(No Model.)

## E. J. RANDALL & G. S. CHASE. TRACE CARRIER.

No. 507,164.

Patented Oct. 24, 1893.

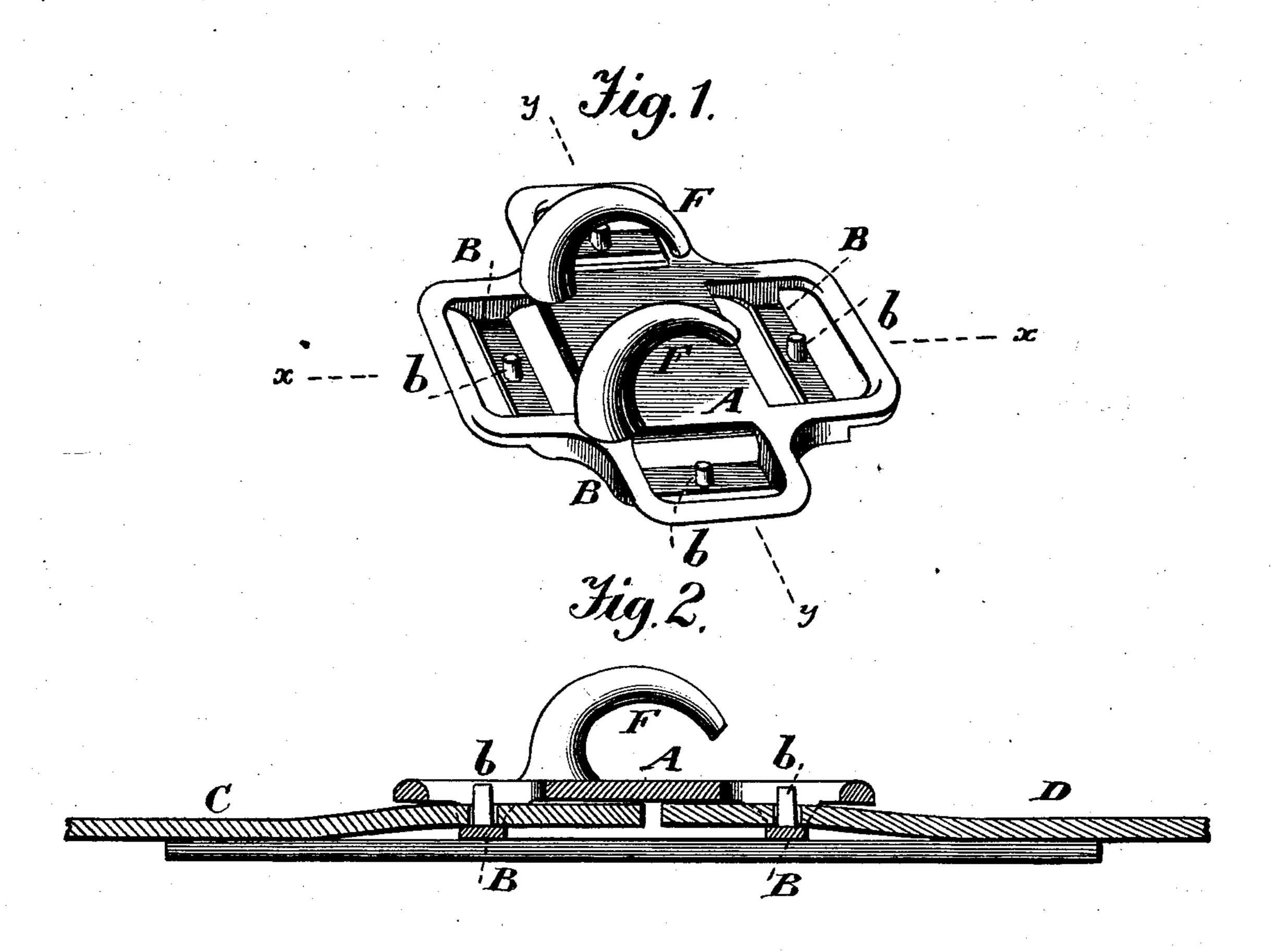
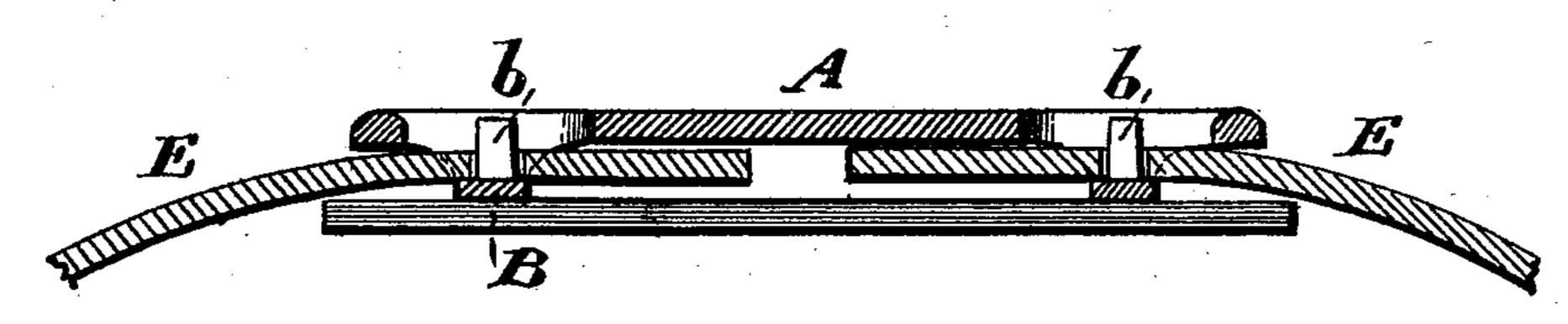


Fig. 3.



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## United States Patent Office.

EGBERT J. RANDALL AND GEORGE S. CHASE, OF EVART, MICHIGAN.

## TRACE-CARRIER.

SPECIFICATION forming part of Letters Patent No. 507,164, dated October 24, 1893.

Application filed December 27, 1892. Serial No. 456,339. (No model.)

To all whom it may concern:

Be it known that we, EGBERT J. RANDALL and GEORGE S. CHASE, citizens of the United States, residing at Evart, in the county of Osceola and State of Michigan, have invented certain new and useful Improvements in Strap-Connectors and Trace-Carriers; and we 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 of reference marked thereon, which form a part of this specification.

The special object of the invention is to make a one-piece connection for harness to which the back strap, hipstraps and crupperstrap may all be buckled, while on the top are placed hooks to receive the cockeyes of the traces when taken from the singletree.

Figure 1 of the drawings is a perspective view; Fig. 2 a section on the dotted line x x of Fig. 1; Fig. 3 a section on the dotted line y y of Fig. 1.

In the drawings, A represents a rectangular plate to each of whose four sides is attached a loop. B is an auxiliary frame, cast in one piece with the loop-plate A but about a quarter of an inch below it so as to bring the four lugs b on its upper side in the middle of the loops. The lugs b extend in a vertical

direction so that their upper ends are about flush with the top of plate A.

The backstrap C, crupperstrap D and the

35 hipstraps E E have each an end passed under I

a loop and under the plate A while it is held by the passage of a lug b through a hole thereof. Thus each is securely held in position by the metallic connection A B while the hooks F F serve the usual purpose of holding 40 the cockeyes of the traces.

By our construction, we do away with the stitching in of the two hipstraps, as well as of the crupper and back straps, while the ends of the straps are out of sight, under the plate 45 A which is sufficiently raised above the bar B for that purpose. We also save about three feet and a half of stitching, one and one-fourth feet of leather, and the usual time consumed in smoothing up the edges.

The avoidance of stitching or riveting is a great desideratum in harness-making and one metallic connection accomplishes it.

What we claim as new, and desire to protect by Letters Patent, is—

As an improved article of manufacture, the described trace-carrier and strap connector, consisting of a central imperforate plate carrying two trace-hooks and four straploops on its upper portion and on its lower 60 portion, an open frame with four lugs or tongues extending up into the said loops as shown and described.

Intestimony whereof we affix our signatures in presence of two witnesses.

EGBERT J. RANDALL. GEO. S. CHASE.

Witnesses:

HOMER HOWARD, FRED BOWLEY.