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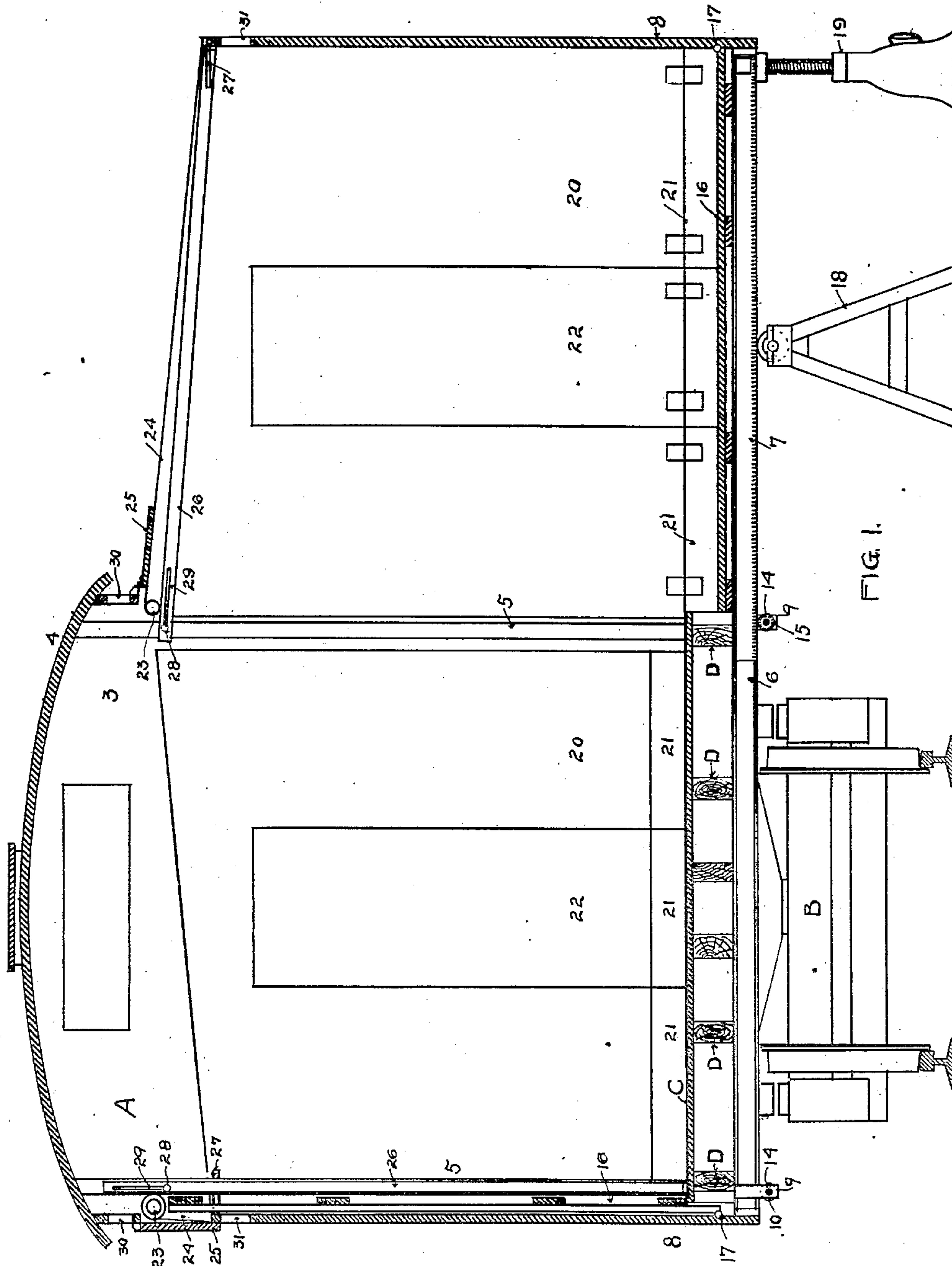
PATENTED AUG. 6, 1907.

R. S. MEARS, N. J. JORGENSEN & W. E. PAXTON.

CAR.

APPLICATION FILED NOV. 16, 1906.

2 SHEETS—SHEET 1.



WITNESSES.

J. A. Hulst
W. E. Paxton

INVENTORS.

Robert S. Mears
Niels J. Jorgensen
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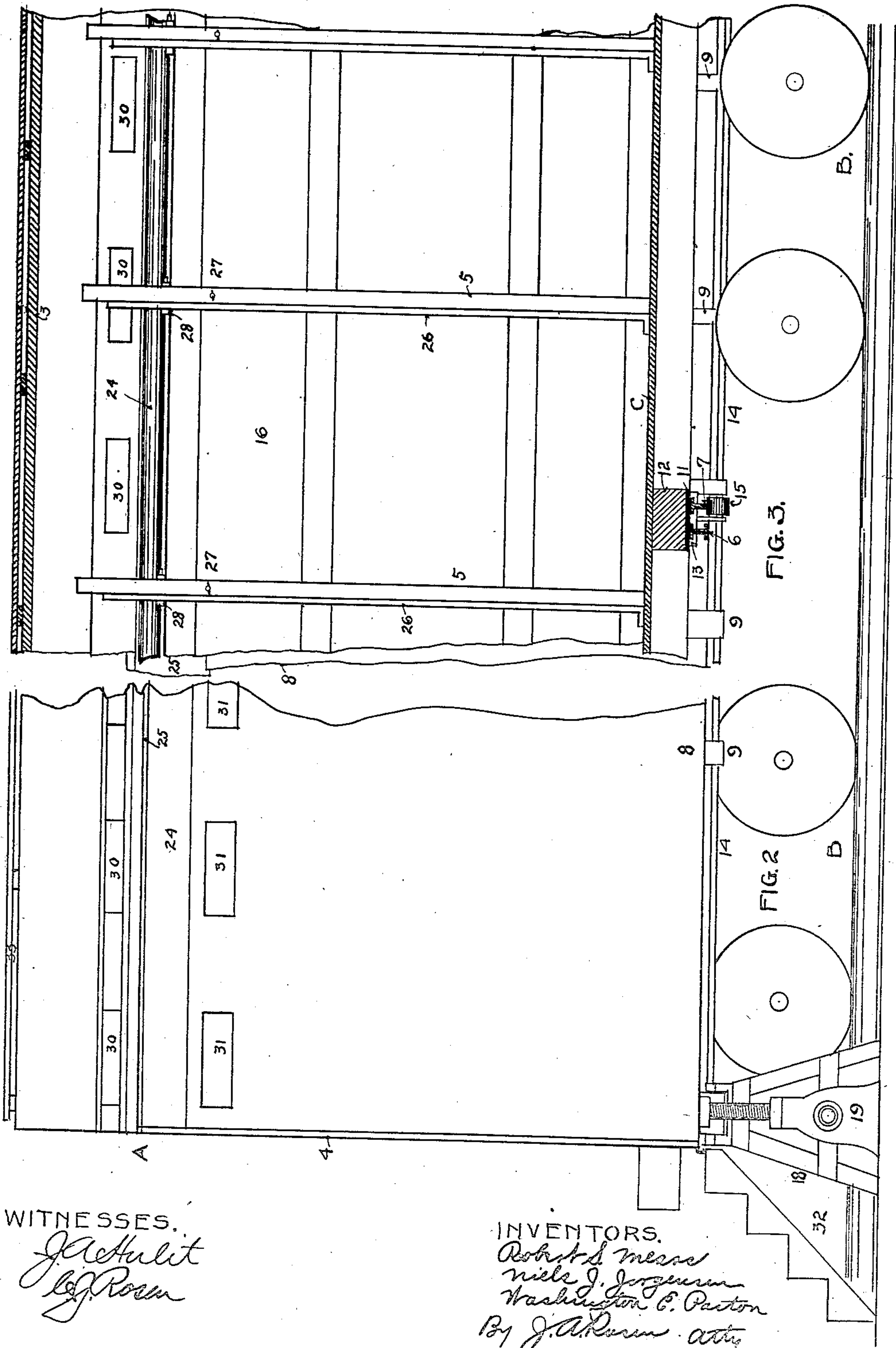
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L. J. Rosen

INVENTORS.

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UNITED STATES PATENT OFFICE.

ROBERT S. MEARS, OF HUMANSVILLE, MISSOURI, AND NIELS J. JORGENSEN AND WASHINGTON E. PAXTON, OF EMPORIA, KANSAS; SAID JORGENSEN AND SAID PAXTON ASSIGNORS, BY DIRECT AND MESNE ASSIGNMENTS, TO SAID MEARS.

CAR.

No. 862,573.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed November 16, 1906. Serial No. 343,676.

To all whom it may concern:

Be it known that we, ROBERT S. MEARS, a citizen of the United States, residing at Humansville, in the county of Polk and State of Missouri, and NIELS J. JORGENSEN and WASHINGTON E. PAXTON, citizens of the United States, and residents of Emporia, in the county of Lyon and State of Kansas, have invented a new and useful Improvement in Cars, of which the following is a specification.

Our invention relates to railway cars in which may be carried articles for exhibition purposes where it is not convenient or desirable to remove the articles from the car while exhibiting them. It may be that the articles are too heavy to afford convenient removal, or that the exhibits are arranged in the car in attractive manner, and that the time for exhibition being short at each place, it would not be possible to remove them. With such exhibits it has heretofore been the plan to set them up in the ordinary car, permitting the persons inspecting the exhibits to pass through the inside of the car, which is obviously a great limitation upon the amount of exhibits to be carried in any one car but is also an obstacle to the convenient and artistic arrangement of the interior of the car, the contents of the car being necessarily crowded.

Our invention has in view a plan for utilizing the entire interior of the car for the exhibited articles, and the provision of extension floors, sides, tops, and ends, so that the car may thus be spread out sideways to about three times its normal floor space, using the side extensions as platforms from which the contents of the car, may be viewed by the spectators. By this method of extending, temporarily, the sides of the car, the interior of the car may be utilized to its full capacity; in transit the extension parts may be folded or collapsed so as to then have the car of substantially normal dimensions; and when the car is thus extended for purposes of exhibition, these extensions may be drawn out, without disturbing the exhibits. The importance of a car of this kind is obvious in the instances of exhibiting heavy machinery, as well as special arrangements of lighter articles. Furthermore, the utility of the car is not limited to exhibition purposes; it may be used as a traveling assembly hall; and it may be used in any case where it may be desired to use the car with the extended floor space.

The invention consists of the parts, improvements, and combinations herein set forth and claimed.

In the drawings accompanying and forming part of this specification, and in the description thereof, we have shown somewhat in outline, the preferred form of our invention, and have shown what we deem to be the best mode of applying the principles of our inven-

tion; but it is to be understood that our invention is not confined to this drawing and the description of the drawing, and that parts and combinations herein separately claimed may be used either with or without the other device or devices of like general nature to those herein set forth; and that we contemplate changes in form, proportion, materials, arrangement, the transposition of parts, and the substitution of equivalent members without departing from the spirit of the invention.

Figure 1 is a cross section of a car made in accordance with our invention, the right-hand side of the car being extended, and the left-hand side being closed or folded up. Fig. 2 is a partial side elevation of the car taken from the right-hand side of Fig. 1. Fig. 3 is a partial center longitudinal section of the car.

Like reference letters or reference numerals indicate like or corresponding parts throughout the several views.

In the drawings we have shown only an outline of the car, no reference being made to details of construction, since our invention does not cover such details, and since such details are well known in the art of car construction; the invention itself being however sufficiently disclosed to enable those skilled in the art to make and use it.

A may represent a car-body mounted on trucks B. C is the ordinary floor, and D, D are the sills. 4 is the car roof and 3 is the car end. So much of the car is of any well known or suitable construction, and need not be further described.

Instead of the ordinary side walls of the car fastened rigidly thereto as part thereof, it should be noted that the sides of our car, 8, 8 are movable, the roof being supported at intervals along the side by the upright studs 5, 5. Secured to the lower edge of the car-sides so as to be capable of being extended in under the car, are a number of movable floor-supports, or I-beams, 6, 6. These I-beams may be located under the car at suitable intervals, say three or four feet apart, and at such places as not to interfere with the wheels, the braking apparatus, or any of the equipment under the car-body. They may be of a length about equal to the width of the car; may be supported at their outer ends on rollers 10, 10 mounted loosely on the line shaft 14 hung in suitable brackets or hangers 9, 9 at intervals along the car-body; and may bear upwardly against a plate 11 which may be secured to a cross-beam 12, or otherwise fastened to the under side of the car. Cleats 13 may be provided if desired to embrace the flanges of the I-beams to serve as guides therefor. Some of the I-beams may be provided with racks, as at 7, which mesh with pinions 15, which may

be keyed to the line shaft 14 and driven thereby to force the I-beams, and with them the car-sides, and other extension parts, outwardly; and in such operation the beams may be supported on dollies 18, and

- 5 when fully extended they may be supported on the more stable supports the jacks 19; it being understood that there may be as many jacks and dollies as may be necessary to facilitate the extension and support the load.
- 10 A foldable floor 16 is hinged to the inside of the movable side and at the bottom thereof, 17, and this is of such width that when the side is extended out to its limit, the floor just fits in between the original and the extended side of the car, as shown in the right-

15 hand side of Fig. 1.

- Extending the length of the car is a roller 23 on which is rolled the tarpaulin 24, which when the side is extended serves as a roof for the extension, and when the extendible side is folded or closed, this tar-
- 20 paulin is rolled up on the roller 23. A drop-board 25 covers the opening in the side of the car above the movable side 8 when the side is closed up and also serves to protect the roller and other parts from the weather when the side is extended, as shown in the
- 25 respective sides in Fig. 1.

- As ends for the extensions, we may have either wooden ends, as illustrated, 20, 20, and foldable up with the sides and across the car-ends, and having the hinged drops 21, 21, at the bottom, or we may have
- 30 a separate tarpaulin; or, indeed, several of the cars may be connected together with mere coverings over the adjoining ends, thus making continuous passages throughout an entire train of the cars.

- To hold the sides rigidly when extended, we may
- 35 provide suitable tie-bars 26, 26, adapted to be bolted, 27, to the sides, and at 28 to the stud 5. When the sides are closed up, these tie-bars may be allowed to stand against the studs, the slots 29, allowing them to be thus shortened with reference to the bolt 28. When
- 40 the side is closed up, the bolt 27 may pass through the corresponding stud, and secured thereto by a nut or pin, so as to hold the side in place. Ventilators may be provided in the upper part of the car-body proper, as at 30, 30, and also in the movable sides, as at 31, 31.
- 45 Suitable steps to the floor of the extension may also be provided, as at 32.

- From this description of the car embodying our invention, the operation will be readily understood. When the car is in service traveling, or at other times
- 50 when it is not desired to extend the sides, both sides may be folded or closed up, as is the left-hand side of

the car shown in Fig. 1, and in such case we have a car of the ordinary or standard measurements as to width, and yet the manner of folding up the sides, floors, and top, take up but very little of the space in 55 the interior of the car, and do not interfere with the contents of the car or their arrangement. With the extensible sides, floor, and roof thus closed or folded up, the car has the appearance from the outside, as to general outline and dimensions of an ordinary car, 60 and may be handled in the same manner. Where it is desired to display the contents of the car, the car may be side-tracked, and one or both sides extended in the manner hereinbefore explained. When both sides are thus extended, we have a floor area about 65 three times as great as the floor area of the ordinary car.

What we claim is:

1. The combination with a car, of a movable side, beams supporting the side and movably supported under the car, and a floor adapted to be laid on said beams when the side is extended and to be folded up against the side when the side is closed up. 70
2. The combination of a car with movable sides and an extensible floor, of beams movably supported by the lower portion of the car and supporting the side and extended 75 floor, and a collapsible roof.
3. The combination with a car, of movable sides, beams extended under the car and supported thereby and supporting the movable sides, floors adapted to be folded up against the sides and to be supported on the beams when extended outwardly, and a flexible covering for said extensions. 80
4. The combination of a car with movable sides, of beams movably supported underneath the car and extendible laterally therefrom and supporting the movable sides, floors adapted to be supported on said beams when the beams and sides are extended and to be folded up against the sides when they are closed, and a flexible covering for said extensions. 85
5. The combination with a car having movable sides, 90 of beams supported by and underneath the car and extendible outwardly therefrom and supporting the movable sides, floors supported on the beams when extended and foldable up against the sides when closed, a flexible roof, folding ends, and adjustable means for supporting said extensions upon the ground. 95

In testimony whereof we have hereunto signed our names in the presence of witnesses.

ROBERT S. MEARS.
NIELS J. JORGENSEN.
WASHINGTON E. PAXTON.

Witnesses to signature of Robert S. Mears:

RICHARD DILL,
B. R. TILLERY.

Witnesses to signatures of Niels J. Jorgensen and Washington E. Paxton:

CHARLES T. EVANS,
E. C. RYAN.