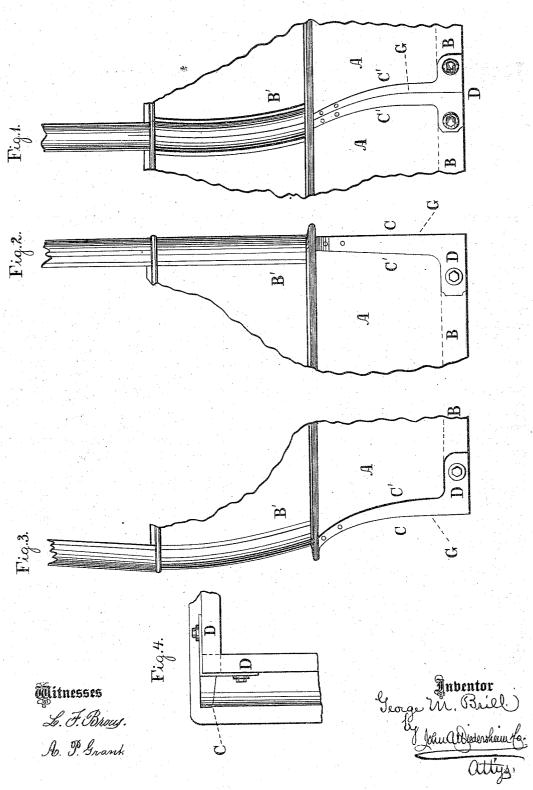
G. M. BRILL. Corner-Protectors for Cars.

No.156,763.

Patented Nov. 10, 1874.



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## UNITED STATES PATENT OFFICE

GEORGE M. BRILL, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN CORNER-PROTECTORS FOR CARS.

Specification forming part of Letters Patent No. 156,763, dated November 10, 1874; application filed July 31, 1874.

To all whom it may concern:

Be it known that I, GEORGE M. BRILL, of the city and county of Philadelphia, and the State of Pennsylvania, have invented a new and useful Improvement in Corner-Protectors of Cars; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a view of the two faces of the corner-protector embodying my invention. Fig. 2 is a side view of the protector. Fig. 3 is a front view thereof. Fig. 4 is a bottom

view.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in means for strengthening the corners and sills of the body of a car.

Referring to the drawings, A represents what is termed the concave of the body of a car, B the sills, and B' the corner-pillars, all of which may be of wel!-known form and construction. To each of the corners of the concave I apply a metallic corner-piece, C, which is arranged vertically, and constructed of two parts, C' C', united to be of angular form in cross-section. Pieces D extend laterally from the bottom of the piece C, and through the same are passed the bolts for securing the

pieces C to the car. The corner-pieces C extend from the bottom of the concave portion of the body to the top thereof, and embrace the portions of the corner-pillars in the concave. The lateral extensions D embrace the ends of the sills, and are bolted thereto.

It will be seen that there is no seam or joint in the piece C, since the vertical portions C'C' and lateral extensions D are of one piece of metal, and when said pieces are in position the outer angles G thereof constitute the angles of the concave of the car.

The parts embraced by the pieces C D will be firmly united, and are thus adapted to withstand the great strain to which they are subjected.

In cases of collision with wagons, drays, &c., the angles G will receive the shocks thereof; but owing to the solid nature of the pieces, breakage of the latter cannot occur, and the concave will in no wise be injured.

Having thus described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

The corner-protector C, consisting of the plates C' C', united angularly, and the laterally-extending pieces D, all formed in one piece, and combined with the concave portion A and sills B of the car, substantially as and for the purpose set forth.

GEORGE M. BRILL.

Witnesses:

JOHN A. WIEDERSHEIM, A. P. GRANT.