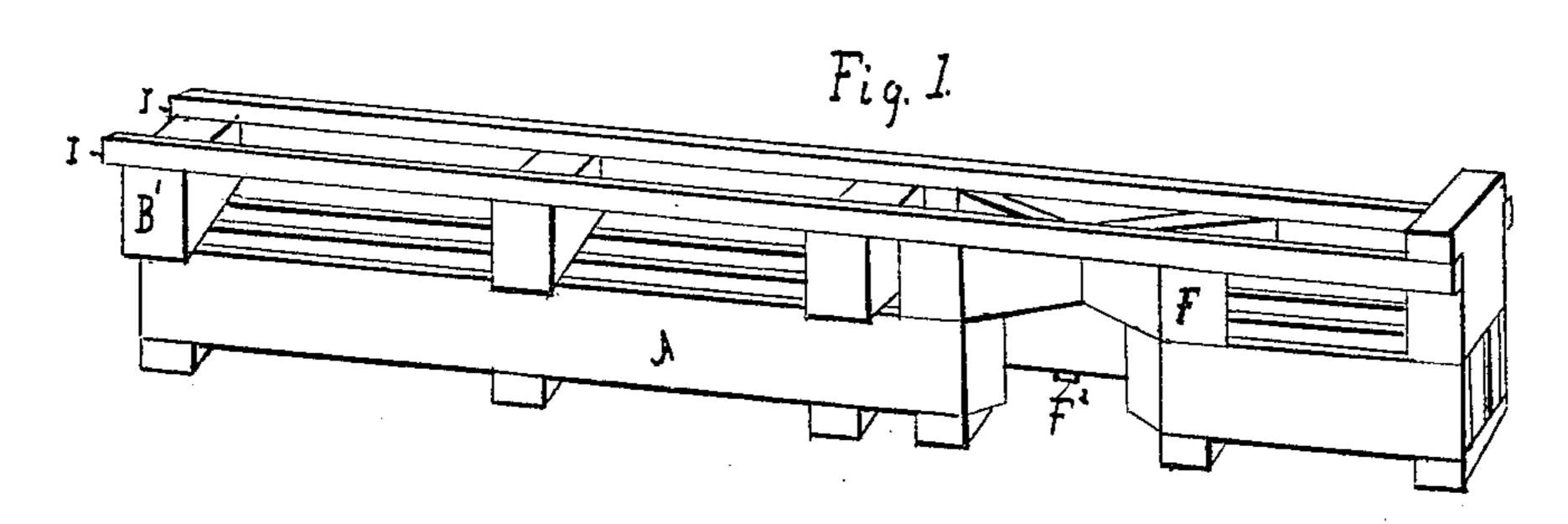
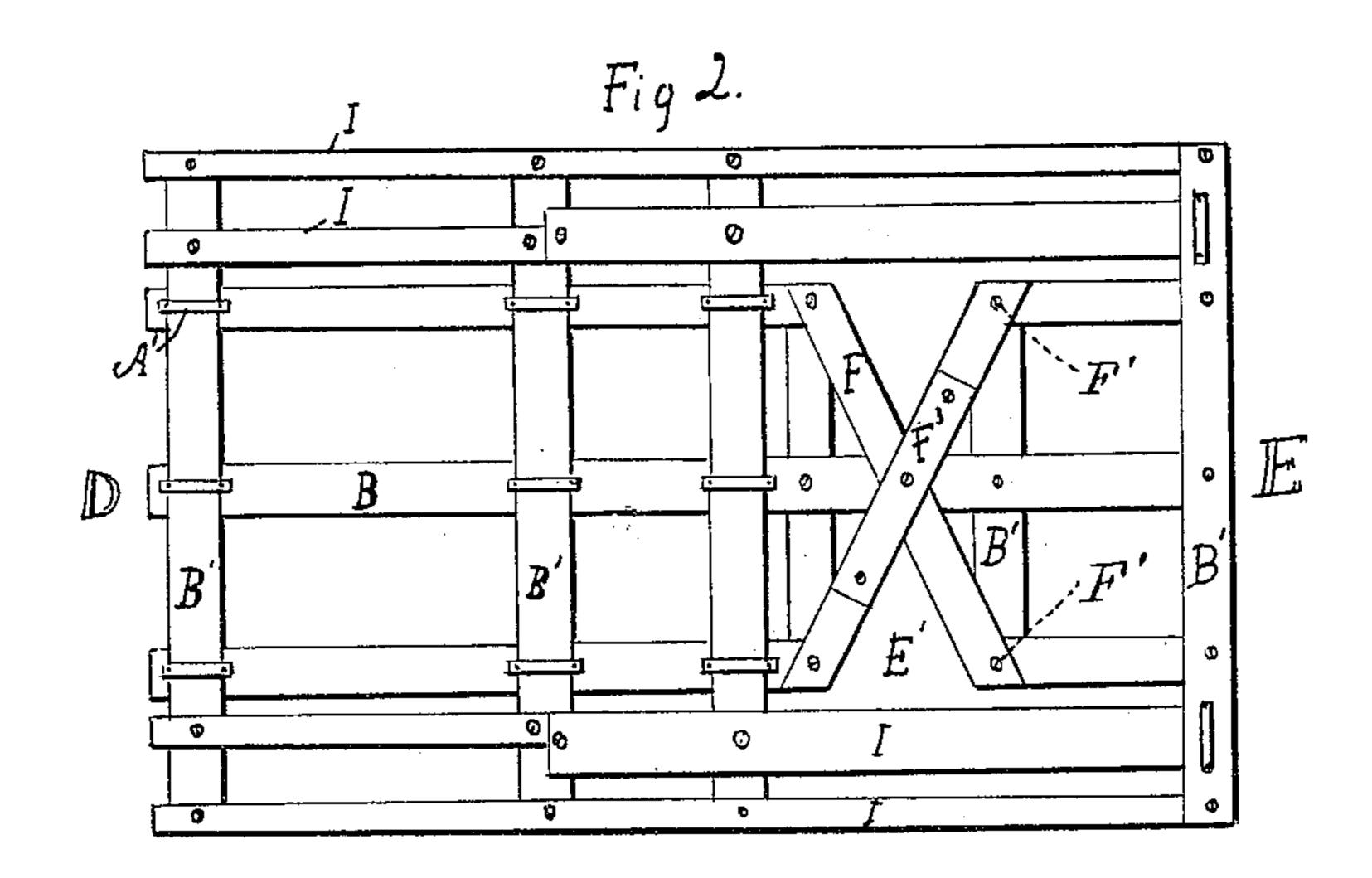
(No Model.)

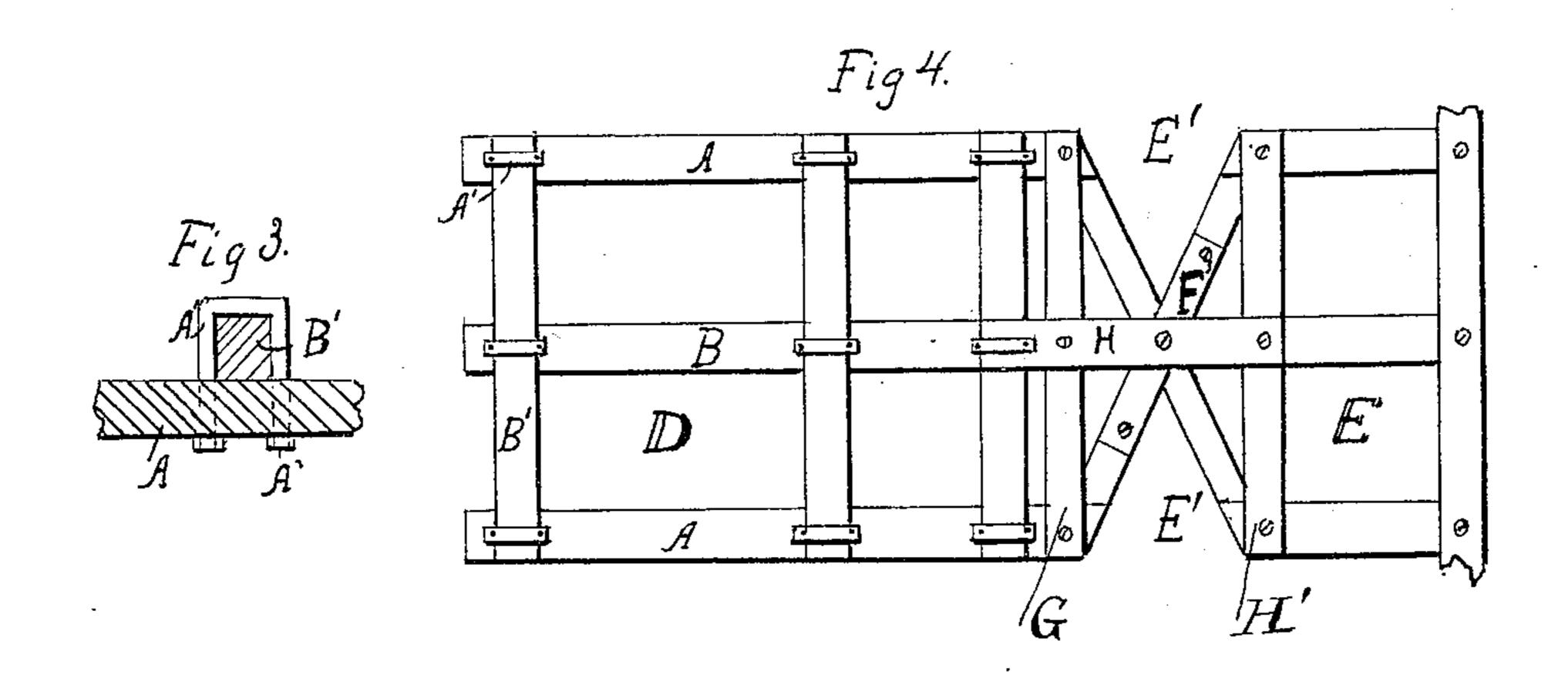
## J. E. & C. B. HAYNES. HAY RACK.

No. 479,878.

Patented Aug. 2, 1892.







Witnesses John F. Joseph James & Layree Charles Den Sommer Strong

## United States Patent Office.

JAMES E. HAYNES AND CHARLES B. HAYNES, OF AMES, ILLINOIS.

## HAY-RACK.

SPECIFICATION forming part of Letters Patent No. 479,878, dated August 2, 1892.

Application filed April 12, 1892. Serial No. 428, 903. (No model.)

To all whom it may concern:

Be it known that we, James E. Haynes and Charles B. Haynes, citizens of the United States, residing at Ames, in the county of Monroe and State of Illinois, have invented certain new and useful Improvements in Hay-Racks; 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.

Our invention relates to a certain new and useful improvement in hay-racks, and more particularly to that part of the hay-rack whereby space is allowed for receiving the wheels of the wagon when it is turned, which device we call a "cross;" and it has for its object to provide a hay-wagon which shall be both strong and able to turn short; and the invention consists in the novel construction and combination of parts, as will be herein-afterfully described, and particularly pointed out in the claim.

Figure 1 in the drawings is a perspective view of our hay-rack. Fig. 2 is the top view. Fig. 3 is a detailed view showing the manner of securing the side and middle bed-pieces to the transverse bed-pieces. Fig. 4 is a view from the bottom, showing braces.

Referring by letters to the accompanying drawings, A designates the platform, which consists of longitudinal sectional side beams and the transverse bed-beams B', held to the side beams on top by stirrups A', the arms of which pass down through holes provided for them in said side beams and are provided with nuts A<sup>2</sup> to retain them in position.

D represents that portion of the rack to the left of the cross. E represents that portion of the rack to the right of the cross.

A middle longitudinal beam B, extending the full length of the body, is securely bolted l

by means of stirrups and forms the lower connection between the sections D and E with the assisting and strengthening power of the cross. The spaces E' thus formed in the bottom of the wagon-rack are intended for and 50 do permit short turns to be made with the wagon while the rack is loaded and in place on the running-gear.

I represents four strips to keep the hay off the wheels.

F designates the cross by which the wagon is allowed to turn short. It also strengthens the frame.

F' indicates the bolts with which the cross is secured to the side beams.

F<sup>2</sup> indicates the bolt which goes through the center of the cross and center beam and secures the two. The cross is provided with an iron plate F<sup>3</sup>, both top and bottom, to hold it solid.

On the bottom of the rack, extending between the transverse beams G and H', is an iron plate H to assist in strengthening the connection between the two sections D and E.

Having thus fully described our invention, 70 what we claim as new, and desire to secure by Letters Patent of the United States, is—

In a hay-rack, the combination of the sectional side beam A, the center beam B, the cross composed of two beams mortised together 75 and provided with plates F<sup>3</sup> F<sup>3</sup>, bolted together on the top and bottom, and a strengthening-plate H, bolted on the bottom of the beam B, thereby strengthening the connection between the parts D and E, substantially as described. 8c

In testimony whereof we affix our signatures in presence of two witnesses.

JAMES E. HAYNES. CHARLES B. HAYNES.

Witnesses: Wm. E. Lohrberg,

WM. ROOK.