

D. G. HETFIELD.
TROTTING SULKY.

No. 188,013.

Patented March 6, 1877.

Fig. 1.

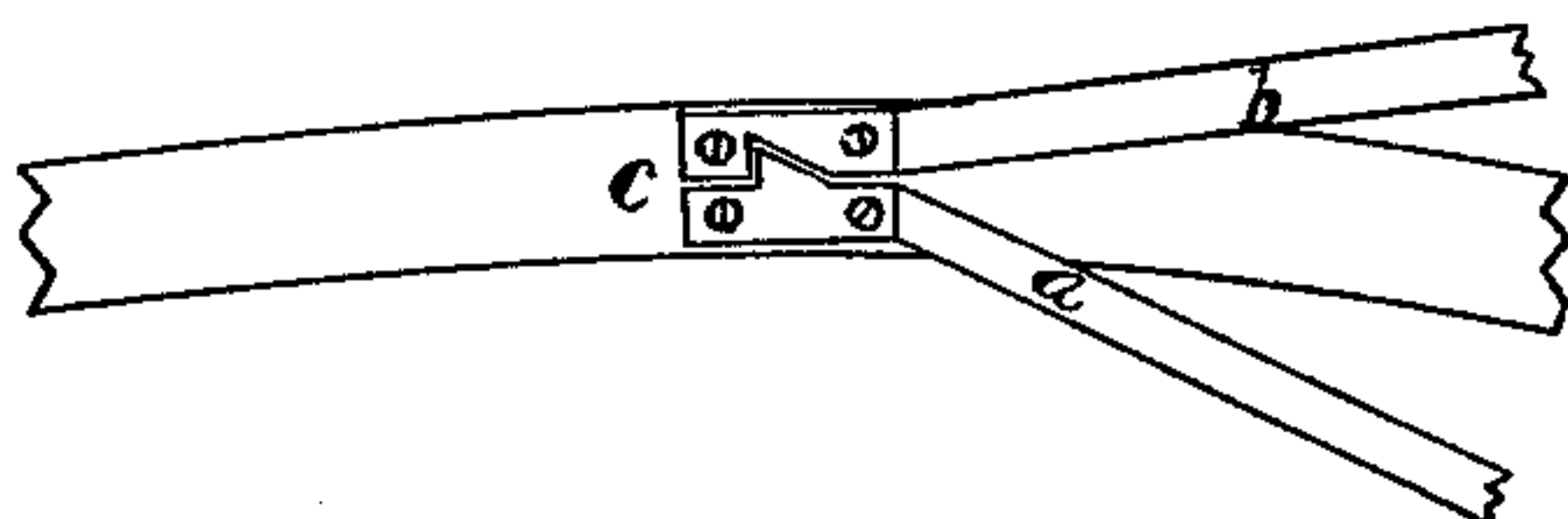
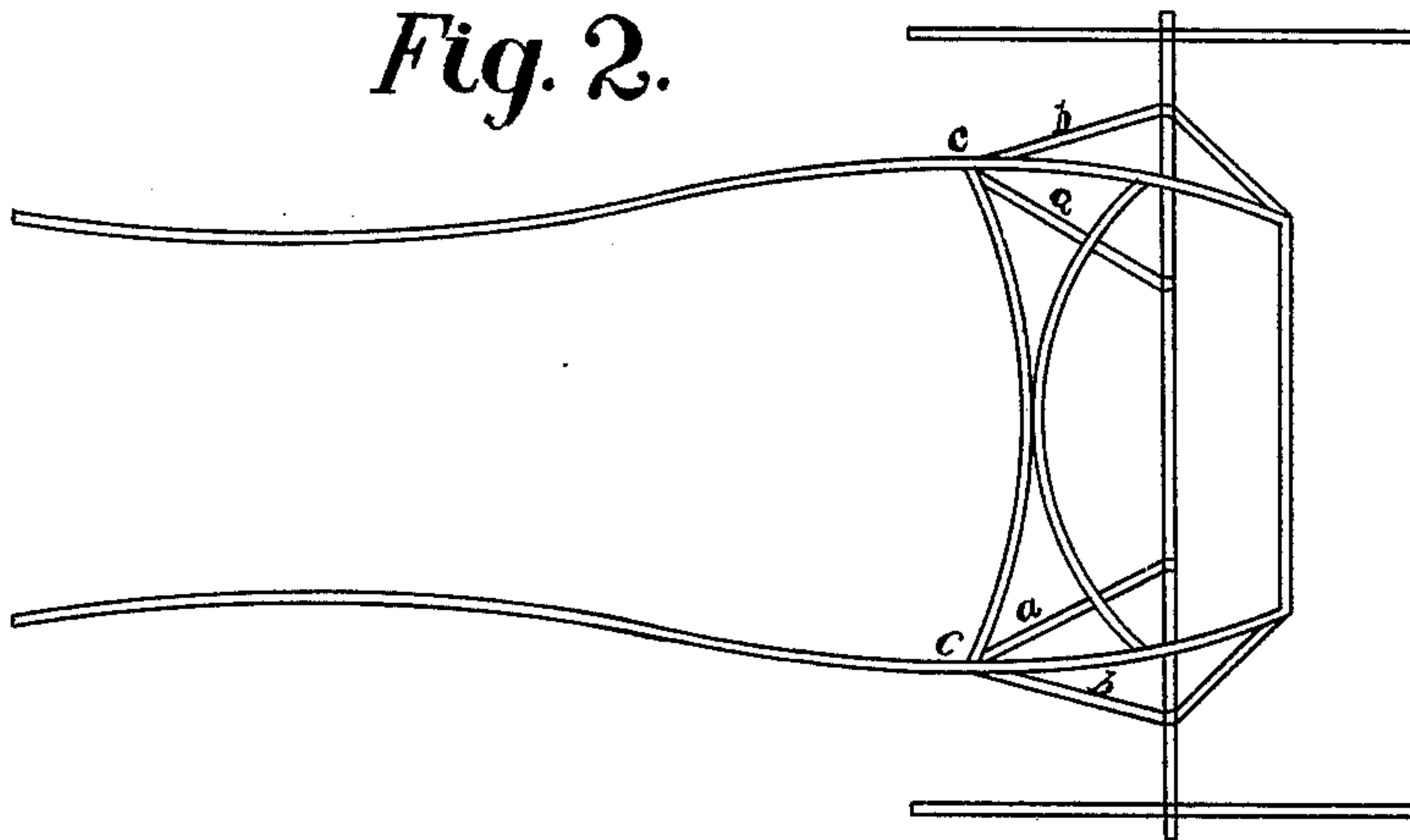


Fig. 2.



Witnesses
W. E. Clark
Crowell & Sons.

Inventor
Daniel G. Hetfield.

UNITED STATES PATENT OFFICE.

DANIEL G. HETFIELD, OF RAHWAY, NEW JERSEY.

IMPROVEMENT IN TROTTING-SULKIES.

Specification forming part of Letters Patent No. **188,013**, dated March 6, 1877; application filed July 10, 1876.

To all whom it may concern:

Be it known that I, DANIEL G. HETFIELD, of the city of Rahway, in the county of Union and State of New Jersey, have invented an Improvement in Trotting-Sulkies, of which the following is a specification:

The object of my invention is to render the axle-tree of a trotting-sulky more stiff and stable, without materially adding to its weight, by means of the additional iron or steel braces *a a*, which braces are attached to the axle-tree much nearer its center than the usual braces *b b*, which make the attachment between the shafts or thills and the axle tree. It also consists in the method of connecting the said additional braces *a a* with the usual braces *b b* at their common junction at the points *c c* on the shafts or thills. The plan view, Figure 1, shows the method of connecting them at their common junction on the shafts or thills. The usual braces *b b* are attached to the shafts or thills in the usual way, except that each one only occupies one-half of the width of the shaft. In the inner edges of the braces *b b* a recess is made, as shown in the drawing, and a projection on each of the additional braces *a*

a fits into them, by means of which the two braces are firmly fastened together at their junction *c c* on the shafts; and as any tendency to spring the axle by any obstruction in the track of the wheel will act in diverse directions on the braces *a a* and *b b*, it follows that the axle will be stiffened to the extent of their divergence from the point *c c*, both being connected to the shafts at a common point, *c c*, and at different points to the axle, as shown in the plan drawing, Fig. 2.

What I claim as my invention is—

1. In a trotting-sulky, the supplemental braces *a a*, attached to the thills and to the axle near its middle, substantially as shown and described.
2. The brace *b*, having its inner edge recessed, and the brace *a*, having a projecting lug adapted to fit such recess, in combination with the thill of a trotting-sulky, substantially as shown, and for the purpose set forth.

DANIEL G. HETFIELD.

Witnesses:

W. E. CLARK,
CHARLES H. JACKSON.