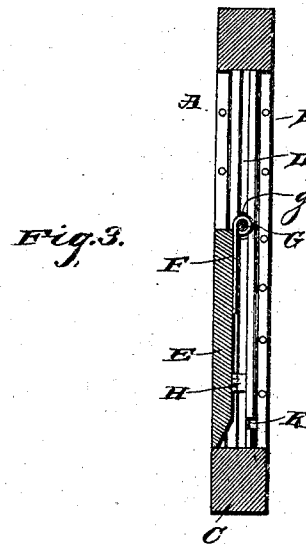
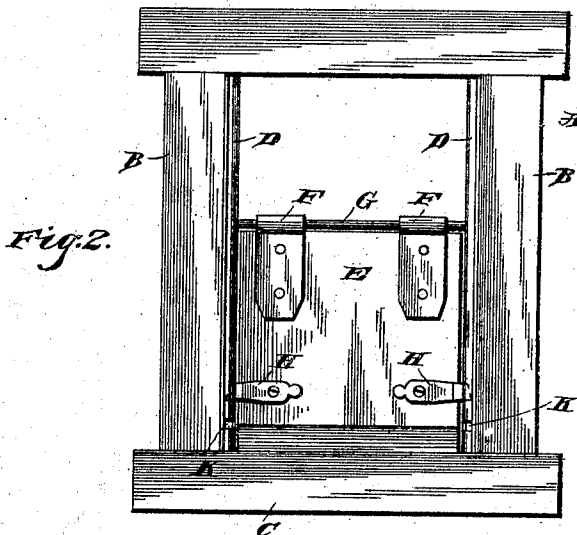
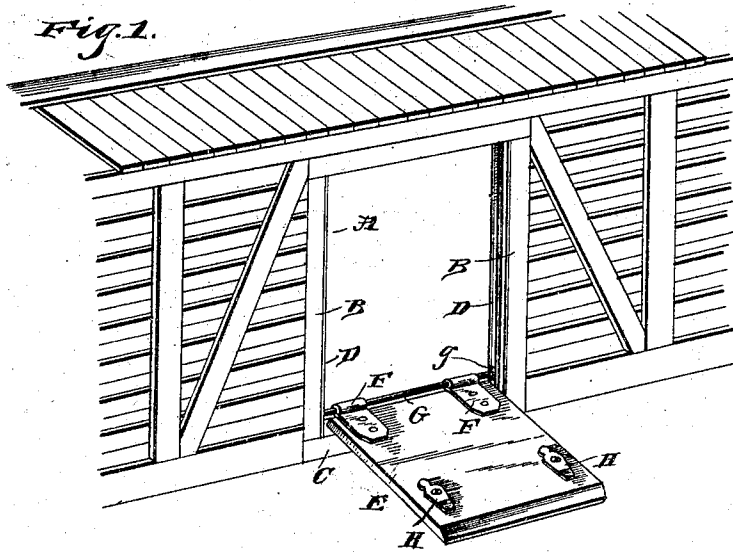


(No Model.)

H. O. DORN.
COMBINED STOCK BRIDGE AND DOOR.

No. 502,510.

Patented* Aug. 1, 1893.



Witnesses

B. S. Oker
C. E. Oker

Inventor

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UNITED STATES PATENT OFFICE.

HERBERT O. DORN, OF SOUTH SIOUX CITY, NEBRASKA.

COMBINED STOCK BRIDGE AND DOOR.

SPECIFICATION forming part of Letters Patent No. 502,510, dated August 1, 1893.

Application filed August 13, 1892. Serial No. 443,041. (No model.)

To all whom it may concern:

Be it known that I, HERBERT O. DORN, a citizen of the United States, residing at South Sioux City, in the county of Dakota and State of Nebraska, have invented a new and useful Combined Stock Bridge and Door, of which the following is a specification.

My invention relates to a combined cattle bridge and guard for stock-cars, the object of my improvement being to provide a simple and easily manipulated device which is permanently connected with stock cars, and which when in the operative position forms a safe and convenient bridge over which cattle, stock, or merchandise may be taken either to or from the car, and which when folded forms a guard to prevent the stock from crowding against the usual doors of the car.

My invention is described in detail in connection with the accompanying drawings, and is specifically pointed out in the appended claims.

In the drawings: Figure 1 is a perspective view of my improved bridge applied in the operative position to a stock-car, a partial view of the latter being shown. Fig. 2 is a front view with the device in its folded position. Fig. 3 is a vertical sectional view, of the device in its folded position. Fig. 4 is a detail view of one of the catches.

A designates the frame of the ordinary stock-car door having the vertical jambs, B B, and the sill, C, and D D designate vertical slotted ways or guides, secured to the surfaces of the jambs.

E designates the bridge, provided at one edge with hinge-eyes, F F, which engage the transverse slide-rod, G, the extremities of which are provided with heads, g g, which fit to slide in the ways or guides upon the inner surfaces of the jambs. The bridge is further provided, near the opposite or free edge with the pivoted catches, H H, which are adapted to extend at their outer ends beyond the side edges of the bridge and engage the ways or guides. The outer ends of these catches are beveled or cut at an angle, as shown clearly in the detail view, Fig. 4, whereby it may be caused to clamp the gate firmly in its folded position.

In operation, the slide or pivot rod is dropped to the lower end of the ways or

guides, and its ends are engaged in notches K K, to hold the rod steady. When not in use the bridge or gate is elevated as shown in Fig. 2, and locked in place by means of the catches.

When it is desired to place articles in the car without the use of the bridge the latter may be raised or slid to the top of the door opening, and held in such position by means of the catches, the beveled ends of which serve as cam latches to maintain the bridge in any desired position.

When in its folded position the bridge is inside the car, parallel with the outer door thereof, and it acts as a guard to prevent the cattle from crowding against the inside of the door and making it difficult to open the same.

The advantages of my improved bridge will be evident from the above description. Briefly stated, the bridge is simple and effective, may be easily extended to the operative position, may be readily folded, and both when extended and when folded it performs a useful function.

Obviously, the free edge of the bridge or guard may be elevated and held in position to form the upper edge of the guard in its vertical position by means of catches, such arrangement being common in this class of devices; but I prefer to elevate the pivoted end of the guard whereby the free end thereof becomes the lower edge when the device is in its vertical position, inasmuch as this arrangement insures greater security and prevents accidental displacement of the guard. This reversibility, however, admits of the quick adjustment of the guard, thus adding to its convenience and efficiency.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a stock car, the combination with vertical guides or ways arranged at the sides of the door, of a combined bridge and guard, pivotally connected at one end to a slide-rod, whose extremities are slidably mounted in said guides or ways, and swinging catches pivotally connected to the bridge near its free edge and adapted to engage in said guides or ways, the extremities of the catches being beveled to lock the bridge or guard at any part of the door opening, substantially as described.

2. In combination with a stock-car, the vertical guides or ways arranged at opposite sides of a door and extending from top to bottom thereof, the reversible bridge or guard provided with a slide rod fitting slidably in said guides or ways, and means for locking the bridge or guard at any desired elevation, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HERBERT O. DORN.

Witnesses:

GEO. H. MULLINS,
D. C. WILBUR.