

(No Model.)

B. C. HICKS.
STOCK CAR.

No. 429,916.

Patented June 10, 1890.

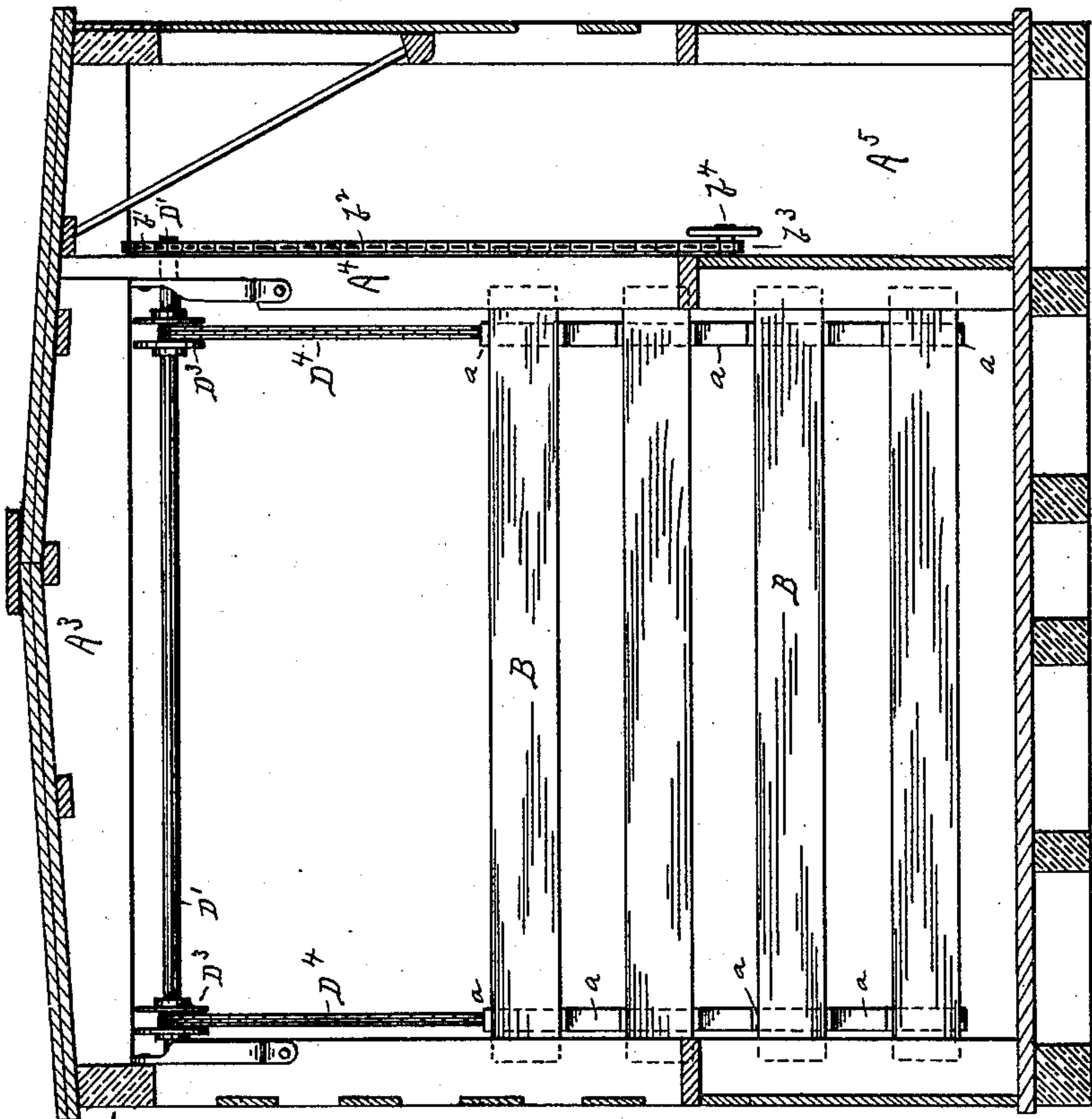


Fig. 2-

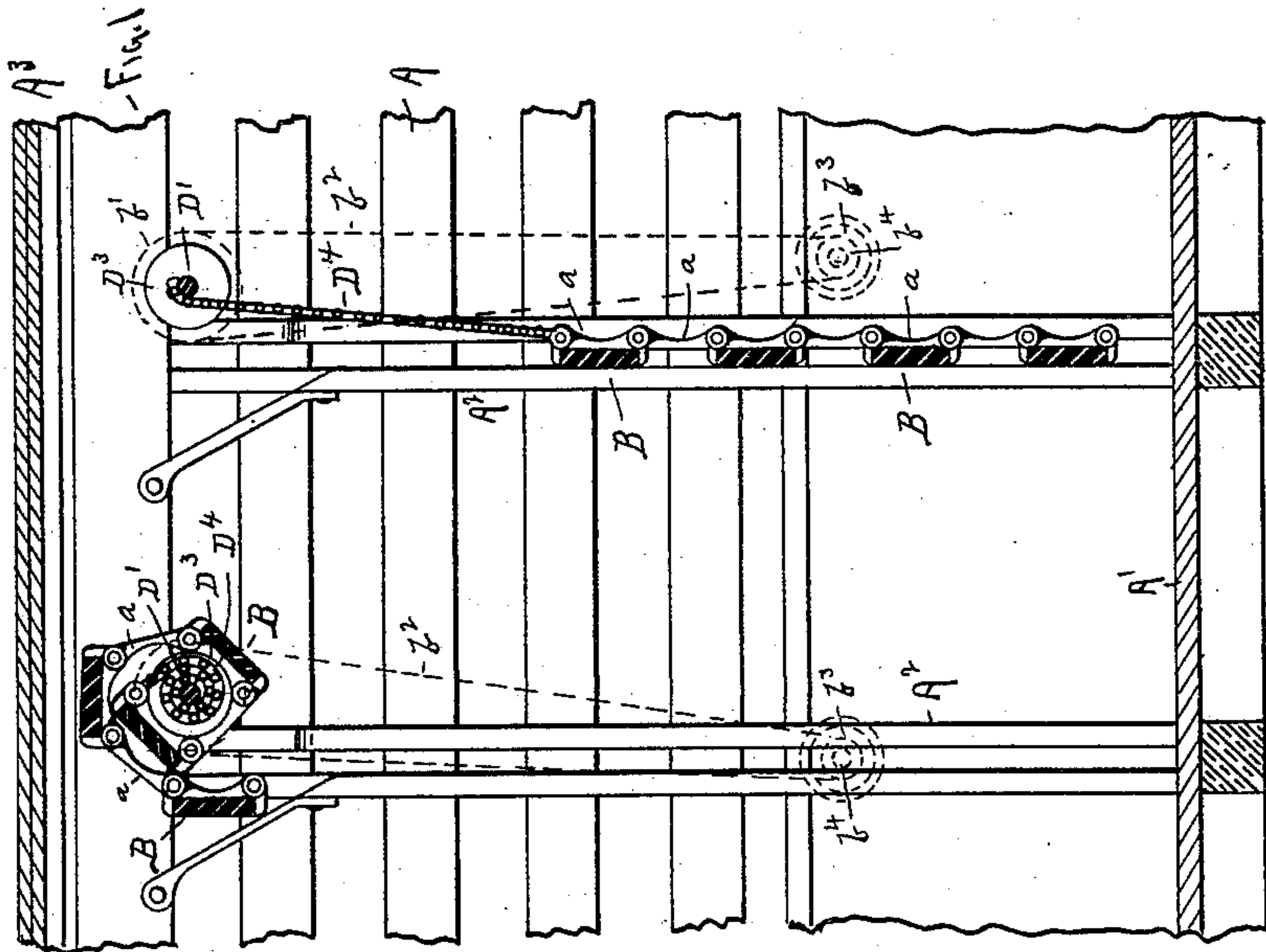


Fig. 1

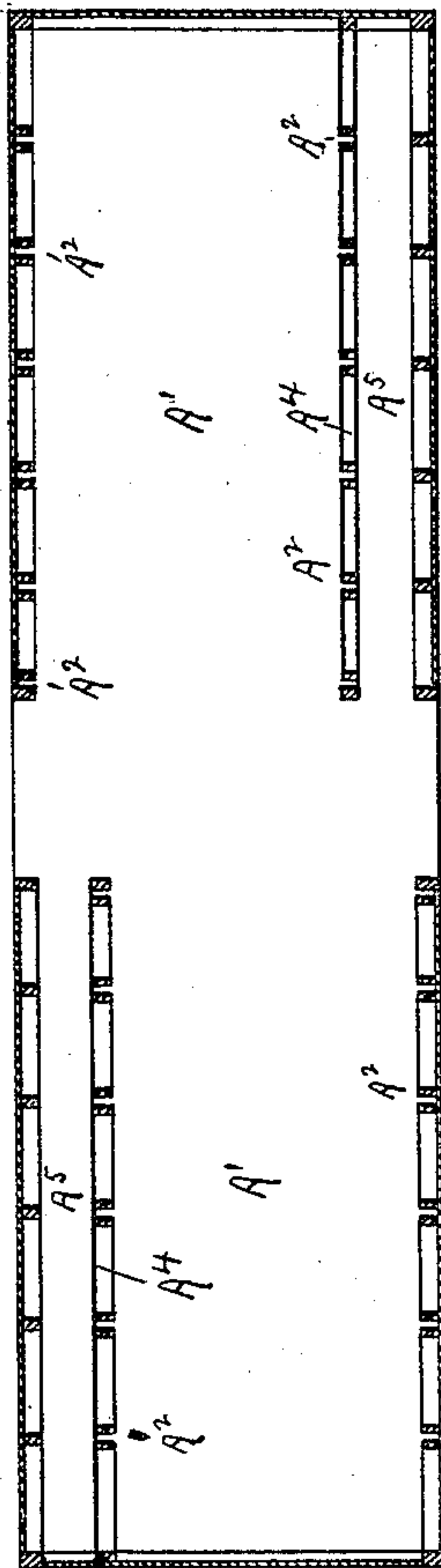


Fig. 3

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UNITED STATES PATENT OFFICE.

BOHN CHAPIN HICKS, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE HICKS STOCK CAR COMPANY, OF WEST VIRGINIA.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 429,916, dated June 10, 1890.

Application filed November 8, 1889. Serial No. 329,611. (No model.)

To all whom it may concern:

Be it known that I, BOHN CHAPIN HICKS, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Stock-Cars, of which the following is a specification.

This invention relates to stock-cars; and it consists in the manner of constructing and operating the series of slatted stall-bars, whereby the interior of the car may be divided into separate compartments for the animals, as hereinafter shown and described, and specifically pointed out in the claims.

In the drawings, Figure 1 is a cross-sectional view, and Fig. 2 is a longitudinal sectional elevation, of a portion of a stock-car with my improvements arranged therein. Fig. 3 is a reduced diagram of a car in longitudinal section, showing the arrangement of the interior fixed partitions.

A' represents the floor, A² the side stanchions, and A³ the roof. All of these parts may be of the ordinary construction, or of any special construction desired, as my invention is applicable to almost any form of car now in use. The side stanchions A² are arranged in pairs, with a narrow space between them to form guides for the ends of the stall-bars B, as shown. These stall-bars are shown connected by chains, the links *a* of which are substantially the same as those shown in my patent, No. 401,274, April 9, 1889, which is the preferable form; but other forms of links may be used, if desired.

Across the upper part of the car-frame above each of the sets of stall-bars is a shaft D', journaled by its ends in the car-frame.

When used in connection with cars for the transportation of horses or fine stock of other kinds, one end of each of the shafts will be journaled in the partitions A⁴, which are set lengthwise of the car to form gangways A⁵, for the convenience of the attendants in feeding the stock, (see diagram, Fig. 3,) and when thus constructed the end of the shaft within the gangways will be provided with sprocket-wheels *b'*, from which chains *b²* lead down to sprocket-pinions *b³*, attached to studs *b⁴* on the side of the partition A⁴ convenient to the

hand of the operator. Cranks or hand-wheels will be connected to the pinions *b³*, by which they may be revolved, and thus through the chains revolve the shafts D'. Upon the shafts D' near each end is a drum formed with a small central portion and with its sides of larger disks D³, or the shaft itself may be utilized as the central portion and the disks formed separately and secured to the shaft a short distance apart. Connected by one end to each of the drums between the disks, or to the shaft between the disks, as the case may be, is a chain D⁴, the other end of each of the chains being connected to the upper link *a* of each of the chains connecting the stall-bars B, as shown. The links of the chains D⁴ will preferably be of flat regular links, and the space between the disks D³ will equal the width of the links, so that when the shafts D' are revolved the chains D⁴ will be wound up between the disks and elevate the bars B, and the chains D⁴ will be just long enough when fully wound up to fill this space even with the rims of the disks, so that when the first slat B reaches the disks, the edge of the slat, the ends of the first or upper link *a* of the partition-chain, and the lower or last link of the chains D⁴ will be in close proximity, so that the continuation of the revolution of the shafts D' will cause the slatted belt to be wound around the disks D³ in the form of a drum or cylinder, as shown at the right in Fig. 2. By this simple device the slatted belts may be elevated into the top of the car to leave the interior of the car free from obstruction when desired. Then when it is desired to lower the stall-bars it is only necessary to reverse the motion of the shafts D', when the gravity of the slats will cause them to run down again into their places, as at the right of Fig. 1.

Having thus described my invention, what I claim as new is—

1. In a stock-car, a flexible partition, in combination with a rotatable shaft having winding peripheries of two different diameters, and chains connecting said flexible partition with said shaft, each chain being attached at one end to said flexible partition and at the opposite end being operatively connected to a portion of the periphery of said shaft, having

a small diameter, substantially as set forth, whereby said chains wind upon the peripheral portions of said shaft having small diameters, and the flexible partition itself winds upon
5 the peripheral portions of the shaft having large diameter.

2. In a stock-car, a flexible partition and a rotary shaft having at its opposite ends a pair of peripherally-extending disks or flanges, in
10 combination with a chain connecting each end of said shaft with said flexible partition, each of said chains winding upon said shaft between a pair of said disks or flanges, and
15 peripheries of said disks or flanges, substantially as set forth.

3. In a stock-car, a longitudinal partition along one side of the car, whereby a gangway is formed between said partition and said side

of the car, and a plurality of flexible parti- 20
tions extending crosswise of the body of the car and dividing the car into a series of stalls or compartments, in combination with a plu-
rality of rotatable shafts crosswise of the top of the car, there being one shaft above each 25
of said flexible partitions, winding-chains connecting each of said shafts to one of said partitions, hand-wheels in said gangway for each
of said shafts, and intermediate gearing be- 30
tween each hand-wheel and its shaft, substantially as set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

BOHN CHAPIN HICKS.

Witnesses:

C. N. WOODWARD,
H. S. WEBSTER.