

(No Model.)

H. W. SMITH.
STOCK CAR.

No. 421,982.

Patented Feb. 25, 1890.

Fig. I.

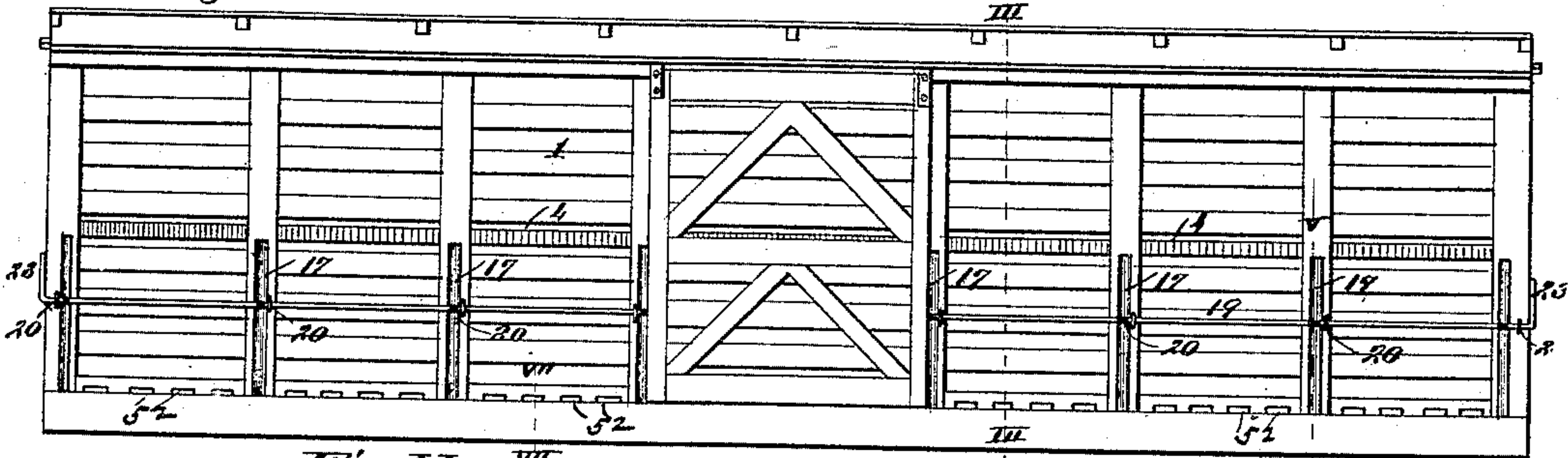


Fig. II.

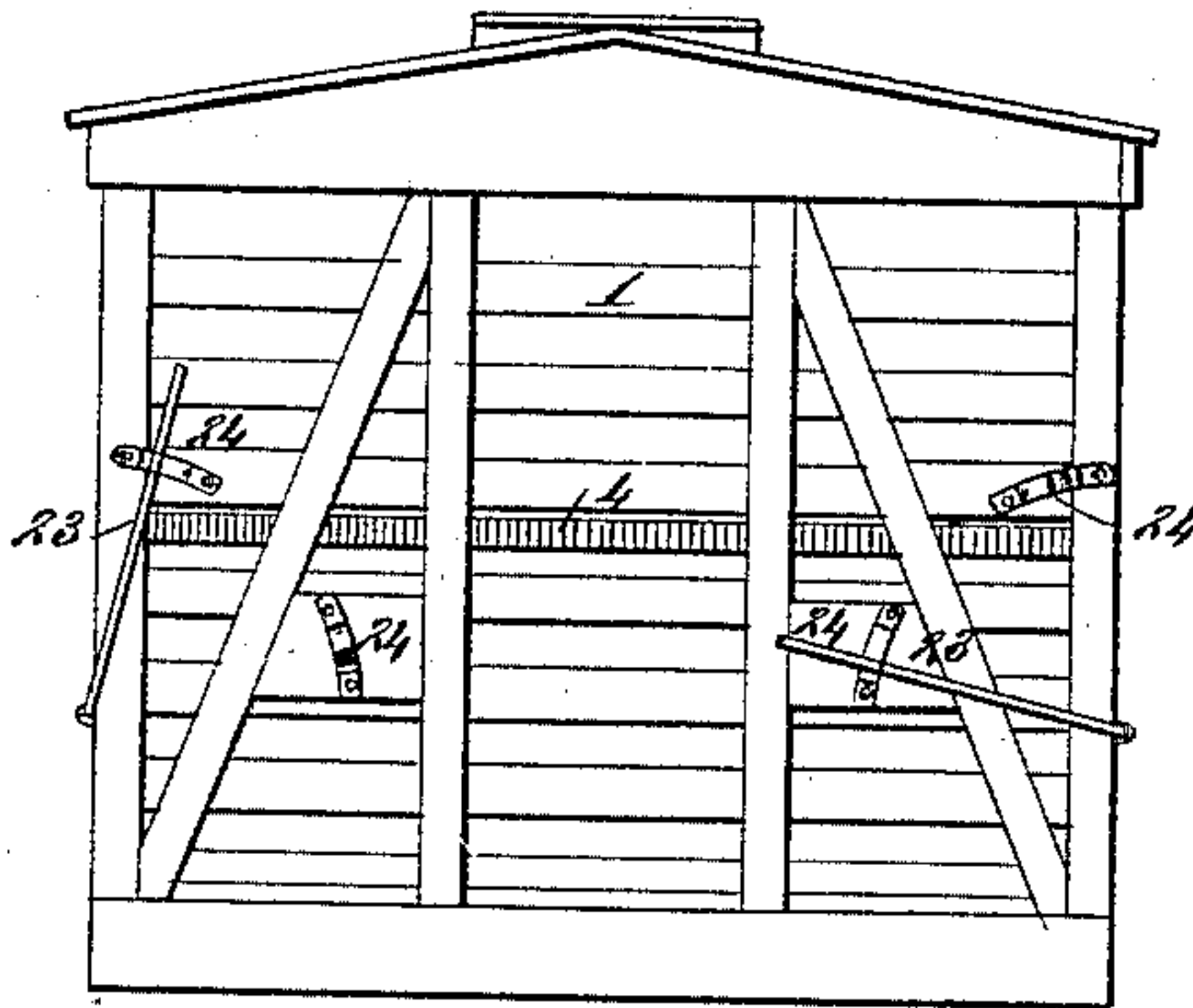


Fig. III.

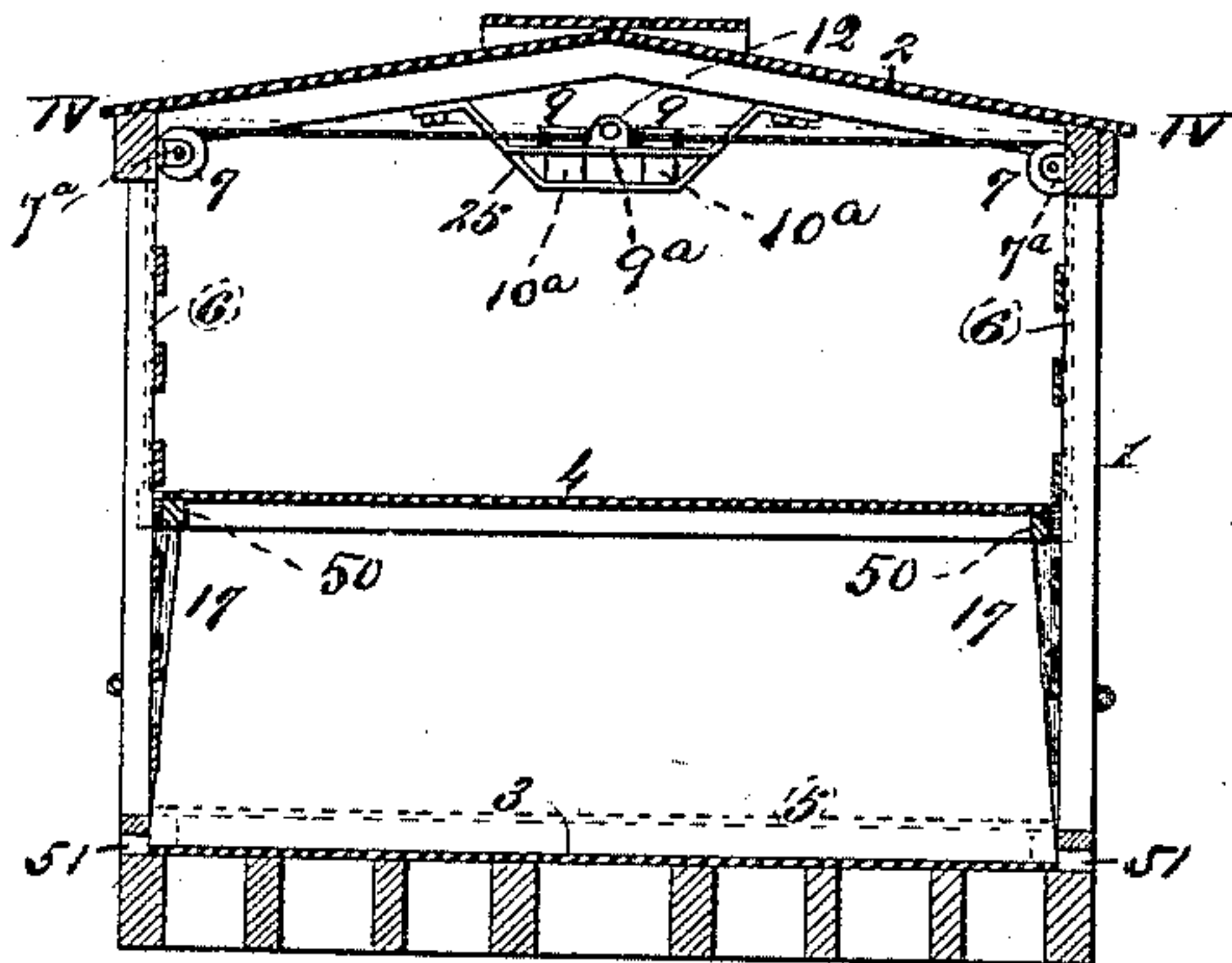


Fig. IV.

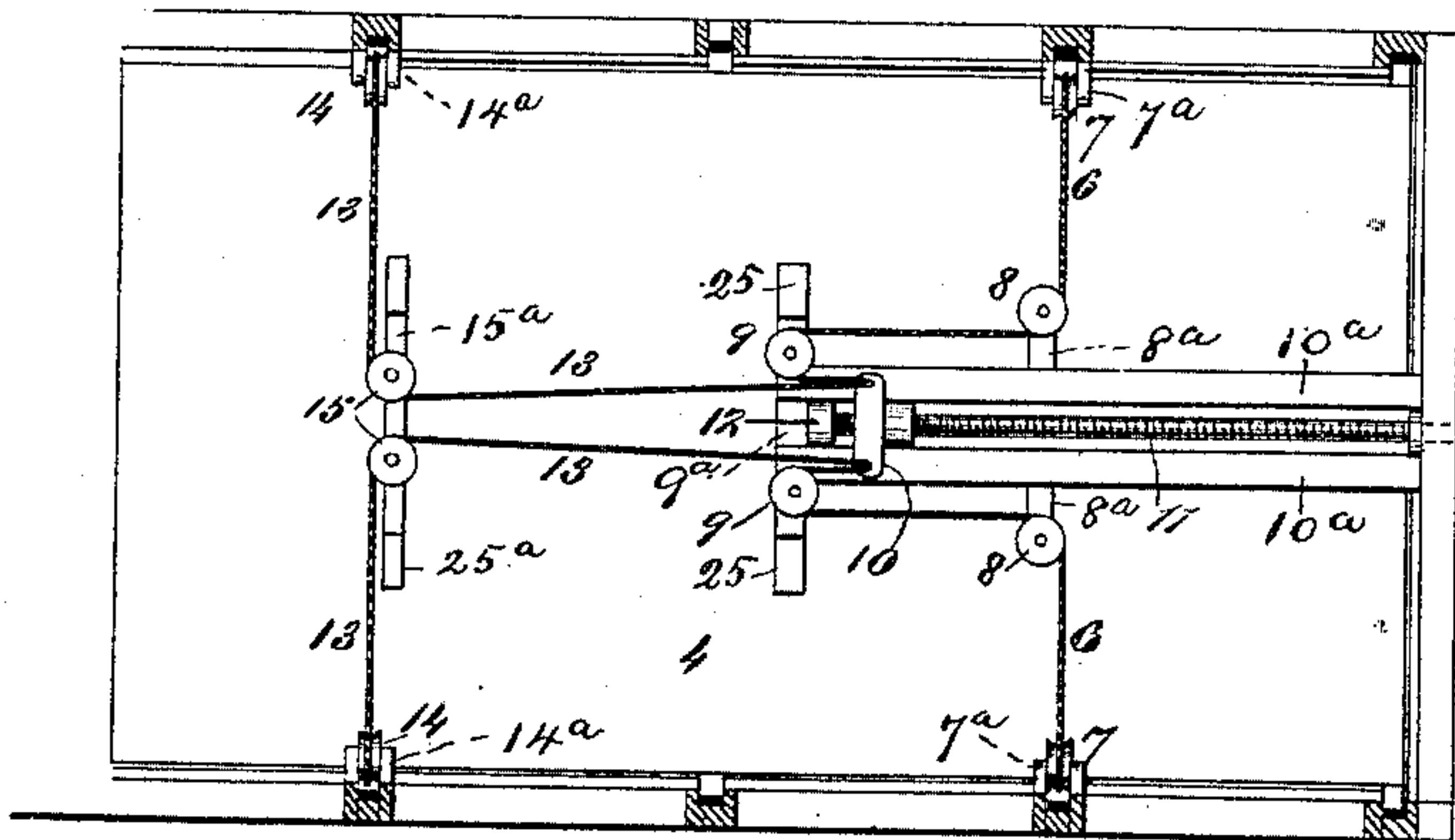


Fig. V.

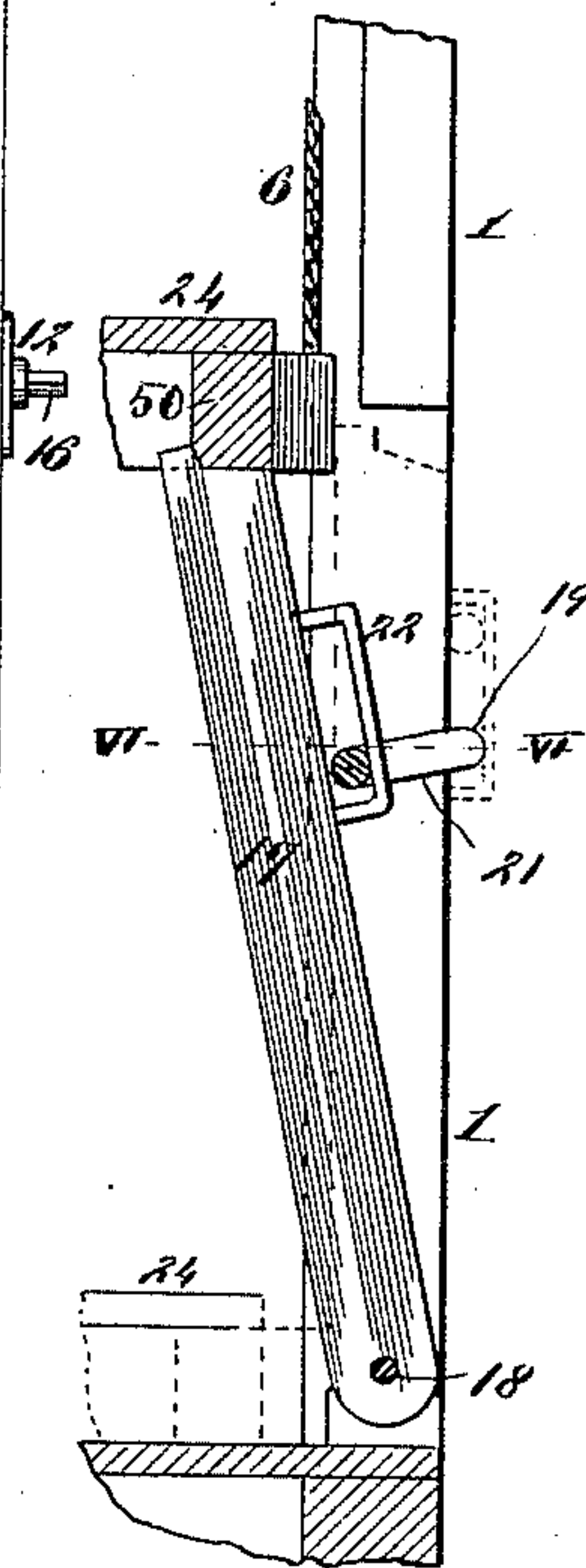


Fig. VI.

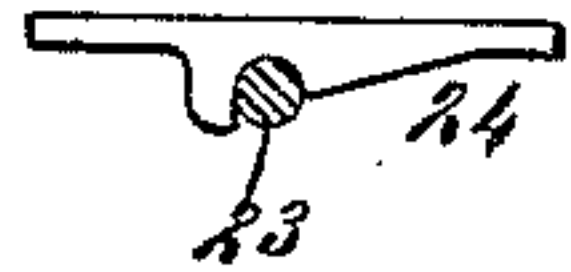
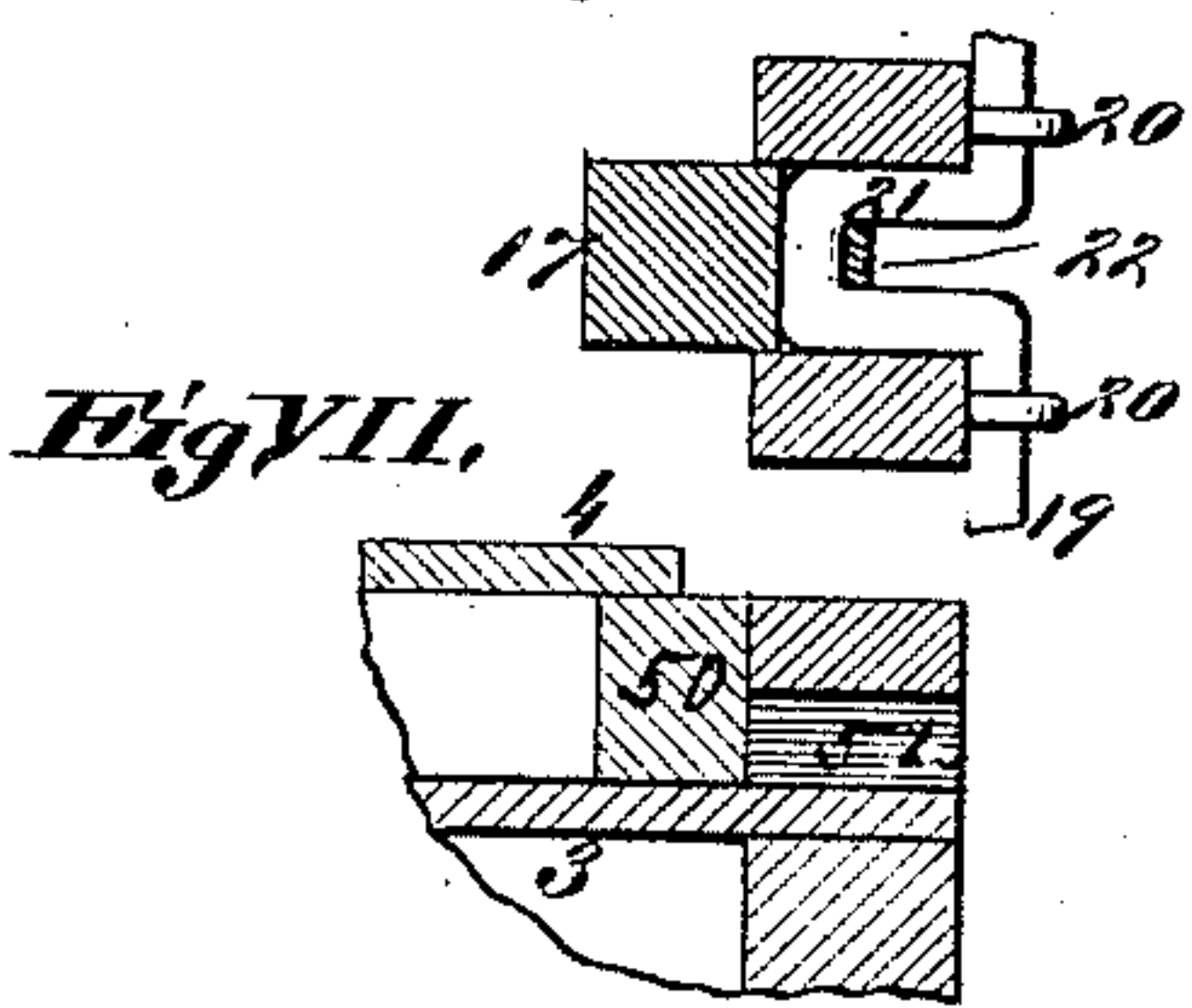


Fig. VII.



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HENRY W. SMITH, OF ST. LOUIS, MISSOURI.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 421,982, dated February 25, 1890.

Application filed March 1, 1889. Serial No. 301,642. (No model.)

To all whom it may concern:

Be it known that I, HENRY W. SMITH, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Stock-Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure I is a side elevation showing the body of a car provided with my improvement. Fig. II is an end view. Fig. III is a vertical transverse section taken on line III III, Fig. I. Fig. IV is a detail horizontal section taken on line IV IV, Fig. III, and looking downward. Fig. V is an enlarged detail vertical view taken on line V V, Fig. I. Fig. VI is a transverse section taken on line VI VI, Fig. V. Fig. VII is an enlarged detail view taken on line VII VII, Fig. I, and Fig. VIII is an enlarged view of one of the catches for holding the arms of the rock-shafts.

My invention is an improvement in convertible stock-cars of the form shown in my application, Serial No. 295,132, presented January 2, 1889; and it consists in features of novel construction, hereinafter described, and pointed out in the claims.

Referring to the drawings, 1 represents the body of the car, 2 the roof, and 3 the floor.

4 represents a partition forming an auxiliary or supplemental floor, which, when not in use, may be lowered onto the floor 1, assuming the position shown by dotted line 5, Fig. III. When the partition is thus placed, the car will be used as any ordinary car; but when it is desired to transform the car into an upper and lower story or an upper and lower compartment for stock the partition 4 is raised from the position shown in dotted lines, Fig. III, to the position shown in full lines, Figs. I, II, and III. It is thus raised by means of cords or cables 6, secured thereto and passing upward and over vertical pulleys 7, mounted in brackets 7^a, secured to the top of the car, and from thence (see Fig. IV) to horizontal pulleys 8, mounted on brackets 8^a, supported in the center of the top of the car, and from thence to like horizontal pulleys 9, mounted on brackets 9^a, secured to the roof of the car, and from thence to a block 10, sliding on ways 10^a (supported at their inner ends

by strap 25) and fitted on a threaded shaft 11, secured by means of suitable boxes 12 to the top of the car.

In addition to the cords or cables 6 other cords or cables 13 are employed, which extend from the partition up over vertical pulleys 14, mounted in brackets 14^a, secured to the top of the car, thence in a horizontal direction to horizontal pulleys 15, mounted on bracket 15^a, supported on strap 25^a, secured to the top of the car near its center, and thence to the block 10. It will be understood that when the shaft 11 is turned in the proper direction the block will be moved in an outward direction upon the shaft, thus shortening the cables 6 and 13 and elevating the partition from the position shown in dotted lines, Fig. III, to the position shown in full lines. The outer end of the shaft is provided with a non-circular end 16 to receive a crank by which it is turned. When the partition has thus been elevated, it is supported by strips 17, hinged at 18 to the bottom of the car at suitable intervals apart, as shown in Fig. I. In their normal position the strips stand upright and parallel with the posts of the car, as shown in dotted lines, Fig. V, and when the partition has been raised these strips are thrown forward to bring their upper ends under the partition, as shown in full lines, Figs. III and IV. The strips are thus operated by means of shafts 19, secured to the side of the car by staples or boxes 20, and having cranks or bent portions 21 secured to the strips by means of staples 22. It will thus be understood that by turning the shaft after the partition has been raised the upper ends of the strips will be thrown inward beneath the partition, and then by lowering the partition slightly by turning the shaft 11 in the proper direction it rests upon the upper ends of the strips, which form a firm support. The shafts 19 may be turned by means of arms or handles 23 on their ends, and these may engage catches 24 in their respective positions for the purpose of holding the shafts from turning or moving from either position to which they may be adjusted.

The cranks 21 of the shafts are illustrated plainly in Figs. V and VI, and the catches 24 are illustrated plainly in Fig. VIII.

By lowering the partition 4 onto the floor

proper of the car, when the former is not in use, it is brought down near the trucks, and there will be a less tendency for the car to upset while in motion than there would if the partition were raised to the top of the car when not in use. The partition 4 has a sill 50 at each side, which rests on the floor 3 when the partition is in its lower position.

51 represents openings along the bottom of the car on a level with the floor 3. In cleaning the floor the stuff is discharged through these openings. When the floor is being cleaned, the partition may be raised to the top of the car out of the way.

15 I claim as my invention—

1. A stock-car having a partition, means for raising and lowering the partition, and means for supporting the partition in its raised position, consisting of hinged strips 17, pivoted to the bottom of the car-body and fitting beneath the sill of the partition, substantially as described.

2. A stock-car having a partition, means for raising and lowering the partition, and means for supporting the partition in its raised posi-

tion, consisting of strips 17, hinged to the bottom of the car-body and fitting beneath the sill of the partition, and the staples 22, secured to the strips, substantially as described.

3. A stock-car having a partition, means for raising and lowering the partition, and means for supporting the partition in its raised position, consisting of strips hinged to the bottom of the car-body, rock-shafts provided with cranks and operating-arms, and catches for engaging the arms, substantially as described.

4. A stock-car having a partition, and means for raising and lowering the partition, consisting of the brackets 7^a and 14^a, vertical pulleys 7 and 14, brackets 8^a, 9^a, and 15^a, horizontal pulleys 8, 9, and 15, ways 10^a, straps 25 and 25^a, sliding block 10, cords 6 and 13, screw-threaded shaft 11, and boxes 12, substantially as described.

HENRY W. SMITH.

Witnesses:

SAML. KNIGHT,

BENJN. A. KNIGHT.