

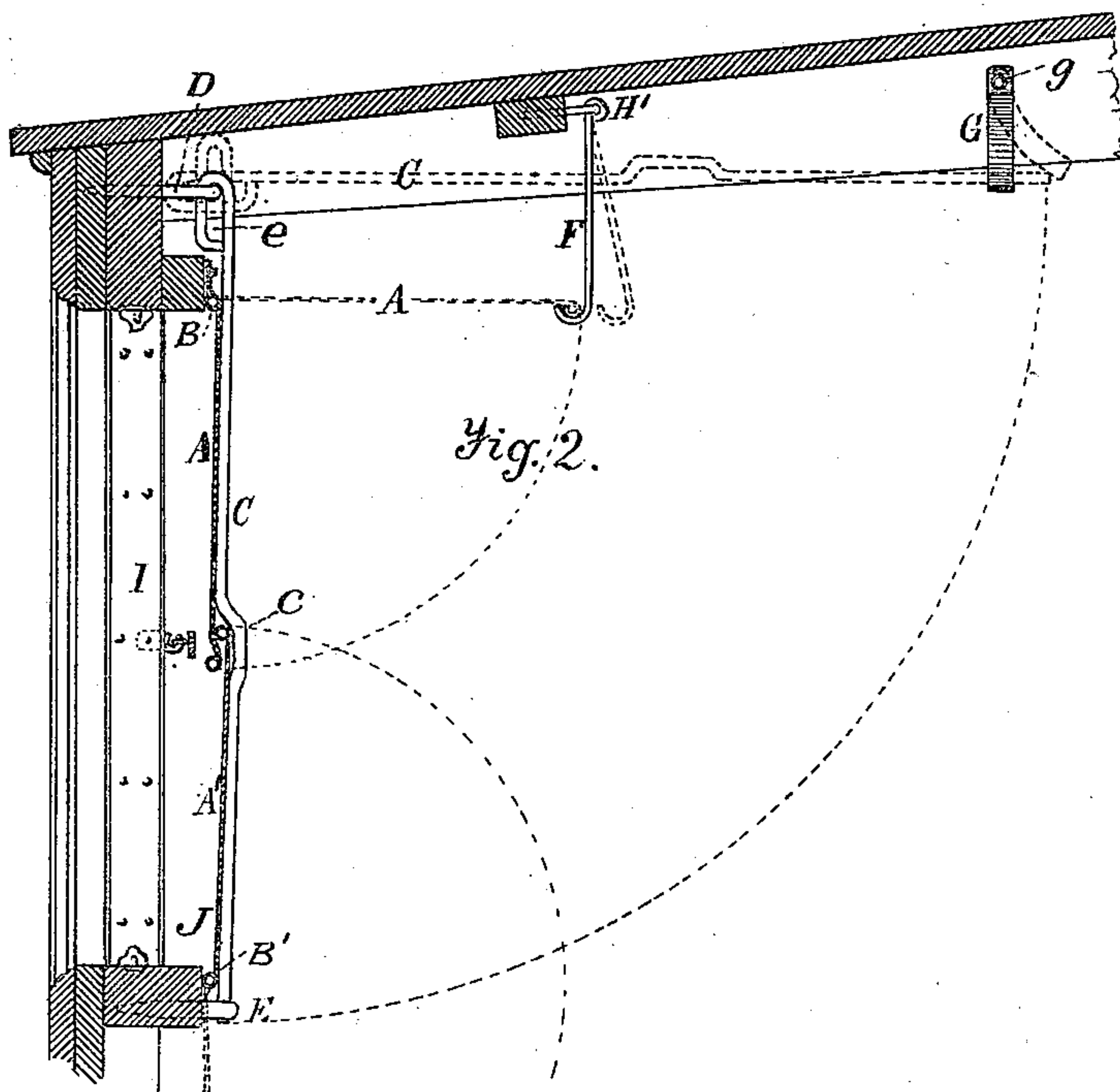
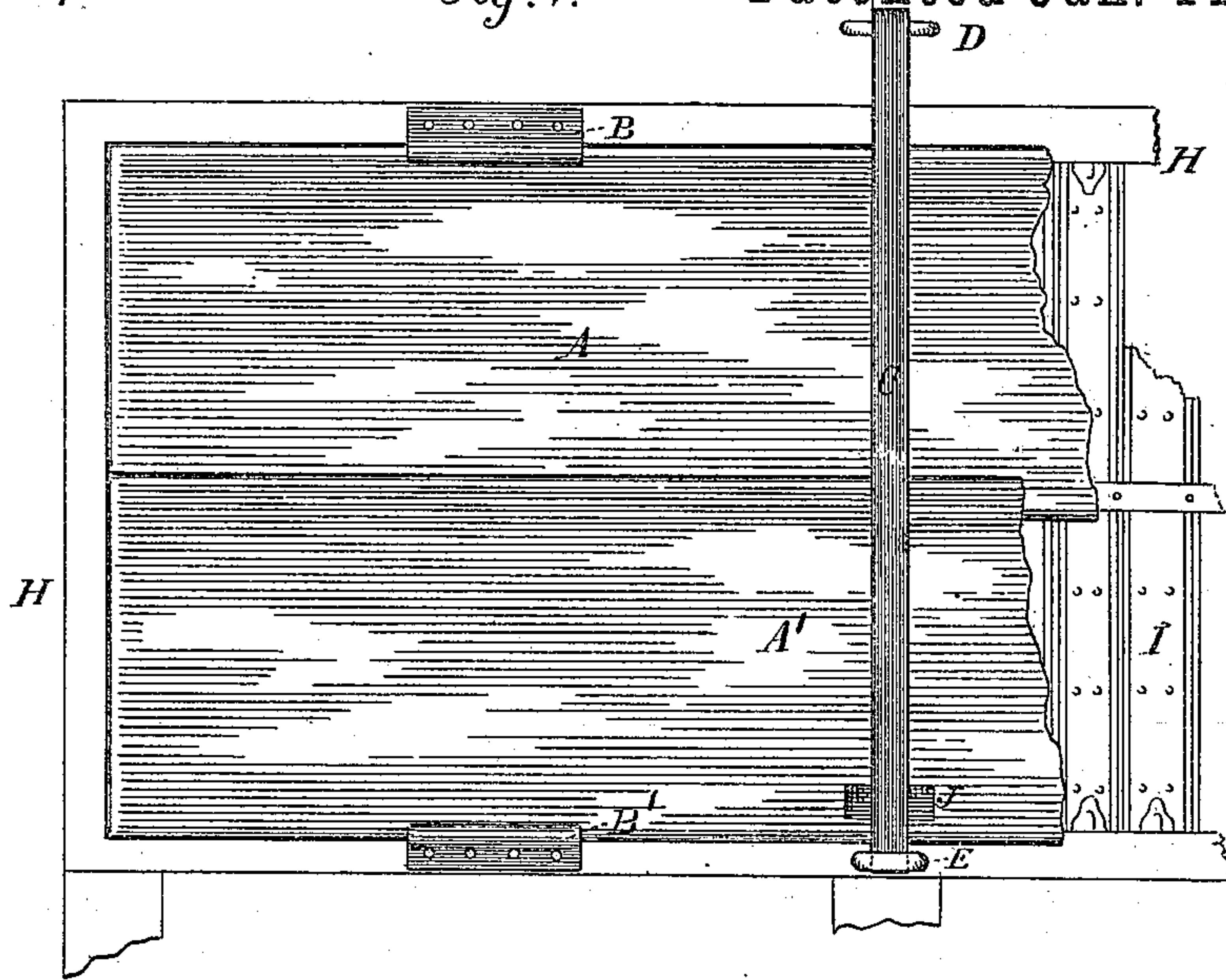
(No Model.)

H. ARMS.
STOCK CAR.

No. 355,907.

Fig. 1.

Patented Jan. 11, 1887.



Witnesses:

E. Hickenlooper.
W. E. Chappin

Inventor:

Harrison Arms,

by G. W. J. Stone,
att'y

UNITED STATES PATENT OFFICE.

HARRISON ARMS, OF TOLEDO, OHIO.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 355,907, dated January 11, 1887.

Application filed May 6, 1886. Serial No. 201,342. (No model.)

To all whom it may concern:

Be it known that I, HARRISON ARMS, of Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful
5 Improvements in Stock-Cars, of which the following is a specification, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an inside storm and
10 winter blind or shutter, and to means for hanging and securing the same in either its open or closed position.

The invention is intended specifically for use with the ventilating-shutters described and
15 shown in Letters Patent No. 308,808, assigned to me, and Letters Patent No. 328,745, granted to me, the storm and winter blinds or shutters being placed immediately behind the ventilating-slats and adapted to be used either with
20 or independently of them.

In the accompanying drawings, Figure 1 is a rear view—that is to say, a view from the interior of the car—showing the storm and winter blinds or shutters in their closed position, and also the relation which they bear to
25 the ventilating-slats in front of them. Fig. 2 is a vertical transverse section of a portion of the car, showing the arrangement of my invention.

30 Similar letters of reference indicate similar parts in the two figures.

The frame-work of the car is shown by H. The storm and winter shutters (represented by A A') are hinged at B B' to the frame-work H. The upper shutter, A, is adapted to open upward, as shown in dotted lines in Fig. 2, and when open is held by the hanger F, which is suspended from the bolt H', driven into a rafter of the car. The lower shutter, A', hinged at
40 B', opens downward, also as shown in dotted lines, Fig. 2.

C is a strap or brace suspended from an eyebolt, D, the brace having an elongated slot, e, which allows it to be lifted, as shown in dotted
45 lines, Fig. 2.

The lower end of the strap or brace C, when it is used to secure the shutters A A' in their closed position, as shown in Fig. 2, fits in the eyebolt E, secured to the frame-work of the car. When the shutters are to be lifted or
50 opened and the brace required to be out of the way, it is moved to the position shown in dotted lines, Fig. 2, and its ends supported by the hanger G, which is pivoted at g. The brace C, centrally of its length, is bent out or
55 bulged, as shown at c, to allow for the projection at the point of connection of the two shutters A A'. The lower shutter, A', is provided with a hole, J, through which the head of the staple E passes when the shutter A' is
60 open, the hole allowing the shutter to hang in a vertical position.

I I are the ventilating-shutters, as described in the said Patents Nos. 308,808 and 328,745.

It has been found that the ventilating shut-
65 ters are insufficient to protect the stock from inclement weather during the winter and rainy seasons, and that the desired protection is fully obtained by the use of the storm and winter
70 shutters herein described.

Having described my invention, I claim—

1. In a stock-car, the hinged shutters A A', combined with the brace C and its securing devices, substantially as set forth.

2. In a stock-car, the combination of the
75 shutters A A', brace C and its securing devices, and the hanger F, substantially as set forth.

3. In a stock-car, the combination of the ventilating-slats I with inside storm and win-
80 ter shutters and securing devices, substantially as set forth.

In testimony whereof I hereunto set my hand and seal.

HARRISON ARMS. [L. S.]

Witnesses:

GEO. H. BECKWITH,
G. B. ORWIG.