

G. F. CHALENDER.

Trusses for Coaches and Cars.

No. 143,498.

Patented Oct. 7, 1873.

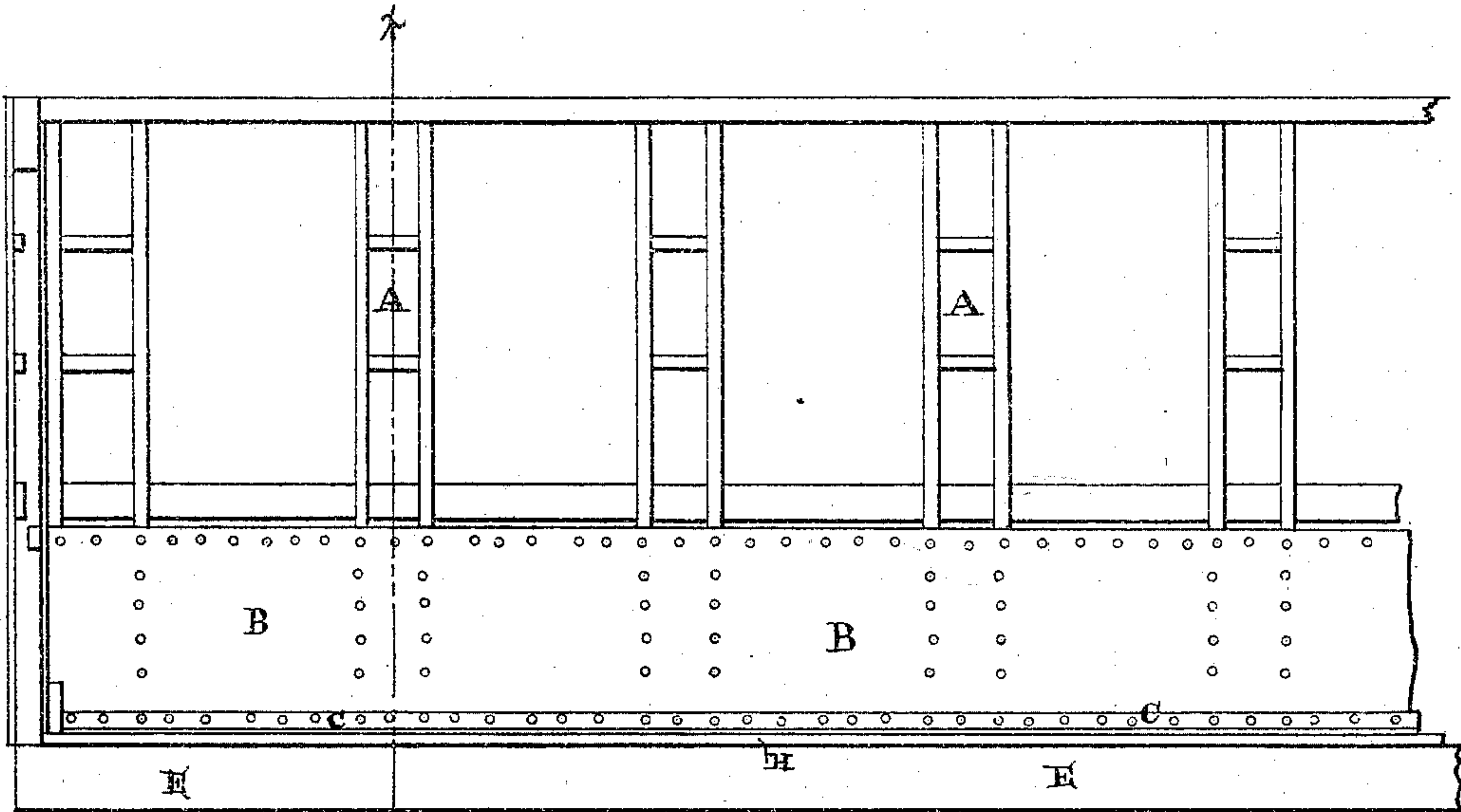


Fig. 1.

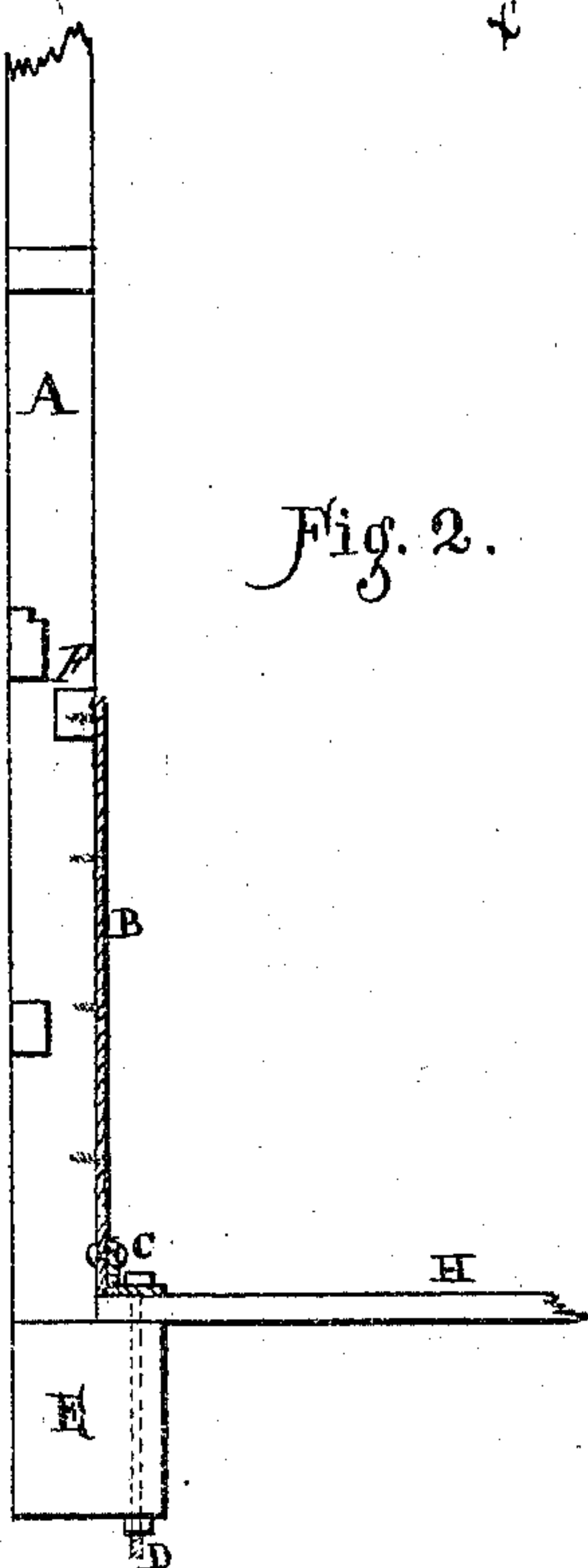


Fig. 2.

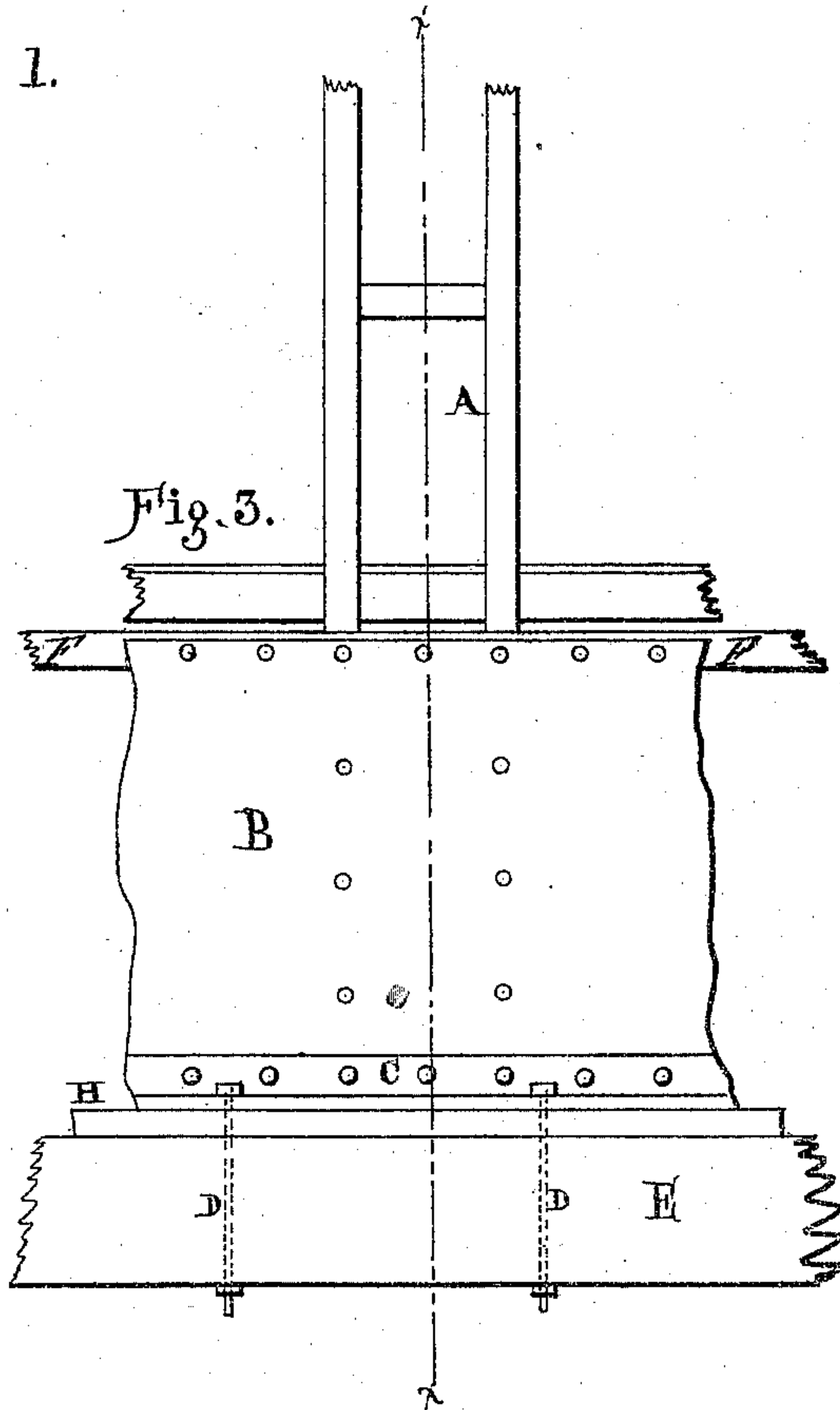


Fig. 3.

Witnesses,

C. M. Higginson
H. Whiting,

Inventor,

Geo. F. Chander

UNITED STATES PATENT OFFICE.

GEORGE F. CHALENDER, OF BURLINGTON, IOWA.

IMPROVEMENT IN TRUSSES FOR COACHES AND CARS.

Specification forming part of Letters Patent No. **143,498**, dated October 7, 1873; application filed January 16, 1873.

To all whom it may concern:

Be it known that I, GEORGE F. CHALENDER, of Burlington, Des Moines county, Iowa, have invented certain Improvements in Truss for Coaches and Cars, of which the following is a specification:

The nature of this invention relates to an improvement in trusses for passenger-coaches; and consists in constructing such trusses of plate or boiler iron, fastened to the sides and sills of the coach, as shown in these specifications, and in the drawings accompanying the same and making a part thereof.

In the drawings, Figure 1 is an elevation of a portion of the framing of a passenger-coach, showing the improved truss. Fig. 2 is a cross-section taken through the framing and improved truss in the plane indicated by the line *x x* in Fig. 1. Fig. 3 is an elevation of the same framing and improved truss shown in Fig. 1, but on a larger scale.

Like letters indicate like parts in all the figures.

A A are the upright posts in the sides of the frame of the coach, arranged in couples. B is the improved truss, constructed either of a single plate of iron of proper dimensions, or of a number of smaller plates riveted together at the overlapping ends, so as to form one continuous plate. This truss should be the full length of the coach, inner measurement, and should occupy the full space on the side of the

coach, between the floor H and the top of the belt-rail F. It should be fastened to the upright posts A A and belt-rail F by screws or bolts, in sufficient number and size to hold it firmly to the frame of the coach, and so give the frame-work strength and stiffness. C is a strip of angle-iron, riveted firmly to the lower edge of the truss or plate, and projecting inwardly and bolted through the sills of the car, as shown at D.

The truss or plate B may be rolled, or otherwise constructed, so as to form the angle-piece C in one with the truss or plate B.

The advantages of this invention are, the economy and simplicity of its construction, and the increased strength and stiffness which it adds to the coach to which it is applied, rendering injury less likely to occur in case of accident.

What I claim as my invention, and desire to secure by Letters Patent, is—

The truss B for cars or coaches, constructed by applying plate-iron to upright posts A A and belt-rail F, and the angle piece or portion C to the lower edge of the truss and to the sill E of the car, substantially as and for the purpose herein described.

GEO. F. CHALENDER.

Witnesses:

C. M. HIGGINSON,
T. S. HOWLAND.