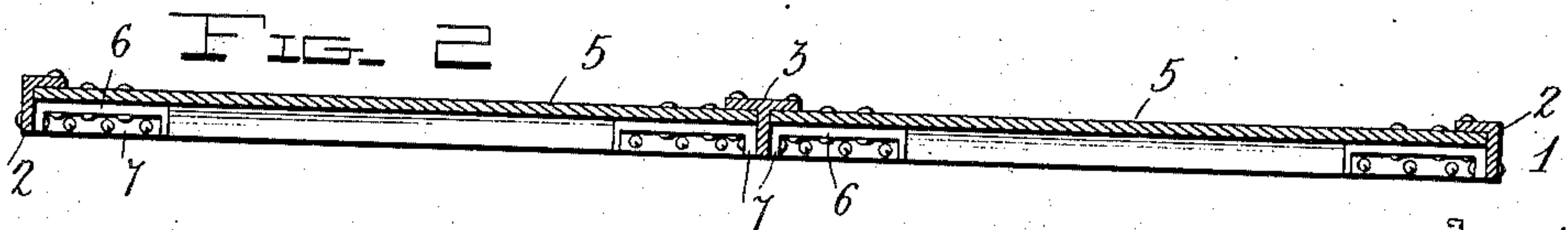
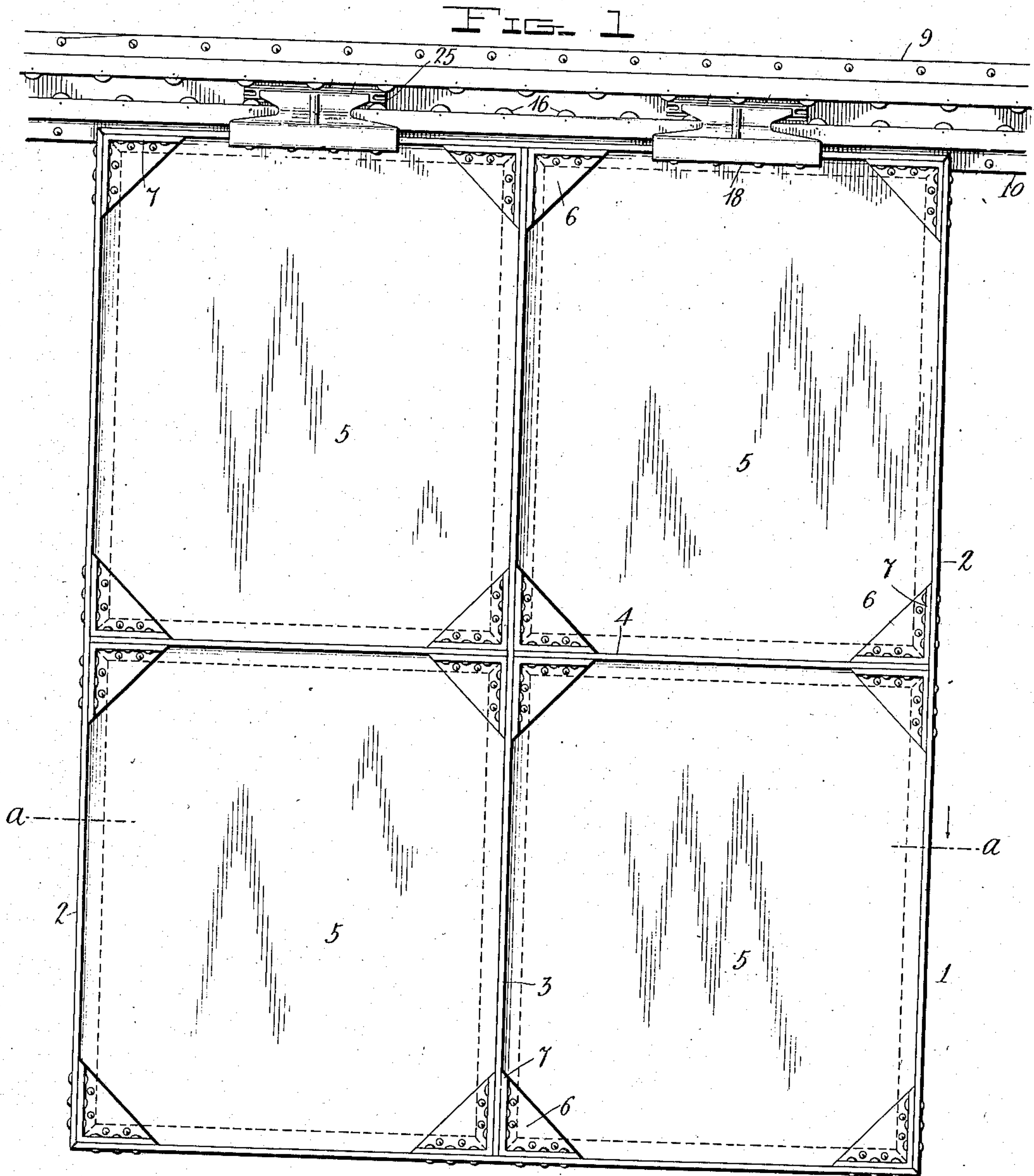


C. M. DONALDSON.
 SLIDING DOOR.
 APPLICATION FILED SEPT. 13, 1907.

947,225.

Patented Jan. 25, 1910.



Witnesses
L. B. Perkins
J. W. Garner

Inventor
Charles M. Donaldson
 By *Victor J. Evans*
 Attorney

UNITED STATES PATENT OFFICE.

CHARLES M. DONALDSON, OF CHARDON, OHIO.

SLIDING DOOR.

947,225.

Specification of Letters Patent. Patented Jan. 25, 1910.

Application filed September 13, 1907. Serial No. 392,744.

To all whom it may concern:

Be it known that I, CHARLES M. DONALDSON, a citizen of the United States of America, residing at Chardon, in the county of Geauga and State of Ohio, have invented new and useful Improvements in Sliding Doors, of which the following is a specification.

This invention relates to improvements in sliding doors for use on railway freight cars and other structures, and the said invention consists in the construction, combination and arrangement of devices hereinafter described and claimed.

The object of the invention is to provide a metallic car door which is light, cheap and simple and is very strong and durable.

In the accompanying drawings,—Figure 1 is an elevation of a door and door hanging devices therefor constructed in accordance with my invention. Fig. 2 is a horizontal sectional view of the same, taken on the plane indicated by the line *a—a* of Fig. 1.

The exterior frame 1 of the door 2 is made of angle metal, preferably iron or steel. The door frame is divided into panels by a vertical bar 3 and a horizontal bar 4, which bars 3 and 4 are made of T-iron or steel, as shown in Fig. 2. The panels are filled by plates 5 of iron or steel which bear against the inner webs of the angle metal frame 2 and of the T-bars 3 and 4, with their edges bearing against the outstanding webs of such frame and bars 3, 4. In the corners of the panels are triangular plates 6 which are provided with outstanding webs 7 that bear against and are riveted to the outstanding webs of the bars or frame 2, 3 and 4, as shown.

It will be understood that the door thus constructed is exceedingly strong and durable and is also readily manufactured at comparatively small cost.

Supporting hangers for the door are indicated at 18. Upper and lower supporting bars or rails are indicated at 9—10 between which the hangers operate when the door is opened or closed.

Having thus described the invention, what is claimed as new, is:—

The herein described door comprising an outer frame the side and end bars of which are L-shaped in cross section so that each bar has an outer web and a base web which extends at right angles to said outer web, the said base webs of the said bars lying in a common plane, cross bars of T-metal arranged in intersecting planes, one connecting the end bars of the outer frame and the other connecting the side bars thereof, each of said cross bars having its base web in line with those of said side and end bars, plates between the cross bars and the bars of the outer frame, bearing on the base webs and having their edges presented to the outer webs thereof and reinforcing triangular pieces bearing on and riveted to the said plates at the corners thereof, and having outstanding flanges bearing against and riveted to the outer webs of the side, end and cross bars, those of the said triangular pieces at the inner corners of the said plates serving to brace the cross bars at the points of intersection, those of the said pieces at the outer ends of the cross bars serving to brace the same and the centers of the side and end bars, and those of the said pieces in the angles between the side and end bars at the corners of the door serving to brace the corners of the outer frame.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES M. DONALDSON.

Witnesses:

W. E. DONALDSON,
W. H. OSBORNE.