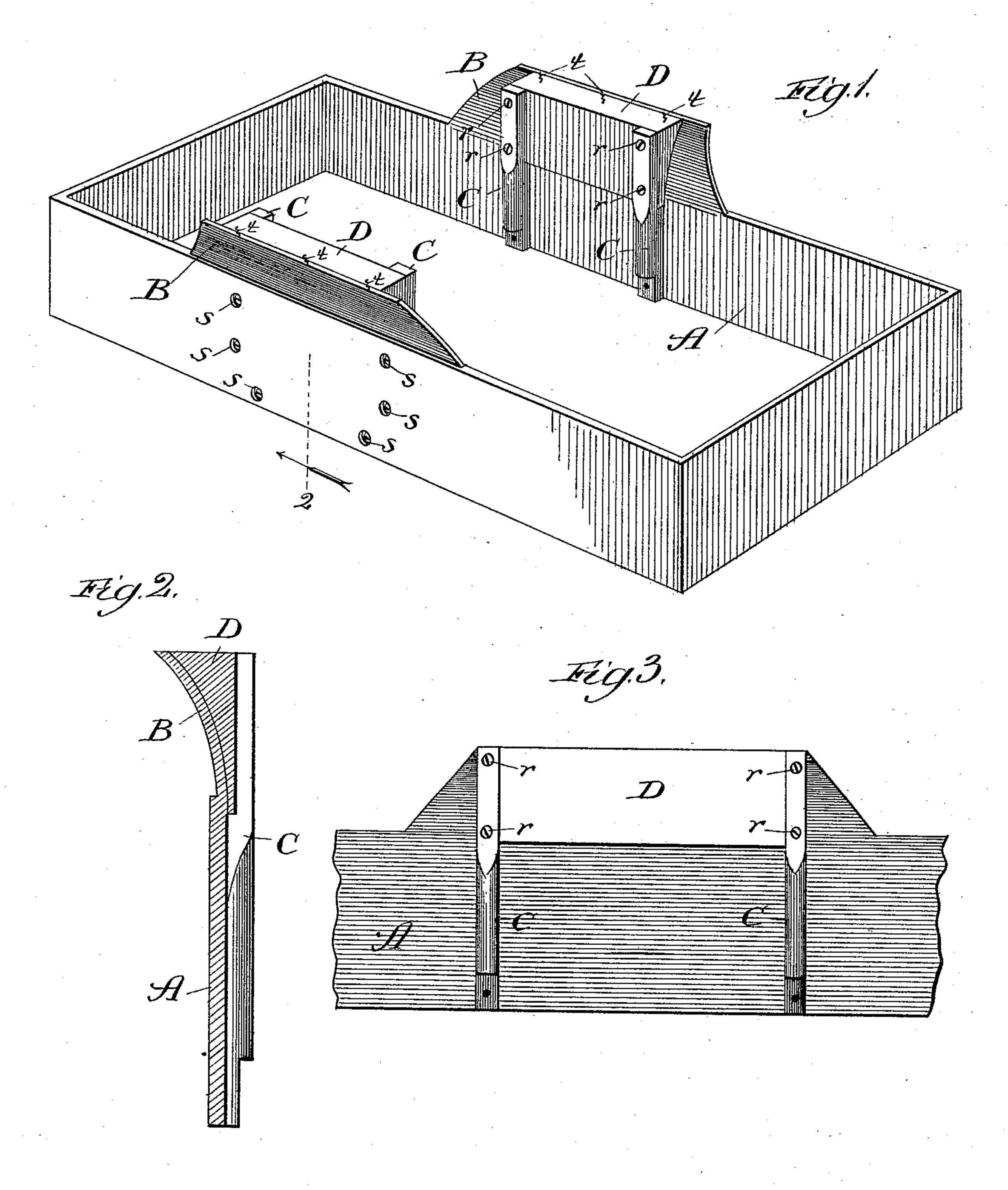
## E. FINN. RISER FOR WAGON BODIES.

No. 488,671.

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## United States Patent Office.

## EDWIN FINN, OF ELKHART, INDIANA.

## RISER FOR WAGON-BODIES.

SPECIFICATION forming part of Letters Patent No. 488,671, dated December 27, 1892.

Application filed June 21, 1892. Serial No. 437,459. (No model.)

To all whom it may concern:

Be it known that I, EDWIN FINN, a citizen of the United States, residing at Elkhart, in the county of Elkhart and State of Indiana, have invented a new and useful Improvement in Concave Risers for Wagon-Bodies, of which the following is a specification.

My invention relates to an improvement in concave risers for the seats of wagon bodies and is particularly directed to overcome certain defects in risers of this character as here-

tofore constructed.

The concave riser is usually in the nature of an extension of the panel curved outward 15 from the body and properly braced by the seat frame or supports. So far as I am aware there have heretofore been two characteristic constructions of risers of this nature both of which involve the making of the riser proper 20 wholly or in part in a separate piece from the panel. In some cases the riser proper or concave strip which constitutes the riser has been made in a single piece bent in the usual way or given a proper curvature by sawing, the 25 lower edge being in the form of a dovetail projection or dovetail recess to enter or receive a corresponding recess or projection formed on the upper edge of the panel to which it is glued. Where the riser is made by sawing it 30 is usually made with an inward squared projection section, the inner face of which lies flush with the uprights of the seat-support to which it is glued and fastened by screws, wire nails, or the like. It is found in practice that 35 the concave riser under the warping action of the atmosphere becomes separated from the panel notwithstanding the presence of the glue and screws, and the crack thus presented, although small and only slightly observable 40 before the body is painted shows very clearly after finishing and renders the product unsightly to an extent to interfere materially with its value. Another form in common use involves the production of a riser in two parts, 45 one of which is in the nature of a vertical extension of the panel and is straight, and the other part of which is in the form of a curved strip cut on its inner side toward the lower edge on a long bevel through which it is glued 50 to the vertical part. The two parts of the riser are adjusted toward each other and glued

together with such delicacy as to present the

appearance of a single piece, and the upper or curved section is provided as before with a rearward extending brace or block through 55 the medium of which the curvature is retained. In this construction the same objection is present as in the other, namely, that where the joint is formed a crack is liable to result which becomes the more unsightly when 60 the body is finished.

A further objection to risers as heretofore constructed is that the bracing of the outwardly curved part is necessarily confined to the upper portion thereof, whereas the great- 65 est strain is exerted at the point where the

riser is joined to the panel.

It is the purpose of my invention to produce a riser for wagon bodies which will be free of the objections herein noted, and to these ends 70 it consists in a seat riser made of a concave strip integral with the panel and braced against the seat support by an interposed concave wedge extending from the upper edge downward to a point beyond the upper edge 75 of the panel.

My invention consists further in the preferred details of construction, all as herein-

after more fully described.

In the drawings—Figure 1 is a perspective 80 view of a wagon body provided with a concave seat riser constructed in accordance with my invention; Fig. 2 is a vertical transverse section taken through one of the risers on the line of 2 of Fig. 1 and viewed in the direction 85 of the arrow; and Fig. 3 is a rear view of a section of a panel having the riser properly braced.

A represents the side panel of a wagon body, and B represents the curved upward extend- 90 ing section integral with the panel which constitutes the concave riser.

C represents the usual vertical seat supports found in similar devices. Instead of being formed substantially of the same width 95 from near the bottom to the top with a short mortise at the upper outer end, the mortise in the supports C is made longer and caused to extend from the upper end of the support to a point below the upper edge of the panel A, 100 as clearly illustrated in Fig. 2.

Between the riser B and the support C and set into the mortise formed in the support is a wedge D in the form of a block of a length

to extend from the support C to the other having its outer face concaved to conform to

the curvature of the riser B.

To construct and adjust the parts it is preferred to proceed as follows: The panels are sawed from a straight board with the riser integral therewith, and the latter are thereupon curved under the joint action of heat and moisture in the common manner. The supports C are thereupon applied in place and

o ports C are thereupon applied in place and glued to the panel and riser, the wedge D having previously been secured in the mortise, heavy pressure being exerted to insure a perfect uniting between the parts. This may be

made more secure by driving wires t into the upper edge of the riser and wedge. Screws are thereupon introduced through the panel into the seat supports C, as indicated at s, and also through the seat supports and into

20 the wedge, as indicated at r. In this manner a riser is produced which, on its outer surface, or that exposed to view, shows and can show no defacing crack, and at the point

where the greatest strain is exerted, namely, where the riser joins the panel, an additional 25 brace is provided by having the wedge D extend down below this point.

What I claim as new and desire to secure

by Letters Patent is—

1. In a wagon body, the combination with 30 the panel having the integral concave seat riser B, the brace D extending along the inner face of the riser and partway over the

panel, substantially as described.

2. In a wagon body, in combination with 35 the panel A having the integral concave seat riser B, seat supports C having the mortise extending from the upper edge to a point below the top of the panel, and concave wedge D introduced between the seat support and 40 riser and panel, substantially as and for the purpose described.

EDWIN FINN.

In presence of— CHARLES B. FISH, JAMES S. DODGE.