

(No Model.)

C. H. WELCH.
CAR DOOR CLOSURE.

No. 586,469.

Patented July 13, 1897.

FIG. 1.

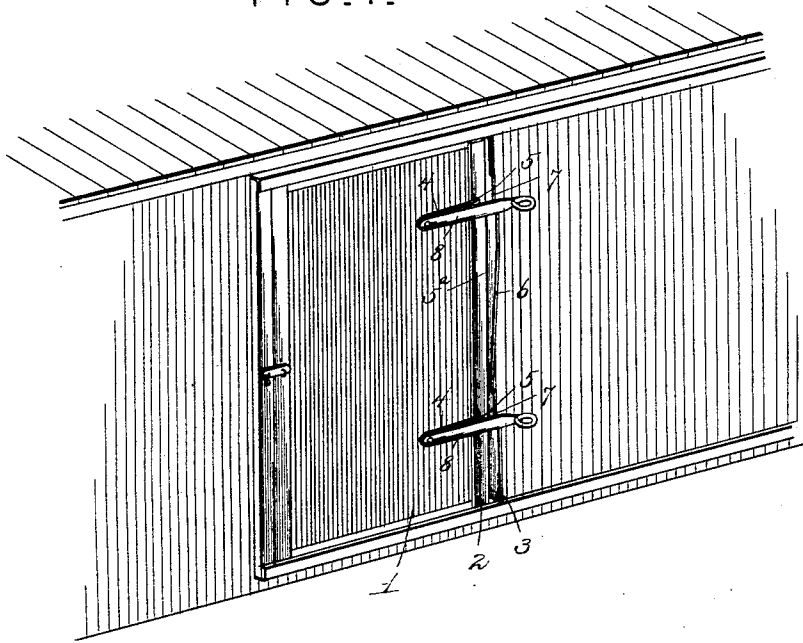


FIG. 2.

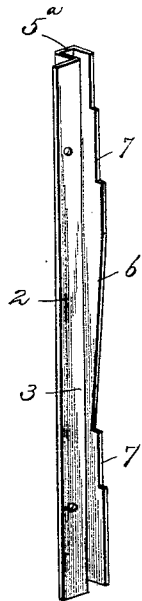
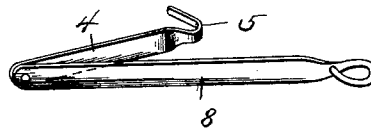


FIG. 3.



WITNESSES

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CAR-DOOR CLOSURE.

SPECIFICATION forming part of Letters Patent No. 586,469, dated July 13, 1897.

Application filed March 15, 1897. Serial No. 627,479. (No model.)

To all whom it may concern:

Be it known that I, CHARLES HARLOW WELCH, a citizen of the United States, residing at Aberdeen, in the county of Monroe and State of Mississippi, have invented certain new and useful Improvements in Car-Door Closures; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to car-door closures, and is adapted for closing the crevices of car-doors to prevent the entrance of sparks therein; and it consists, essentially, of a shield or guard adjustably mounted on the end of a car-door and having locking means coacting therewith to hold it in proper position when the door is closed.

The object of the invention is to provide an attachment in connection with the car-door formed of metal and having a projecting portion continuing from a trough or groove which will receive or catch the flying sparks and cause them to drop below the body of the car without contacting with the wood framing or parts at the point where the device is applied.

In the drawings, Figure 1 is a perspective view of a portion of a car and door, showing the improved device applied thereto in locked position. Fig. 2 is a detail perspective view of the closure or improved device shown detached. Fig. 3 is a detail perspective of one of the latches for securing the device in a locked position.

Referring to the drawings, wherein similar numerals of reference are employed to indicate corresponding parts of the several views, the numeral 1 designates a car-door which may be of any suitable dimension and situated either at the end of the car or at the side. To one edge of the car-door is movably attached an angularly-bent flange 2 of a guard or shield 3 by means of hinge-plates 4, having reduced ends 5, passing through the said flange 2 and secured to the car-door by any suitable means, but preferably passed through the said door and clenched, as will be readily understood. The said reduced portion of the hinge-plates are formed with a sufficient bend to permit free movement of the shield or

guard when the latter is released. The flange 2 is continuous with a groove or trough which extends vertically, as shown, and is located against the edge of the door, and from the opposite side of said trough the guard or shield is continued outwardly in the form of a projecting flange 6, whose outer edge stands beyond the plane of the door and is formed with recesses at the upper and lower portions thereof, as at 7, for a purpose which will be presently described.

Secured to the outer surface of the door adjacent to the guard or shield and, as shown in Fig. 1, at the upper and lower portions of the said door are latches 8, which are adapted to be connected at their forward ends to the same fastening by which the hinge-plates 4 are attached. The said latches 8 are adapted to be moved over the outwardly-projecting flange 6 of the shield or guard and to engage the recesses 7 therein, it being understood that the said recesses hold the said latches against dropping downward should the latter become loosened at their points of connection with the car-door. These latches hold the guard or shield firmly locked or in operating position, and, as shown in the accompanying drawings, two of said latches are employed; but it will be readily understood that in smaller doors one latch will be all that is required to properly hold the guard or shield in locked position and may be readily used instead of the double form, which is employed in larger doors. It will also be understood that in very large constructions of the attachment an intermediate latch and hinge-plate might be readily used, the number of said devices not in the least changing the nature or spirit of the invention, but being merely a duplication of the same device.

The several attaching-bolts will be so arranged that the heads thereof will be on the inner side of the door, so as not in the least to interfere with the proper operation of the latter, and the guard or shield will be constructed of metal of suitable thickness. The outer ends of the latches will also be provided with suitable grips or loops for readily operating the same.

The application of the device at the rear of the car-door prevents contact of sparks with

the wood of the car at this point and entrance of the same through the crevice or joint made by the door with the adjacent frame of the car.

It will be understood that many minor
5 changes in the details of construction and arrangement might be made and substituted for those shown and described without in the least departing from the nature or spirit of the invention.

10 Having thus described the invention, what is claimed as new is—

In a car-door closure of the character set forth, the combination of a guard or shield comprising an attaching-flange and a groove
15 or trough with a flange projecting outwardly

therefrom and beyond the plane of the door and having recesses therein, hinge-plates for movably securing the said guard or shield, and latches removably engaging the said recesses in the flange of the guard or shield adjacent to the groove or trough, substantially
20 as and for the purposes specified.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHARLES HARLOW WELCH.

Witnesses:

F. A. ELLIOTT,
MILO S. BEACH.