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T. B. BLACKBURN & C. D. BRANN.
SIDE DUMPING RACK FOR CARS.

APPLICATION FILED MAR. 19, 1907.

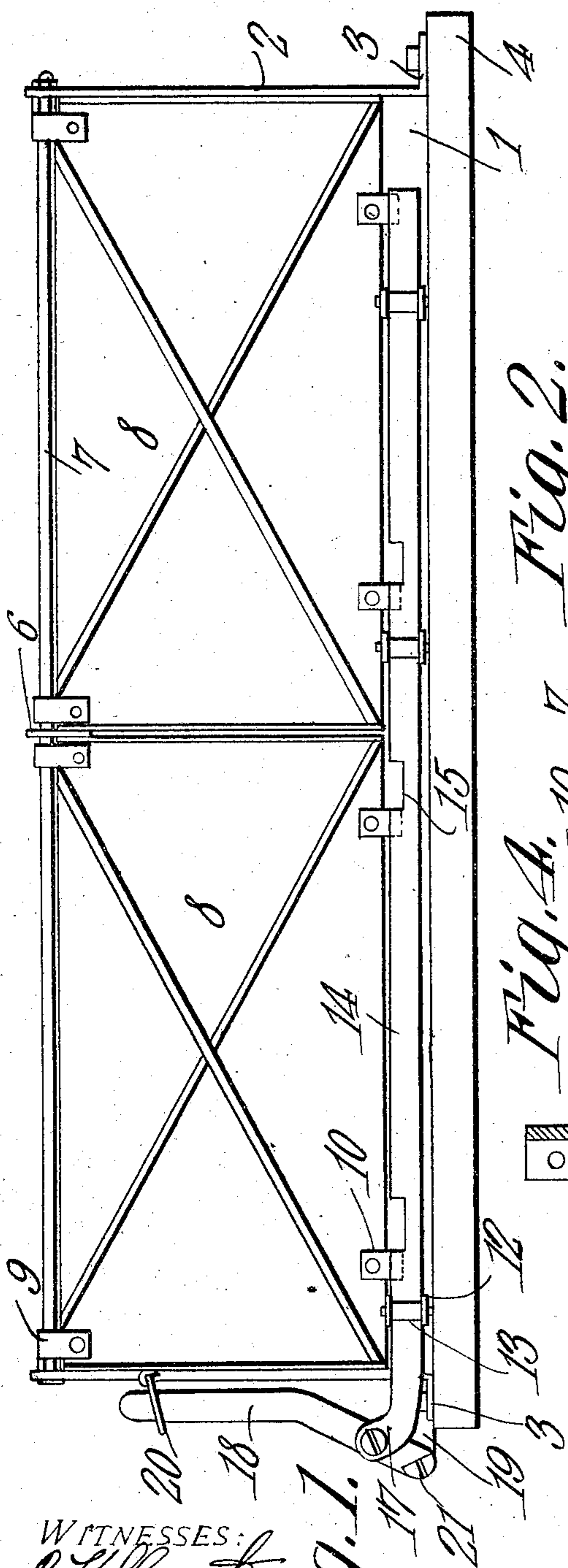


Fig. 1.

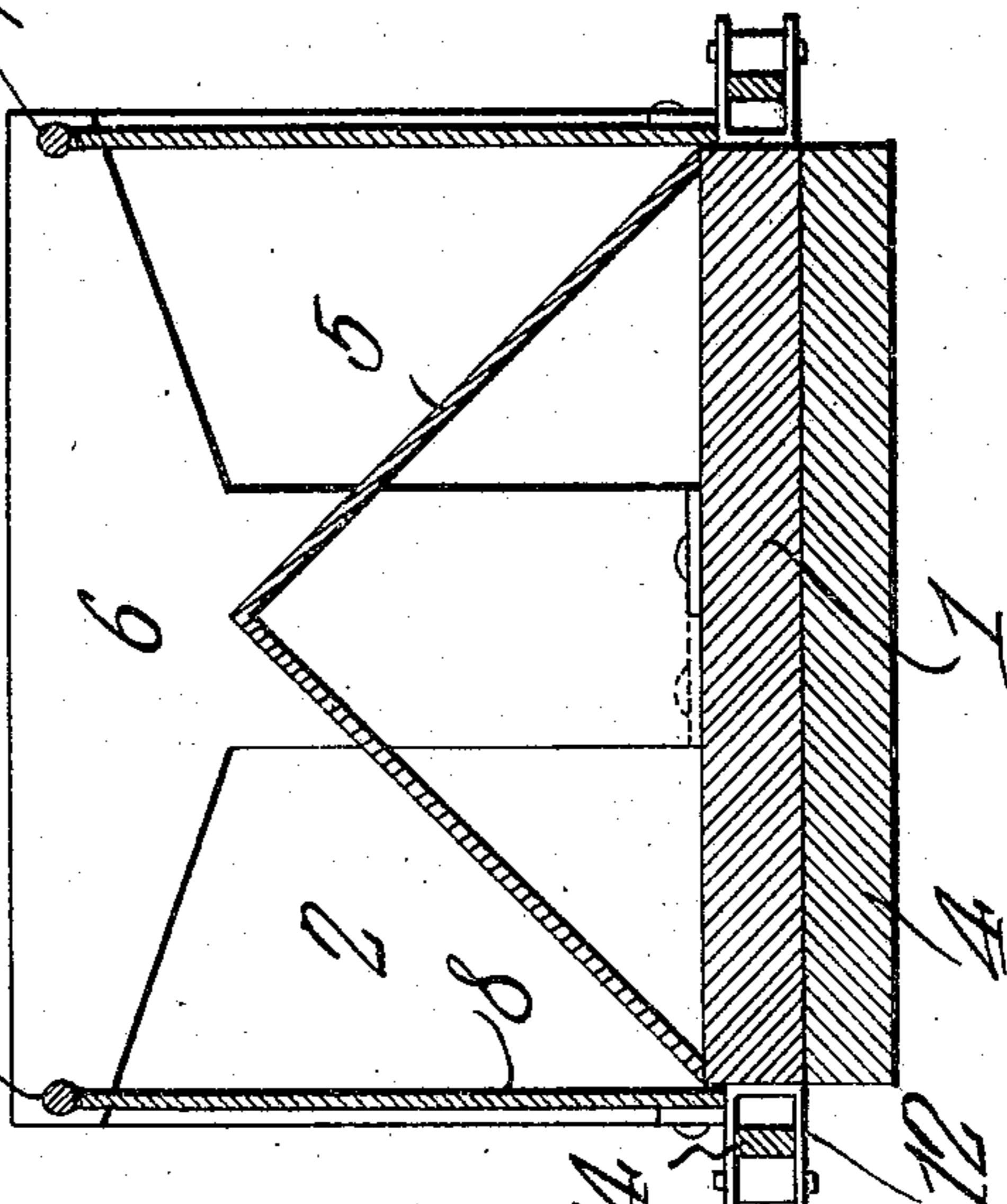


Fig. 2.

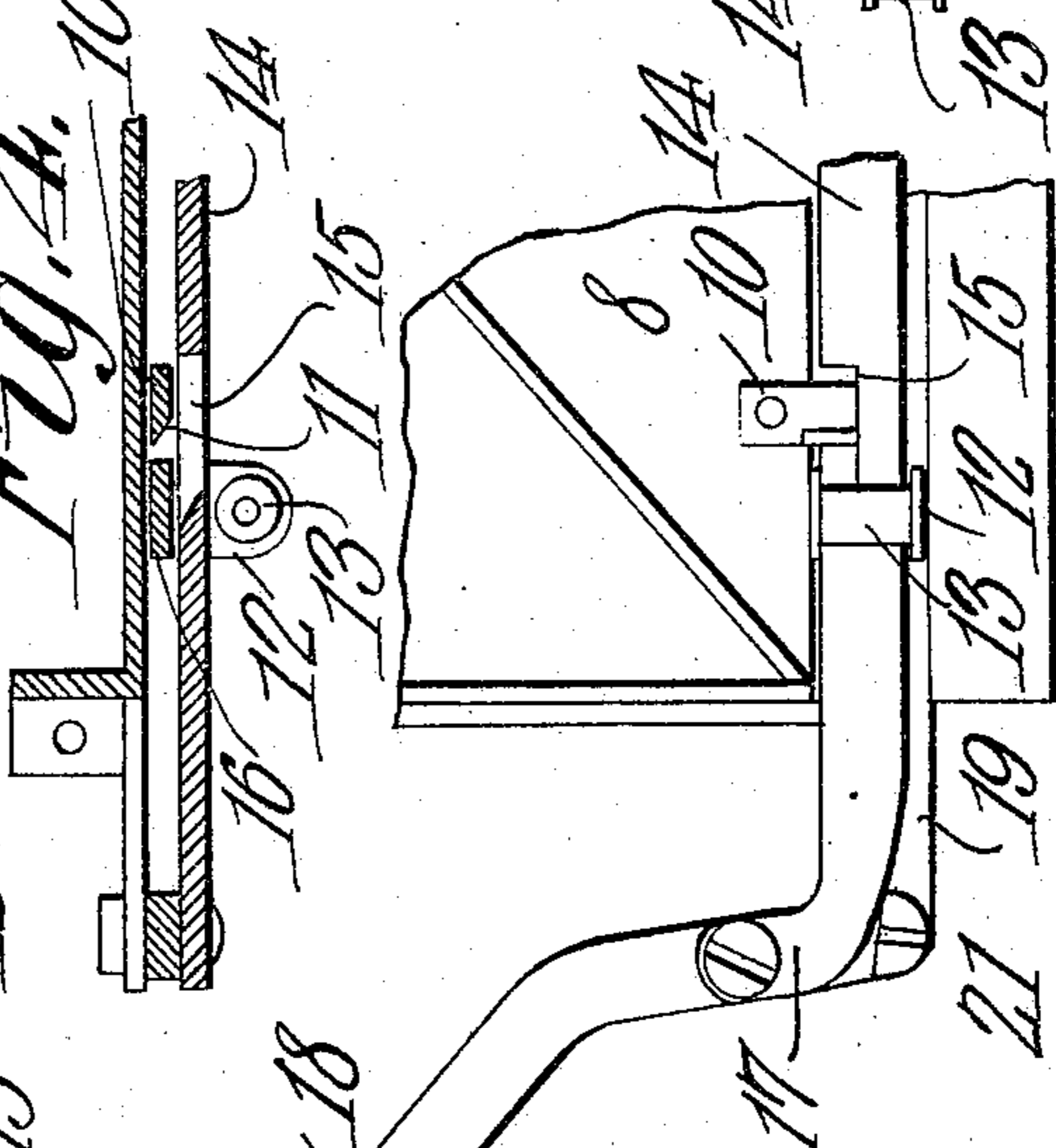


Fig. 3.

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Fig. 4.

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UNITED STATES PATENT OFFICE.

THOMAS B. BLACKBURN AND CHARLES D. BRANN, OF OXNARD, CALIFORNIA.

SIDE DUMPING-RACK FOR CARS.

No. 858,644.

Specification of Letters Patent.

Patented July 2, 1907.

Application filed March 19, 1907. Serial No. 363,192.

To all whom it may concern:

Be it known that we, THOMAS B. BLACKBURN and CHARLES D. BRANN, citizens of the United States, residing at Oxnard, in the county of Ventura and State of California, have invented a new and useful Side Dumping-Rack for Cars, of which the following is a specification.

This invention has relation to racks of the character indicated herein and it consists in the novel construction and arrangement of its parts as hereinafter shown and described.

The object of the invention is to provide a rack which may be easily and readily applied to or detached from the platform of a flat car and which is provided with swinging sides and an inclined bottom. The said sides are provided with depending lugs which, together with longitudinally movable bars constitute means for holding the sides in closed positions. The said bars are provided with recesses which when moved opposite or in registration with the said lugs permit the said side to swing laterally whereby the contents of the rack is dumped from the side thereof. A lever mechanism is attached to each bar for moving the same and the bars are supported in clips which are provided with friction rollers against which the said bars bear.

In the accompanying drawing:—Figure 1 is a side elevation of the rack. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a detail side elevation of the lower corner of the rack showing the bar moved with its perforation moved opposite the lug of the side, and Fig. 4 is a horizontal sectional view cut on the line 4—4 of Fig. 3.

The rack consists of the base 1 which is provided at its end with the fixed sides 2, 2. The ends of the rack are provided with the lugs 3, 3 which may be bolted to the floor or platform 4 of the car. The bottom 5 is mounted upon the base 1 and the said bottom slopes both ways from the center line of the rack in order to direct the contents thereof to either side thereof. The rack is provided at an intermediate point with a T-arm 6 which passes through the bottom 5 and is fixed at its lower end to the base 1. The branches or arms of the said T-arm terminate flush with the longitudinal edges of the base 1. The rods 7, 7 are fixed at their ends in the sides 2 and pass through the ends of the branches of the T-arm 6. The side sections 8 are provided at their upper edges with bearings 9 which receive the rods 7. The lugs 10 depend from the lower edges of the said sections and are beveled along their vertical edges as at 11. The clips 12 are attached to the edges of the base 1 and are provided with the vertically disposed friction rollers 13. The bar 14 passes through the clips 12 and bears against the rollers 13. Said bar is provided at suitable intervals with the recesses 15, the edges of which, which lie adjacent the beveled edges 11 of the lugs 10, are correspondingly beveled as at 16.

The end of the bar 14 is upturned as at 17 and is pivoted to the lever 18 which in turn is fulcrumed at its lower end to the lug 19 attached to the base 1 of the rack. The bail 20 is pivotally attached to the end of the rack and is adapted to be swung over the free end of the lever 18 for holding the same against the end of the rack. The head of the pin 21 which forms the fulcrum for the lever 18 projects laterally beyond the side of the same and is located in the path of the bar 14 and when the lever is swung away from the rack the said bar engages the head 21 when its lateral movement is checked.

The operation of the device is as follows: Presuming that the parts are in the positions as shown in Fig. 1 of the drawing and the rack is loaded with material which is to be dumped the bail 20 is swung from over the free end of the lever 18 and the said lever 18 is swung upon its fulcrum away from the end of the rack until the bar 14 comes in contact with the head 21 of the fulcrum. Thus the recesses 15 provided in the upper edge of the bar 14 are brought laterally opposite the lugs 10 which by reason of the weight of the material within the rack and which bears against the side sections 8, pass through the said recesses 15 as the said sections 8 swing laterally and thus permit the said material to fall from the side of the rack. When the rack is emptied of the said material the sections 8 again assume vertical positions and the lugs 10 pass back through the recesses 15. The free end of the lever 18 is then swung toward the end of the rack which moves the bar 14 longitudinally and the beveled edges 16 of the said recesses pass over the beveled edges 11 of the lugs 10 and solid portions of the bar 11 are moved laterally opposite the sides of the said lugs and thus the side sections 8 are confining against lateral swing. The T-arm 6 is of such configuration and is so located as to brace the intermediate portions of the rods 7 and prevent the same from bulging laterally and also braces the bottom 5 with relation to the base 1. At the same time the said T-arm does not interfere with the lateral movement of the material in falling from the rack.

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

1. A rack comprising a base, ends fixed to the base, rods connecting said ends together, a T-shaped support attached at its lower end to the base and at its branches to the rods, and swinging sides mounted upon said rods.

2. A rack comprising a base, ends fixed to the base, side sections hinged between the ends and having depending lugs with beveled side edges, a bar mounted for longitudinal movement upon the base and having recesses adapted to register with the lugs and being provided with vertically disposed beveled side edges and means for moving the bar.

3. A rack comprising a base, ends fixed thereto, swinging sides mounted between the ends and having lugs, clips attached to the base, rollers journaled in said clips, a bar passing through the clips and bearing against said rollers and means for moving said bar longitudinally, said bar

being notched to co-operate with the lugs to retain the sides against lateral movement when in one position and liberate the sides when in another position.

4. A rack comprising a base, ends fixed thereto, swing-
5 ing sides mounted between the ends, a bar slidably
mounted upon the base and adapted to confine the sides
when in one position and liberate the sides when in an-
other position, said bar having an upturned end, a lever
fulcrumed upon the rack, a head mounted upon the lever
10 and lying in the path of said bar, the upturned end of
said bar being pivoted to the lever.

In testimony that we claim the foregoing as our own,
we have hereto affixed our signatures in the presence of
two witnesses.

THOMAS B. BLACKBURN.
CHARLES D. BRANN.

Witnesses:

I. W. STEWART,
C. C. FIELD.