

No. 883,294.

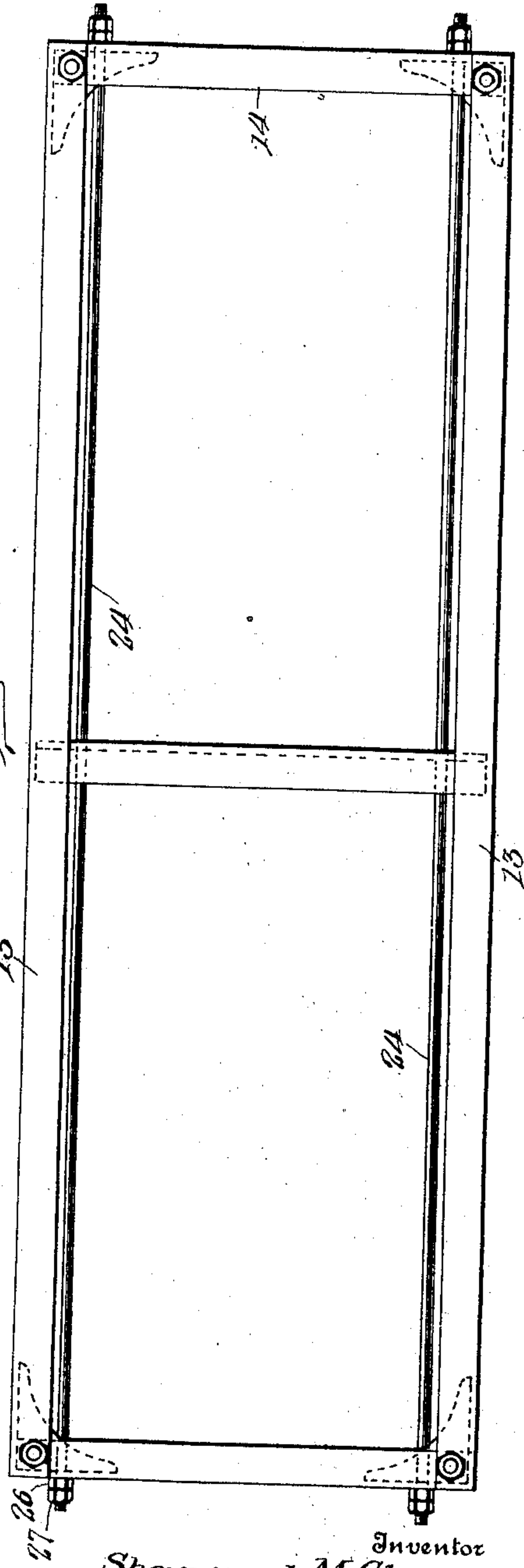
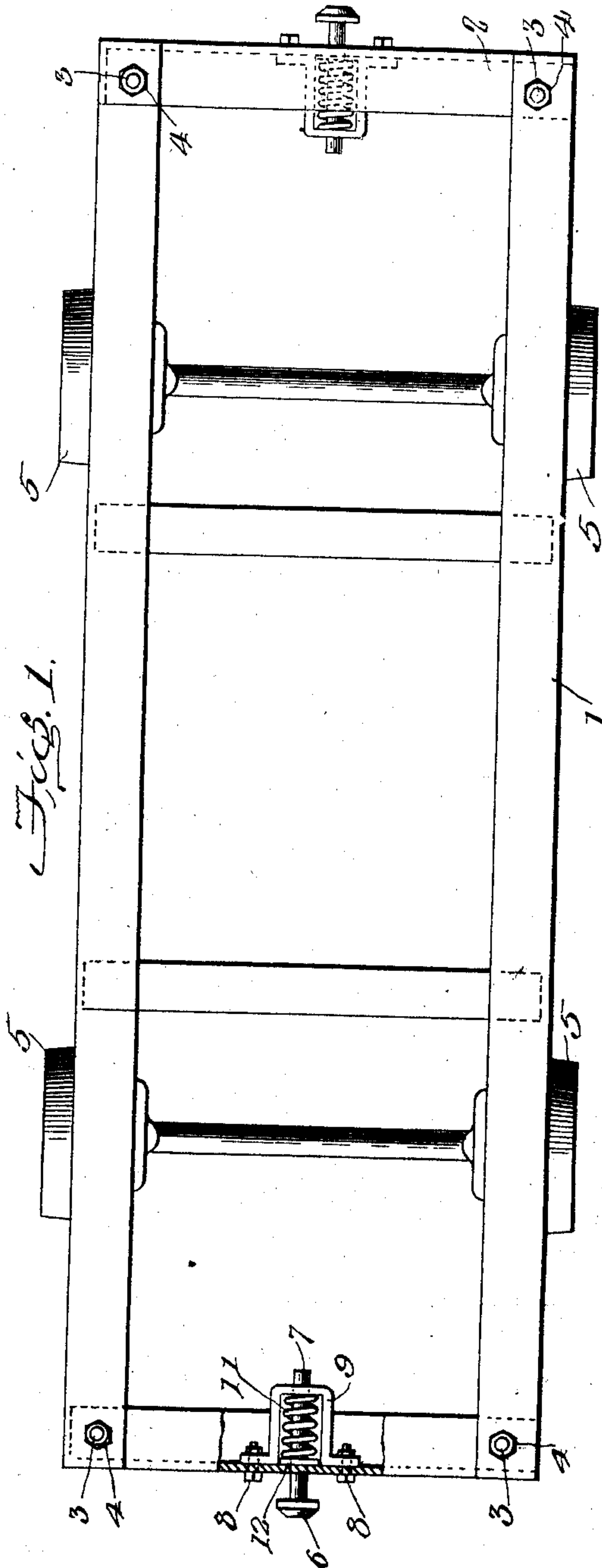
PATENTED MAR. 31, 1908.

S. M. CHASE.

TRANSPORTING AND DRYING CAR FOR CEMENT OR CONCRETE BLOCKS.

APPLICATION FILED APR. 6, 1906.

2 SHEETS—SHEET 1.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 3.

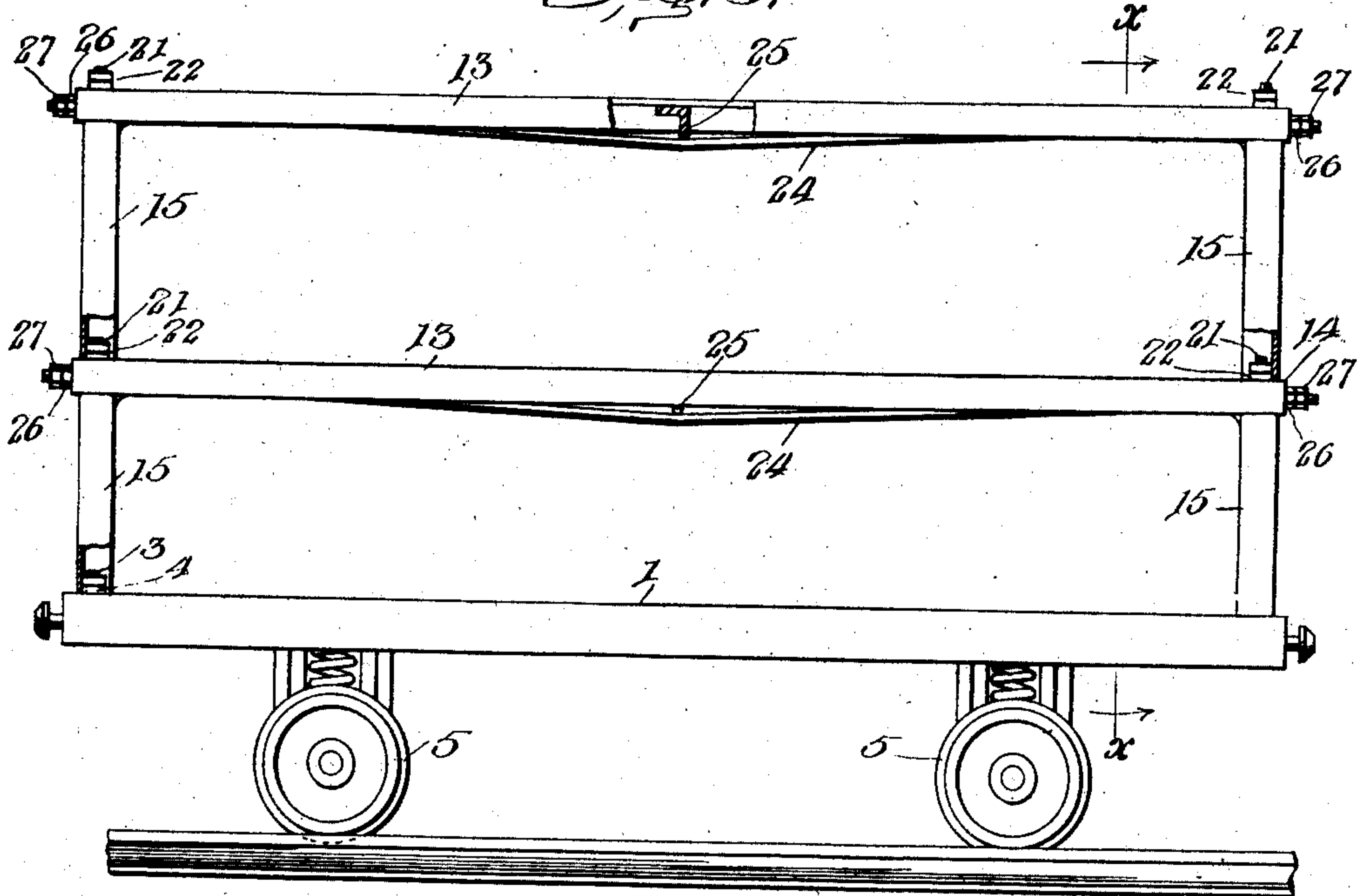


Fig. 4.

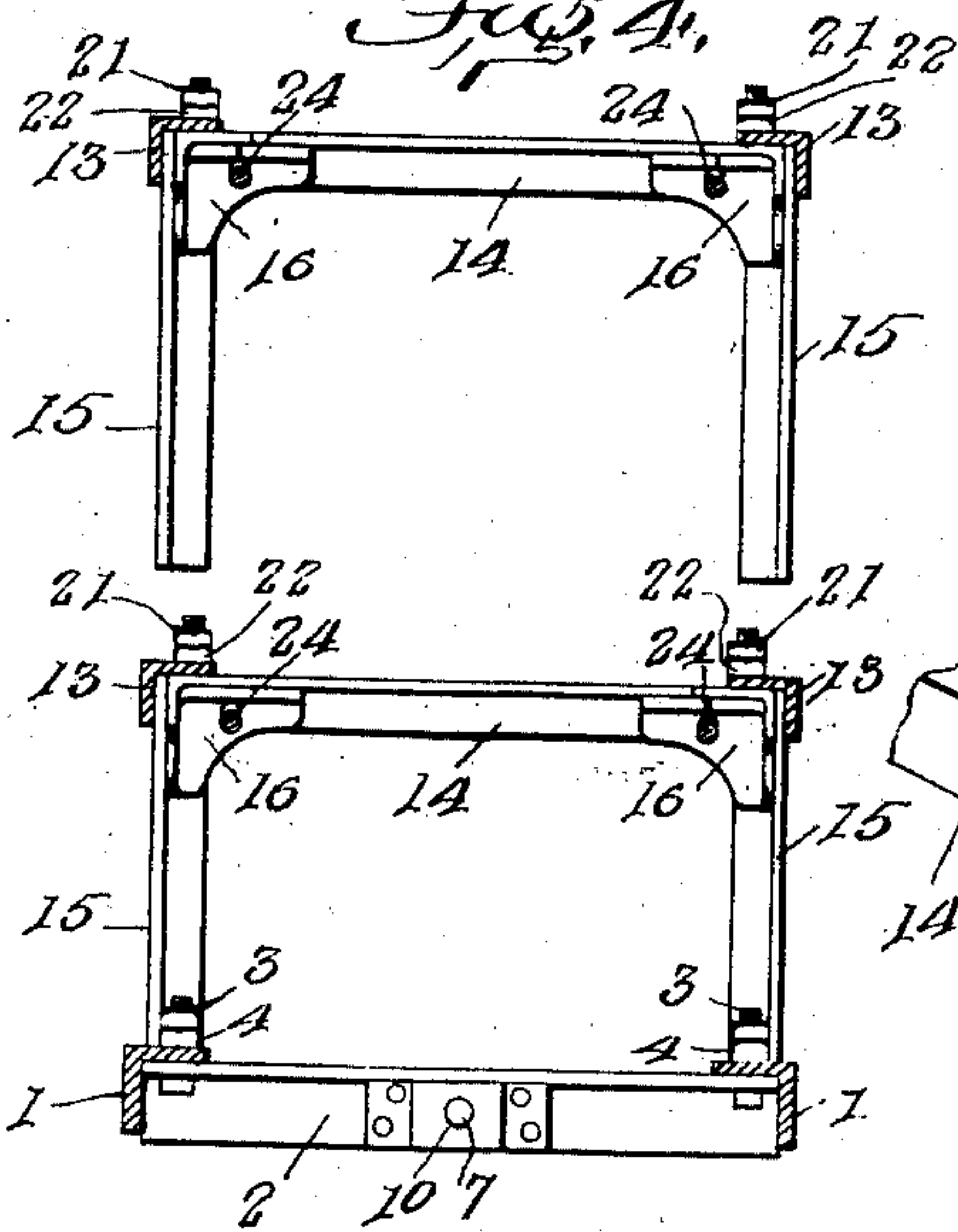


Fig. 5.

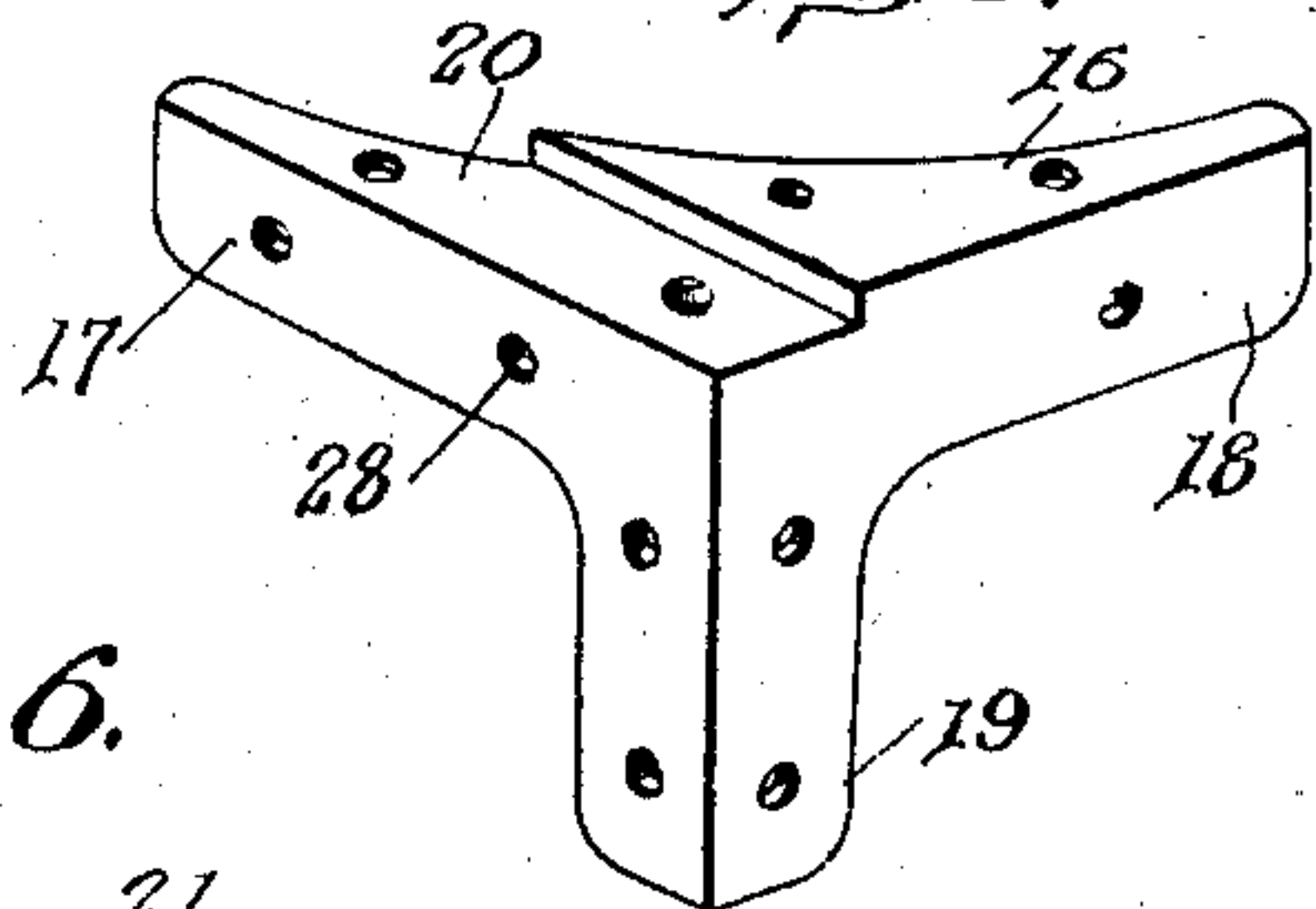
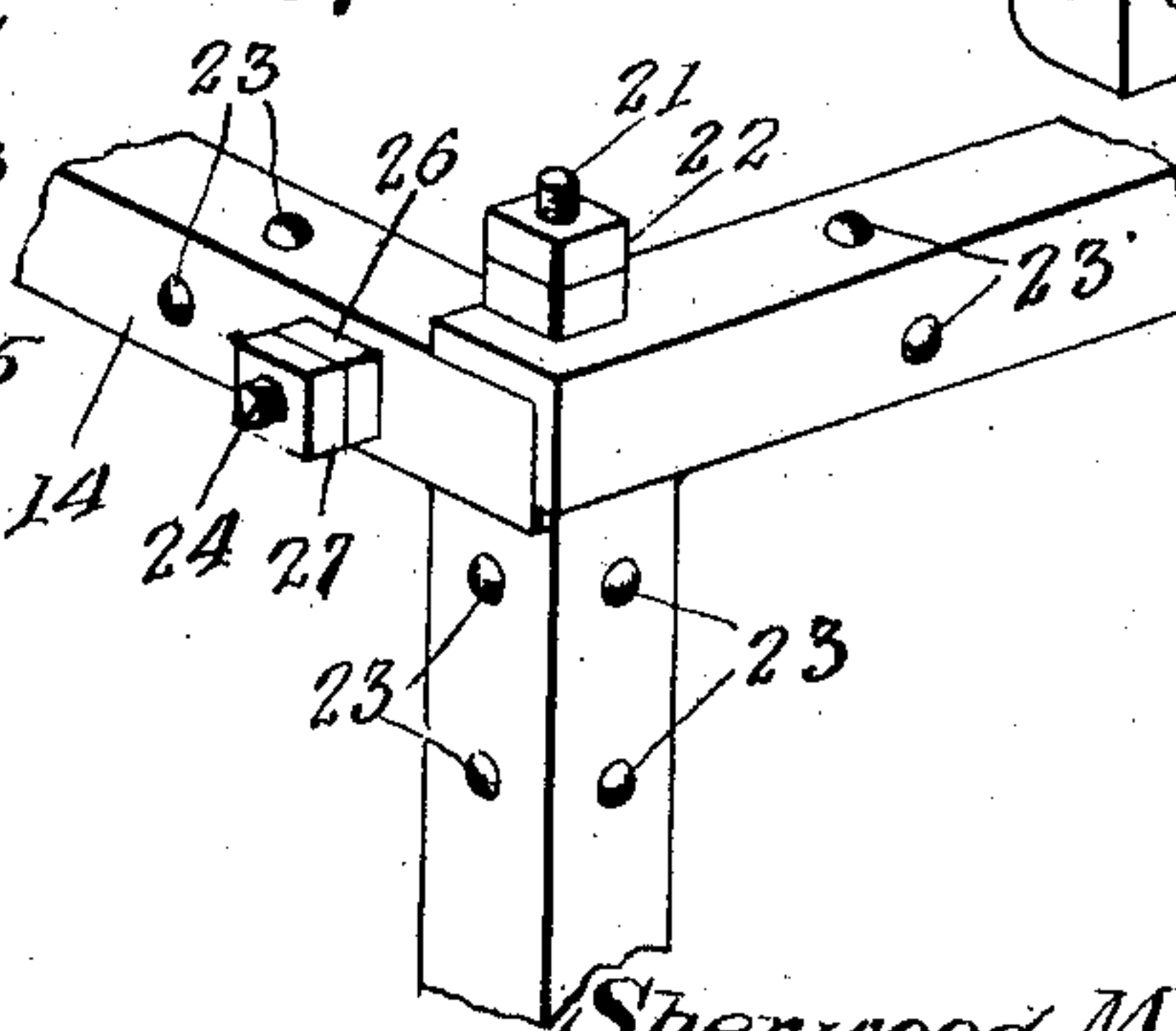


Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

SHERWOOD M. CHASE, OF COLUMBUS, OHIO, ASSIGNOR TO THE CHASE FOUNDRY AND MANUFACTURING COMPANY, OF COLUMBUS, OHIO, A CORPORATION OF OHIO.

TRANSPORTING AND DRYING CAR FOR CEMENT OR CONCRETE BLOCKS.

No. 883,294.

Specification of Letters Patent.

Patented March 31, 1908.

Application filed April 6, 1906. Serial No. 310,204.

To all whom it may concern:

Be it known that I, SHERWOOD M. CHASE, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Transporting and Drying Cars for Cement or Concrete Blocks, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in transporting and drying cars for cement or concrete blocks, and more particularly to that class of cars comprising a main frame supported on suitable track wheels, and a plurality of superposed removable decks.

My invention has for its object to provide a simple and efficient means for preventing horizontal displacement of the decks when in position; to provide a simple and strong construction whereby the angle bars composing the deck frame and legs are united to each other; and to provide means whereby the entire supporting surface of each deck or frame shall be unobstructed from end to end, thereby increasing the capacity of the car.

To these and other ends my invention consists in certain novel features which I will now proceed to describe, and will then particularly point out in the claims.

In the accompanying drawings, Figure 1 is a plan view of the main frame or car body; Fig. 2 is a similar view of one of the removable decks; Fig. 3 is a side elevation of the car, showing a triple platform or deck car comprising one main frame or deck and two removable superposed decks or platforms; Fig. 4 is a detail sectional view, taken on the line $x x$ of Fig. 3 and looking in the direction of the arrows; Fig. 5 is a detail perspective view of one of the corner brackets, detached and shown on an enlarged scale; and Fig. 6 is a similar view, on a smaller scale, showing the members attached to said bracket.

Referring to said drawings and considering first the car body or main platform, the same is constructed of longitudinal side members 1, composed of angle bars, and end members 2, also composed of angle bars. These members overlap at their ends, and are connected by bolts 3, passing through their overlapped horizontal flanges and secured by nuts 4. The bolts are preferably arranged with their heads downward, as shown, so that the shank or body of the bolt

may extend a considerable distance above the deck and receive two nuts, one of which serves as a jam nut to lock the parts, while the two nuts constitute a considerable vertical projection above the surface of the deck or platform. The nuts are arranged with their sides parallel with the sides and ends of the platform or deck. They constitute retaining projections which, fitting within the corresponding angles of the legs of the superposed decks, prevent lateral displacement of these latter, in the manner hereinafter described. The main platform or deck is supported on track wheels 5, and is provided at each end with a buffer 6. Each buffer comprises a head or buffer proper and a tail piece or shank 7, which passes through a suitable guiding aperture in the vertical web of the corresponding end angle piece 2. To the rear face of this vertical web of said end piece there is secured, by bolts 8 or otherwise, a U-shaped bracket 9, having at its rear end a guiding aperture to receive the rear end of the shank 7. A coiled spring 11 is mounted on the shank between the end of the bracket 9 and the vertical web of the cross piece 2, acting on an abutment or collar 12 on the shank. It will be observed that the location of the springs and brackets on the inside of the end pieces materially shortens the length of the car, thereby increasing the number of cars which can be placed on a given length of drying track, while the location of the bracket and spring underneath the horizontal web of the end piece serves to cover and protect them.

The supplemental decks are similarly constructed, each deck or platform comprising a deck frame composed of longitudinal angle bars 13, forming the side members of the deck frame, and transverse angle bars 14 at the ends, forming end members of said frame. Each deck is provided at each of its four corners with a vertical leg 15, these legs also being composed of angle bars. In order to properly and firmly unite these three parts at the corner, I employ at each corner an angle bracket 16, one of which is shown detached in Fig. 5 of the drawings. This bracket comprises three arms, two of which, indicated by the reference numerals 17 and 18 respectively, extend horizontally at right angles to each other, while the third arm, indicated by the reference numeral 19, extends vertically downward in a direction at right angles to the

other two. In the present instance, I have shown the side members 13 as overlapping the end members 14 at their junction, and, for the purpose of giving both of these members a flat horizontal bearing on the bracket 16, said bracket is rabbeted or cut away along the top of the arm 17, as indicated at 20, to receive the horizontal web or flange of the end piece 14. Said end piece therefore has its webs fitting both horizontally and vertically against the corresponding surfaces of the bracket. The end of the side member 13 also similarly fits the horizontal and vertical surfaces of the arm 18 of the bracket, the extremity of its horizontal flange also extending over and fitting on top of the horizontal flange of the member 14, which lies flush with the top surface of the arm 18 of the bracket. The overlapping horizontal parts of the members 13 and 14 are secured together by a bolt 21, which passes upward through the bracket and through the overlapped part, extending above the deck to receive nuts 22, which, like the nuts 4 of the main platform, constitute retaining projections to engage the legs of the superposed deck and prevent horizontal displacement thereof. The angular leg 15 fits at its upper end against the corresponding angular surfaces of the arm 19 of the bracket, the upper end of said leg fitting between the vertical flanges or webs of the members 13 and 14 and the bracket 16. The three members 13, 14 and 15 are additionally secured to the bracket by suitable rivets 23. The construction is such that a simple, strong and durable connection between the three members is effected at a relatively small cost, and a smooth and firm joint is produced.

Since the supplemental decks require to be handled and lifted, they are made of lighter and consequently weaker structural elements than the main frame or platform. It has therefore been necessary heretofore to provide each one of these supplemental decks or platforms with a pair of intermediate legs, located midway of its length, in order to strengthen and support the central portion thereof. These intermediate legs, resting upon the deck below, obstruct its surface and restrict its carrying capacity. To avoid this objection, I strengthen the deck frame of the supplemental deck or platform in such a way as to dispense with the intermediate legs, and this I accomplish by means of truss rods 24. The deck frame is provided at its central portion with a cross piece 25, preferably in the form of an angle bar, under which cross piece the truss rods 24 pass. The ends of the truss rods pass through the vertical flanges of the end members 14 and are provided on the outside of said end members with tensioning nuts 26 and lock nuts 27. Where the truss rods are arranged, as is preferred, close to the side members 13, the ends of the truss rods also pass through suitable apertures 28 in the

corner brackets 16. These truss rods so strengthen the deck frames as to enable me to dispense with the intermediate legs and leave the supporting deck frames unobstructed from end to end.

I wish it to be understood that I do not desire to be limited to the exact details of construction shown and described, for obvious modifications will occur to a person skilled in the art.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A transporting and drying car comprising a wheel-supported main platform or deck and a supplemental platform or deck adapted to be superposed thereon and provided with supporting legs at its corners, said legs comprising members arranged in substantially vertical planes extending at an angle to each other, the deck on which said legs rest having upwardly extending projections which lie within the angles of the leg members to engage the same and prevent horizontal displacement, substantially as described.

2. A transporting and drying car comprising a wheel-supported main platform or deck and a supplemental platform or deck adapted to be superposed thereon and provided with supporting legs at its corners, said legs comprising members arranged in substantially vertical planes extending at an angle to each other, the deck on which said legs rest having upwardly extending projections which lie within the angles of the leg members to engage the same and prevent horizontal displacement, said projections consisting of bolts and nuts which also serve to connect the members of the supporting platform or deck, substantially as described.

3. A supporting deck or platform comprising a deck frame and corner legs constructed of angle bars, the side and end members of the frame and a leg meeting at each corner, in combination with a supporting bracket at each corner to which said three members are secured, said bracket having three arms arranged at right angles to each other, each arm extending parallel to one of said members and having angular contact surfaces against which the corresponding angular members fit, substantially as described.

4. A supporting deck or platform comprising a deck frame and corner legs constructed of angle bars, the side and end members of the frame and a leg meeting at each corner, in combination with an internal supporting bracket to which said three members are secured, said bracket having three arms arranged at right angles to each other, and each arm extending parallel to one of said members and having two external contact surfaces against which the angular

surfaces of the members fit, substantially as described.

5 In a supporting deck or platform, an internal corner bracket comprising three arms arranged at right angles to each other, each arm having angularly arranged external contact surfaces, in combination with side and end frame members constructed of angle bars and having their horizontal webs over-
10 lapped at the corner and secured to two of the bracket arms, one of said arms being

rabbeted or cut away to receive the lower frame member, and an angle bar leg fitting and secured to the third arm of the bracket, substantially as described.

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

15

SHERWOOD M. CHASE.

Witnesses:

ARNO EBERLEIN,
CHAS. R. SLYH.