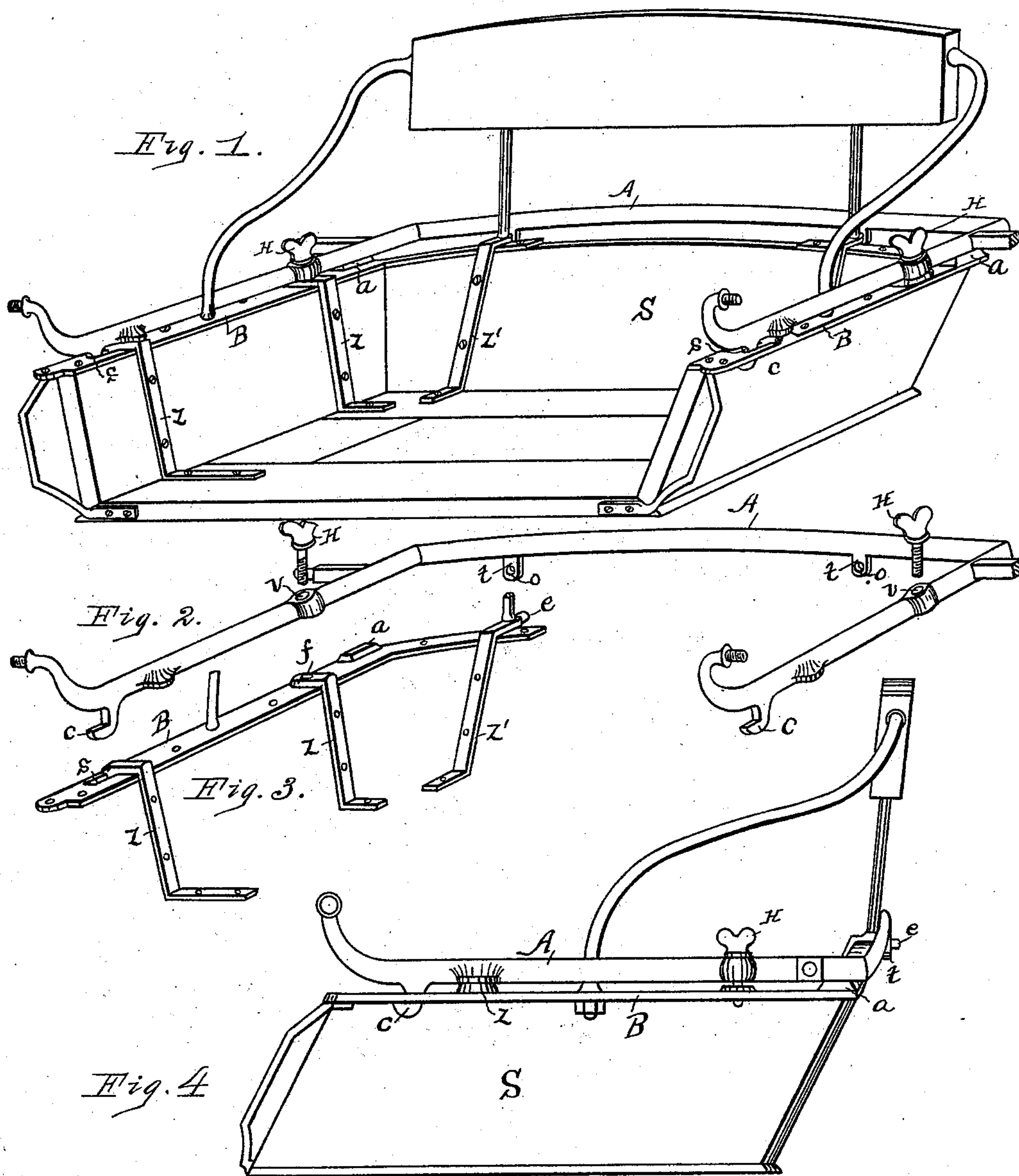


(No Model.)

S. BURDSALL.  
SHIFTING RAIL FOR VEHICLES.

No. 408,651.

Patented Aug. 6, 1889.



Attest.  
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C. S. Wheeler

Inventor.  
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By  
Roscoe B. Wheeler  
att'y



# UNITED STATES PATENT OFFICE.

STEPHEN BURDSALL, OF FREMONT, OHIO, ASSIGNOR TO JOHN V. BEERY  
AND DAVID DAVIS, OF SAME PLACE.

## SHIFTING RAIL FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 408,651, dated August 6, 1889.

Application filed April 25, 1889. Serial No. 308,614. (No model.)

*To all whom it may concern:*

Be it known that I, STEPHEN BURDSALL, a citizen of the United States, residing at Fremont, in the county of Sandusky and State of Ohio, have invented certain new and useful Improvements in Detachable or Shifting Rails for Vehicles; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to detachable rails for vehicles; and it consists in a certain construction and arrangement of parts, whereby the top or canopy of a vehicle may be easily and quickly removed to form an open vehicle, and when replaced said parts being firmly secured from rattling, all of which will be fully hereinafter set forth, and the essential features of my device pointed out particularly in the claims.

In the accompanying drawings, forming a part of the specification, Figure 1 is an isometrical view of a vehicle-seat, showing the detachable rail mounted thereon. Fig. 2 is a view of said rail detached. Fig. 3 is a detail showing seat and brace-irons detached from the seat. Fig. 4 is an end elevation of the vehicle-seat and rail.

As indicated in the drawings, S represents a vehicle-seat, B B the seat-irons, Z Z' the brace-irons, and A the detachable rail.

Secured to the top of the ends and back of the seat are the L-shaped seat-irons B B, said seat-irons having the open slots s in their forward end, and being provided near the angle with the raised support a. (See Figs. 1 and 3.) The brace-irons Z Z' are secured to the bottom and end of the seat, their upper end being bent over the seat-iron, forming raised supports for the rail A, as clearly shown in Figs. 1, 3, and 4. The brace-irons Z' are secured to the bottom and back of the seat, their upper end being bent over the seat-iron and provided with the lug e, as shown in Figs. 3 and 4.

The detachable rail A is provided at its forward ends with the hooks c c, the said rail having through its end portions the holes v, which loosely receive the thumb-screw H, the back portion of said rail being provided with the depending ears t, having the holes o. The rail A is secured to the seat by placing the hooks c on the forward or free ends of said rail in the open slot s in the ends of the seat-irons, and, forcing said rail forward, causing the hooks of the rail to engage under the seat-irons, and at the same time the lugs e on the ends of the brace-irons Z' enter the holes o in the ears t of the rail, when the holes v through the end portions of the rail will register with the screw-threaded hole f in the seat-iron. (See Figs. 2, 3, and 4.) Then, by means of the thumb-screws H passing through the rail into the seat-irons, the parts are secured in position, as shown in Figs. 1 and 4.

On looking at Fig. 4 it will be seen that the raised bearings of the seat-iron, into which the thumb-screw H is screwed, is lower than the bearings Z and a on each side thereof. Therefore, when the thumb-screw is screwed down, the rail will be slightly sprung between the bearings Z and a. The bearing Z acting as a fulcrum, a leverage force will be exerted on the outer end of the rail, forcing the hook c tightly against the under face of the seat-iron, which securely binds the parts and prevents rattling.

To detach the rail A, the thumb-screws H are unscrewed from the seat-irons, and said rail is drawn back, disengaging the hooks c c and lugs e e, when the rail is free to be removed.

Having thus fully set forth my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the seat-irons having open slots at their forward ends, and the raised supports, the detachable rail adapted to encircle the seat, its forward ends having hooks to engage with the seat-irons, and screws passing through the detachable rail at a point midway between the raised supports, substantially as specified.

2. In combination with the seat-iron hav-

ing the slot at the forward end, and the raised supports, the detachable rail having a hook at the free end, said detachable rail adapted to engage with the seat-iron at the back of  
5 the seat, and screws passing through the rail into the seat-iron, as and for the purposes specified.

3. In combination with the seat-irons having the open slots at their forward ends, and  
10 the raised supports, the detachable rail adapted to encircle the seat, its forward ends

having hooks to engage with the seat-irons, its back portion having ears to engage with the lugs of the brace-irons, and screws passing through the detachable rail into the seat- 15 irons, substantially as set forth.

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

STEPHEN BURDSALL.

Witnesses:

R. B. WHEELER,

C. S. WHEELER.