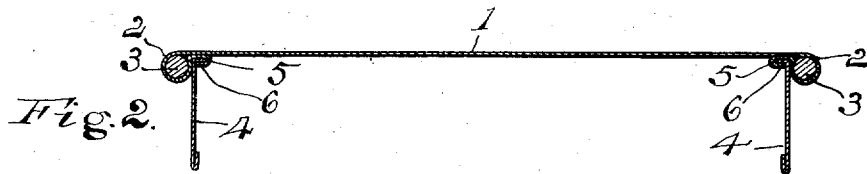
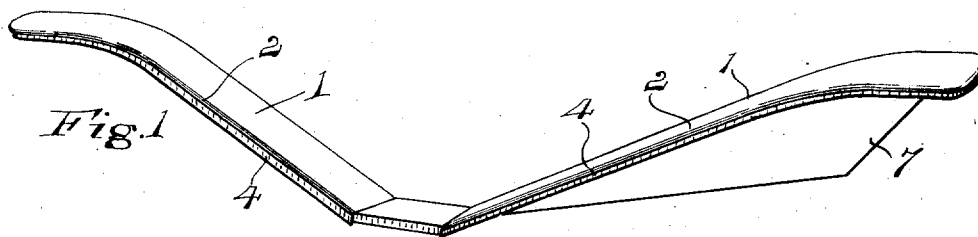


A. LITTLE.
METALLIC FENDER AND MUD GUARD.
APPLICATION FILED NOV. 30, 1909.

989,619.

Patented Apr. 18, 1911.



Witnesses
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UNITED STATES PATENT OFFICE.

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METALLIC FENDER AND MUD-GUARD.

989,619.

Specification of Letters Patent.

Patented Apr. 18, 1911.

Application filed November 30, 1909. Serial No. 530,680.

To all whom it may concern:

Be it known that I, ALEXANDER LITTLE, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Metallic Fenders and Mud-Guards, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to fenders for wheeled vehicles and more particularly to a construction thereof whereby lightness and rigidity are obtained together with an exterior that is free from rivet heads and like
15 projections.

The invention consists in the matters hereinafter set forth, and more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a view in perspective of a fender embodying the invention; Fig. 2 is a view in cross section of the fender; Fig. 3 is a view in cross section of a fender body, showing the method of forming a stiffening margin; Fig. 4 is a
20 similar view showing the method of applying a flange; and Fig. 5 is a view in detail showing a modification of a locking joint.

Referring to the drawings, a sheet metal body 1 has its margins 2 rolled around suitable stiffening wires 3 and bent inwardly flat against the under side of the body. Depending flanges 4 have their upper margins 5
30 intumed in parallel relation to the inner portion of the body margins 2, which are folded outwardly around the flange margins, thus forming a retaining lip 6, the outer face of each flange 4 contacting with the inner rolled portion of the body flange.

The flange adjacent the vehicle body may be of sufficient width and proportion to form a wing 7 in the usual manner and the face of the body of the fender may be pressed up or embossed if desired.

To further strengthen the seam between the flange and the body, the lip 6 with the inclosed portion of the flange margin may be folded outwardly to form a double locking seam as indicated in Fig. 5.

By this construction, a fender is obtained
50 which may be made of light sheet material, the reinforcing seam between the flanges stiffening the fenders sufficiently, as the wire may be of any desired gage.

There are no rivets, or other fastenings which interrupt the otherwise smooth and unbroken surfaces of the fender, so that the enamel or like finish may be readily applied.

Obviously, changes in details of construction may be made without departing from the spirit of the invention and I do not care to limit myself to any particular form or arrangement of parts.

I claim as my invention:—

1. A fender for vehicles comprising a sheet metal body whose margins are rolled around a stiffening wire and bent inwardly against the under side of and in parallel relation to the body, and flanges whose upper margins are intumed and secured against the under side of the intumed portion of the rolled margin of the body in the angle thereof by the outer lips of the body margins which are reverted around the intumed edges of the flanges.

2. A fender for vehicles comprising a sheet metal body whose margins are rolled around a stiffening wire and bent inwardly against the under side of and in parallel relation to the body, and flanges whose upper margins are intumed and secured against the under side of the intumed portion of the rolled margin of the body by the outer lips of the body margins which are reverted around the intumed edges of the flanges, the outer faces of the flanges being in contact with the rolled portions of the margin.

3. In a combined fender and mud guard, a fender, a reinforcing wire around which the margin of the fender is wrapped adjacent to its edges, the projecting margin of the fender extending inwardly from the reinforcing wire contiguous with the underface of the fender, its edge formed with a return bend spaced apart to receive the rim of the guard, and a mud guard having a rim bent at an angle to its body portion, said rim being lodged within the space formed by the return bend of the fender.

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

ALEXANDER LITTLE.

Witnesses:

JAMES E. GRACE,
OTTO F. BARTHEL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."