

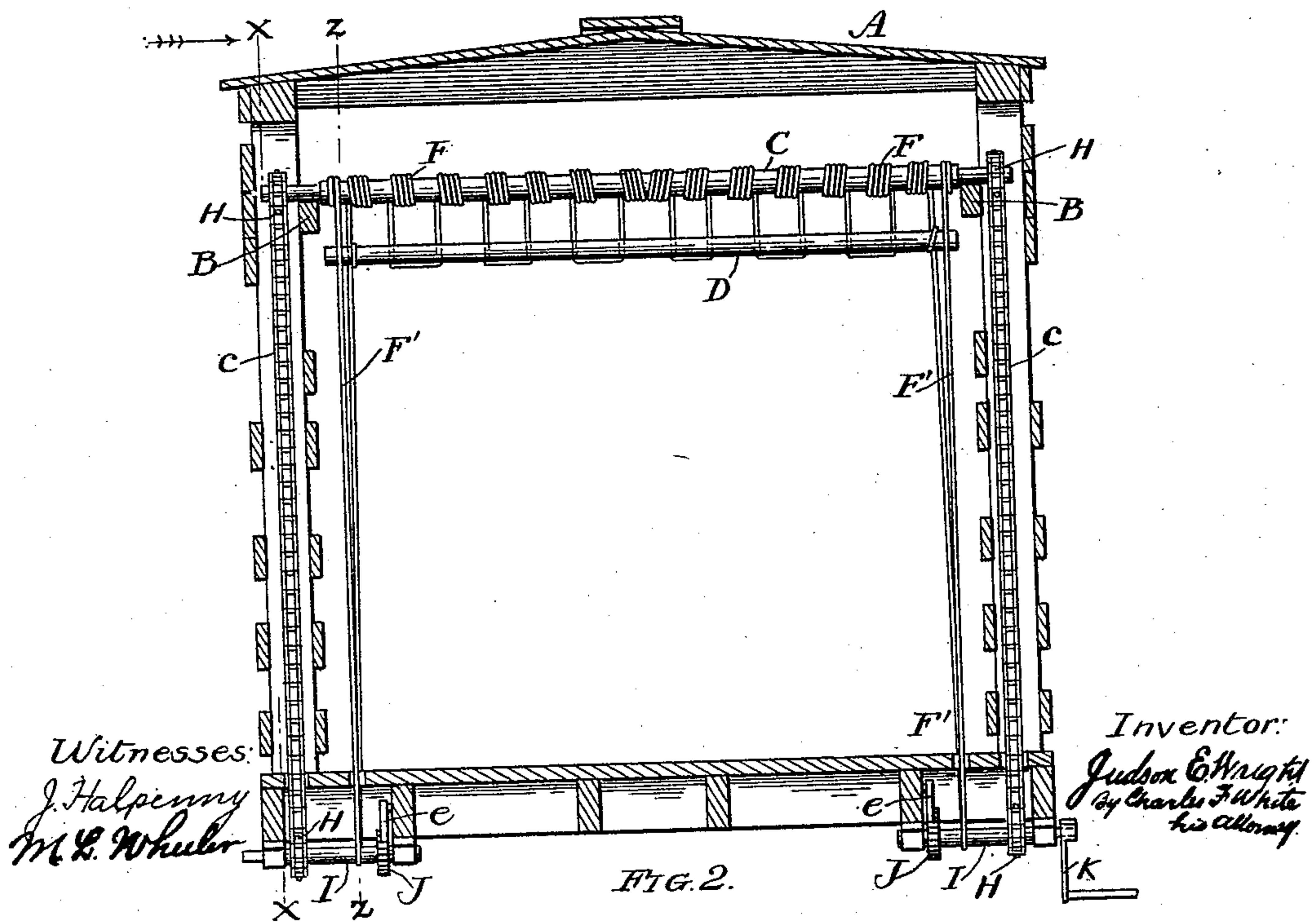
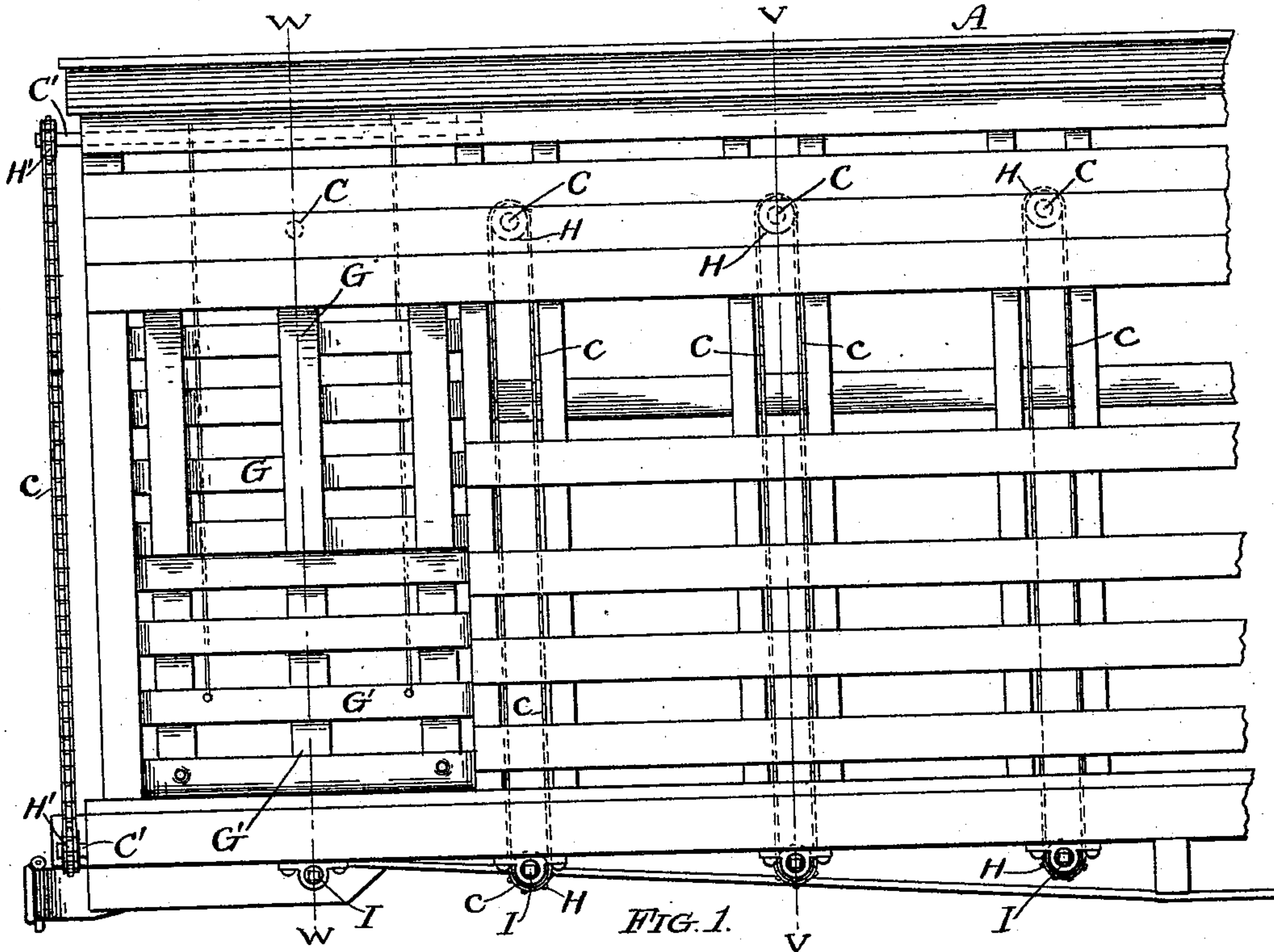
(No Model.)

2 Sheets—Sheet 1.

J. E. WRIGHT.
STOCK CAR.

No. 455,697.

Patented July 7, 1891.



Witnesses:
J. Halpinny
M. L. Wheeler

Inventor:
Judson E. Wright
By Charles F. White
his attorney

(No Model.)

2 Sheets—Sheet 2.

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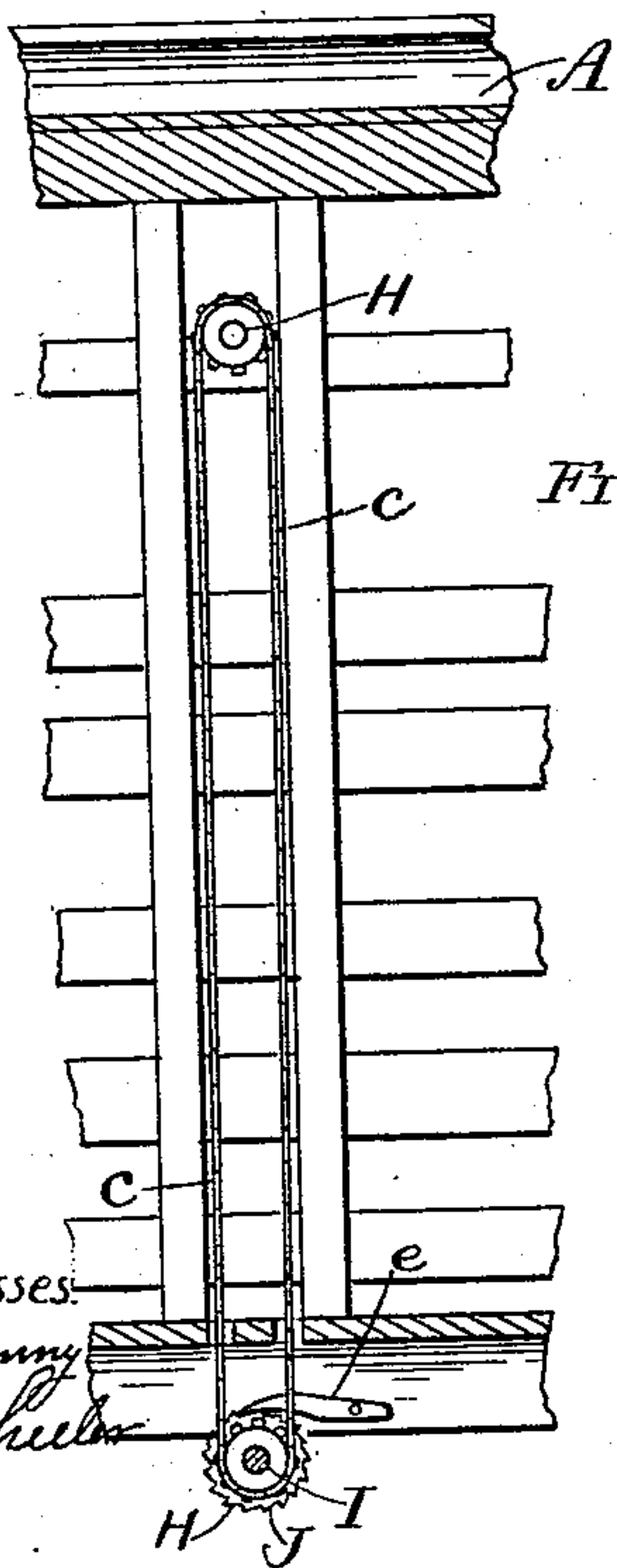
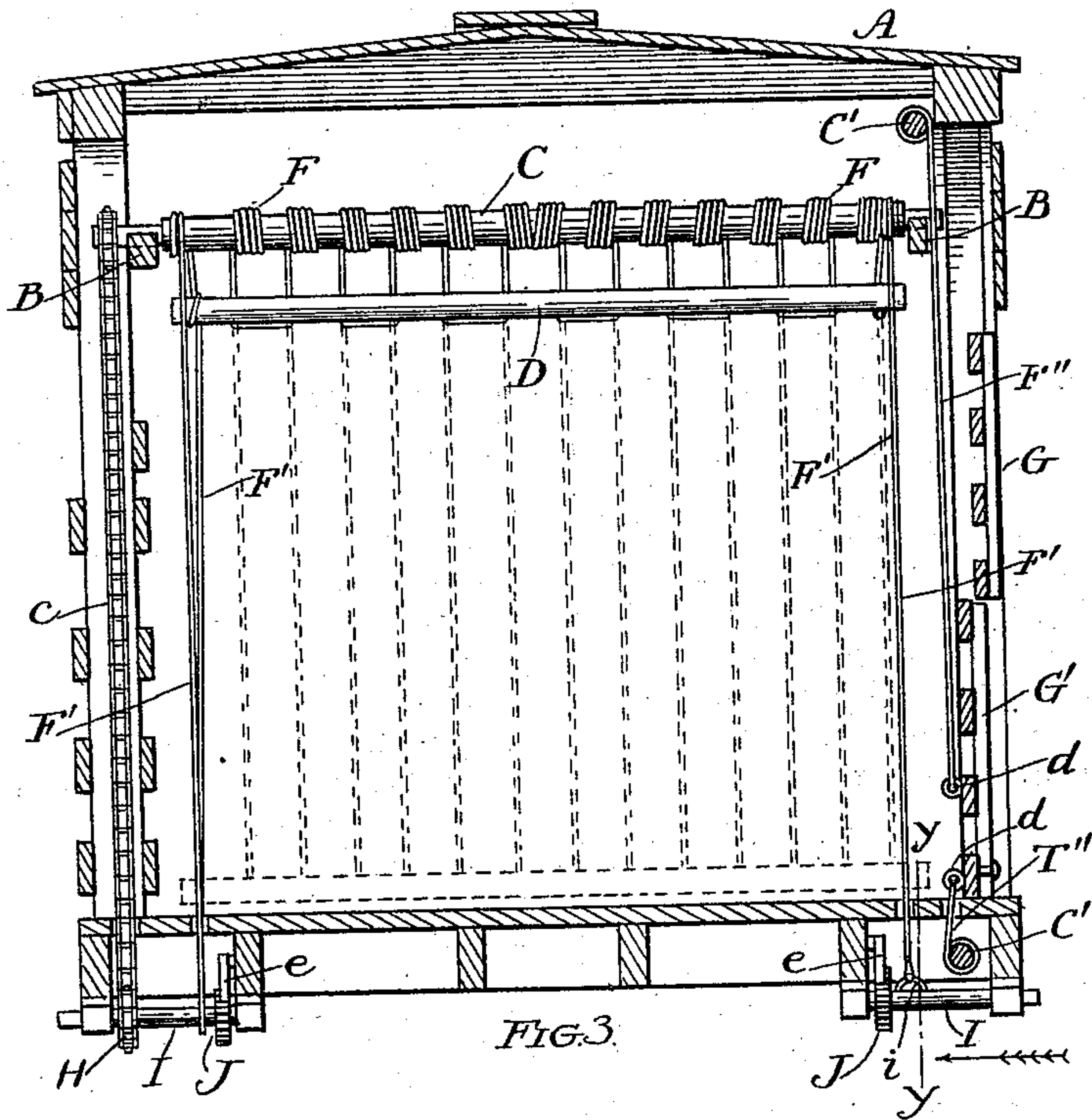


FIG. 4.

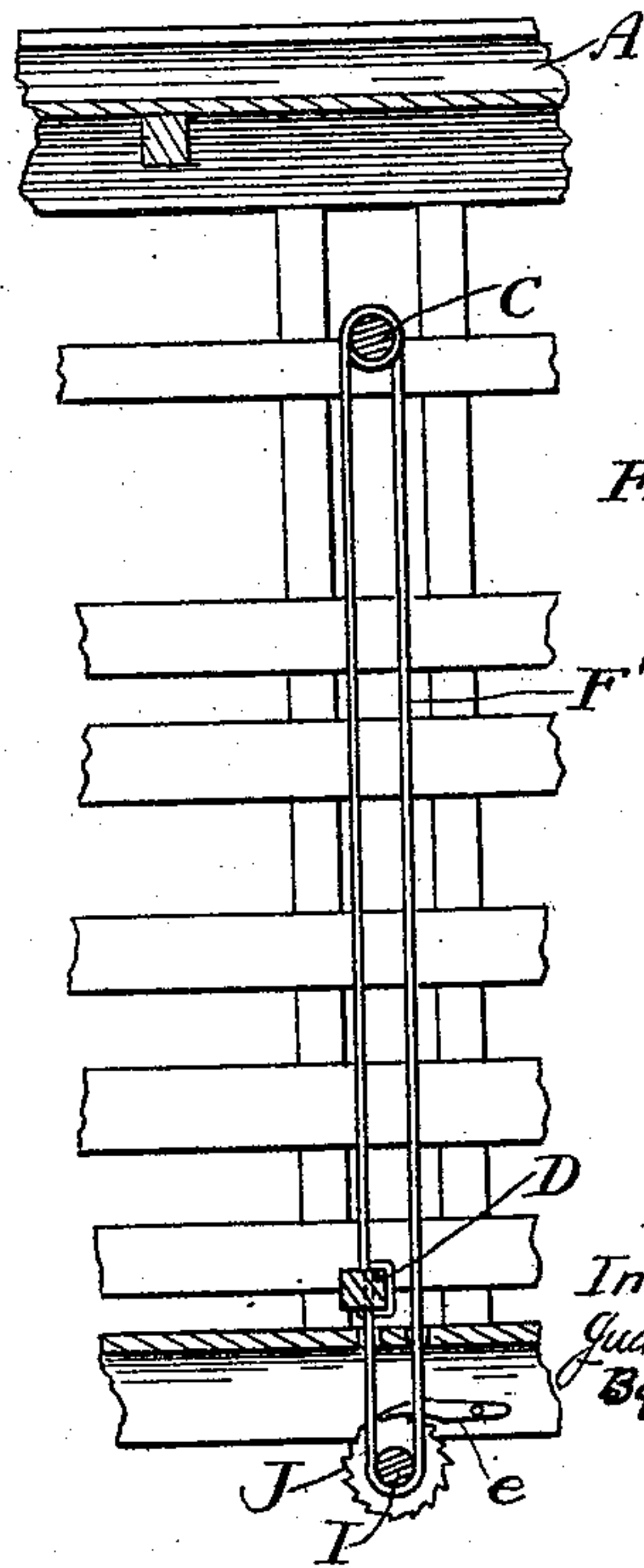


FIG. 5.

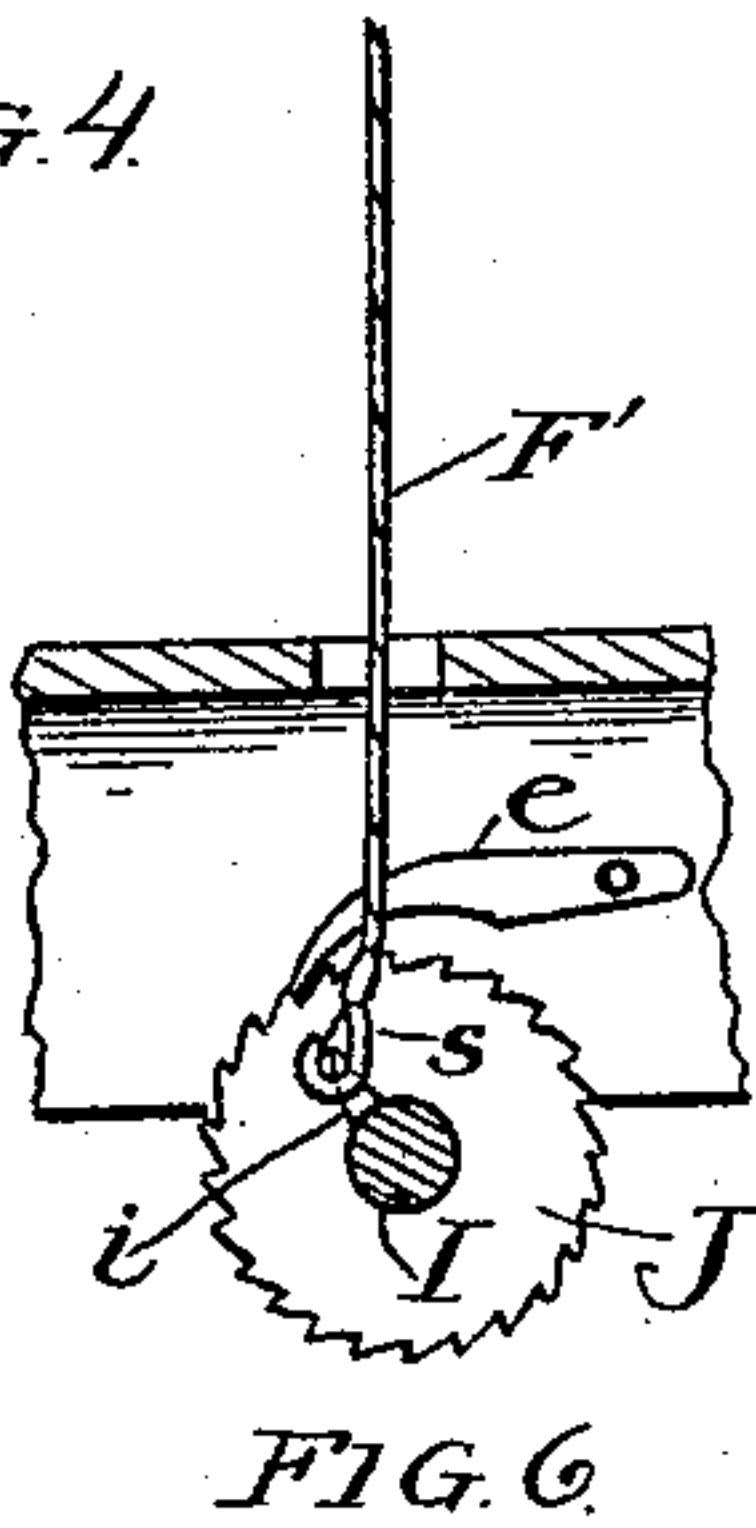


FIG. 6.

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UNITED STATES PATENT OFFICE.

JUDSON E. WRIGHT, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
WM. B. MOORE, OF SAME PLACE.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 455,697, dated July 7, 1891.

Application filed September 28, 1889. Serial No. 325,448. (No model.)

To all whom it may concern:

Be it known that I, JUDSON E. WRIGHT, of the county of Cook and State of Illinois, have invented certain new and useful Improvements in Stock-Cars, which are fully described in the following specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to cars designed for carrying cattle and horses; and it consists, substantially, of a partition (constructed of rope or other flexible material) at its upper end attached to and adapted to be wound on and unwound from a roller extending transversely across the car near the top and at its lower end attached to a cross-piece or timber forming the bottom of the partition, in combination with a rope, cord, or chain secured to the cross-piece forming the bottom of the flexible partition and extending therefrom downward and around rotatable rollers or drums placed near the platform of the car, preferably underneath such platform, and from thence upward and to the roller to which the upper end of the flexible partition is attached and there secured in such manner that when the roller is turned so that the flexible partition is unwound the rope, cord, or chain is wound upon such roller, and when the flexible partition is wholly unwound from the roller further continuous turning of the roller will continue to wind the rope, cord, or chain thereon, thus continuing to draw the cross-piece forming the bottom of the flexible partition downward, and will also rewind the flexible partition on the roller, thereby drawing such flexible partition taut, and means for holding the flexible partition in its taut position, as by a dog intermeshing with a ratchet-wheel secured on the shaft of the roller or on a shaft geared thereto by sprocket-wheels and chain or other equivalent mechanism.

In the construction embodying my invention herein described, and illustrated by the drawings, there are a series of flexible partitions attached, respectively, to a series of rollers extending transversely across the car, such car being thereby divided, when the flexible partitions are down, into stalls adapt-

ed to hold a single animal. The rollers in the upper part of the car are provided near one or both their ends with suitable sprocket-wheels, over which link-belt chains extended down and around similar sprocket-wheels on loose rollers beneath the car are made to work. These rollers beneath the car are provided with crank-shafts, and are so arranged that when turned in one direction the rope or flexible partition will be rolled upon the rollers in the upper part of the car, and the cross-piece to which the ropes are secured, and which forms the lower part of the partition, will be raised up out of the way of the stock in the car in loading or unloading. A rope or cord is firmly secured at one end to the roller on the upper part of the car and is made to extend down and pass around rollers underneath the car, and then secured to the cross-piece forming the lower part of the partition. As the flexible partition is unrolled from the upper roller this rope is wound thereon. When the flexible partition is wholly unrolled, further turning of the roller rewinds it thereon, and as the rope is also being wound on the upper roller the upper part of the flexible partition is drawn upward and the lower part by the rope attached to the cross-bar thereof the partition is drawn taut, the sprocket-wheels being secured from turning backward. By this means the rope or flexible partition is always kept taut. By loosening the sprocket-wheels and turning the crank on the rollers beneath the car back the rope partitions are carried back to their original position.

The object of my invention is to provide a stock-car with partitions which can be readily raised out of the way of the stock when the car is being loaded or unloaded, and which, as soon as the stock is in the car, can be slid down and the car divided into separate stalls for each creature, said partitions being so constructed of flexible material as to provide a yielding support for the stock and protection against injury from jars and the jarring and pushing of one creature against the other and from being trampled upon in case they get down.

Referring to the drawings, Figure 1 is a side view of a section of a stock-car equipped

with my invention. Fig. 2 represents a cross-section on the line V V, showing one of the partitions with the mechanism for operating the same. Fig. 3 represents a cross-section on the line W W, also showing one of the partitions and the mechanism for raising the car-door. Fig. 4 is a view of a section of the car on the line X X, showing the link-belt chain working over the sprocket-wheels on the ends of the rollers C; also the ratchet-wheel J with the catch *e*. Fig. 5 is a view of a section of the car on the line Z Z, showing the rope secured at one end to the rollers C and at the other end to the cross-partition D and passing down over the loose roller. Fig. 6 is a view on the line *y y*, showing the ratchet-wheel J, with the catch *e*, and also the end of the rope F', with the snap *s* thereon.

Similar letters represent like parts in the several figures.

A is a stock-car.

C C are rollers extending transversely across the car near the top, which are made to turn in the bearings B B on the sides of the car.

D D are cross-pieces forming the lower part of the partitions.

F F F are ropes placed at short intervals apart and secured at one end to the cross-pieces D D and at the other to the rollers C C. These ropes are made to form flexible partitions, by means of which the car is divided into separate stalls, and are made of just sufficient length to extend from the rollers C C to the cross-pieces D D when said cross-pieces rest upon the floor of the car. F' F' are similar ropes, which are also secured one at either end of said cross-partitions D D, and which extend down through openings in the bottom of the car and around the loose rollers I I, underneath the car, and thence up to the rollers C C, to which they are fastened.

H H are sprocket-wheels secured to either end of the rollers C C and to the loose rollers I I, and around which the link-belt chains *c* are made to work.

J J are ratchet-wheels, also secured to the loose rollers I I and provided with the drop-catches *e e*.

G is the car-door, which is in two sections and is made to slide up by mechanism similar to that used for operating the partitions. This mechanism consists of the two loose rollers C' C', working on suitable bearings, one in the upper part of the car above the door and one underneath the car below the door. H' H' are sprocket-wheels attached to the ends of said loose rollers, over which the link-belt *c* is made to work, and F'' F'' are ropes, and *d d* eyebolts in the lower section of the car-door, to which one end of said ropes are secured, their other ends being secured to the rollers C' C'.

The method of raising and lowering the partitions is as follows: The ropes having been secured to the rollers C C and the cross-pieces D D in the manner stated, and ad-

justed so that the bottoms of said cross-pieces rest upon the floor of the car, with the rope taut, the crank K is turned to the left, thus rotating the roller I, and also by means of the link-belt *c* the roller C. As the latter roller turns, the ropes F F are wound upon it and the cross-pieces D are raised from the floor of the car out of the way of the stock when the car is being loaded and unloaded. By turning the crank in the opposite direction the ropes F F are unwound from the rollers C C, and the ropes F' F', passing around the rollers I I, are at the same time wound upon said rollers C C and the cross-pieces D D carried down toward the bottom of the car by said ropes. When the cross-pieces D D rest upon the floor of the car, the ropes F F are entirely unwound from the rollers C C, and by continuing to turn the crank to the right the ropes will be wound in the opposite direction on said rollers at the same time the ropes F' F' are wound thereon, and in this manner the lower part of the flexible partition is held down in position, while the upper part is raised, until the partition is held taut. The catch *e* drops into the ratchet-wheel J as the crank is turned to the right and prevents the roller from turning back, and thus the flexible partition is maintained taut. When it is desired to raise the partition, the catch is slid to one side of of the ratchet-wheel.

The operation of opening and closing the car-door by my device is as follows: The door being closed, the crank K is placed on the crank-shaft of the roller C', carrying the sprocket-wheel H', and turned to the right. This rotates the rollers C' C' and raises the lower section G' of the door, which slides inside the upper section G, until a cleat near the lower end is brought in contact with the lower cleat of said section G, and carries it also up toward the top of the car. The door is lowered by turning the crank in the opposite direction.

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

1. In a stock-car, a flexible partition adapted to be wound over a roller, such flexible partition having a cross-piece forming the lower end thereof, in combination with a roller adapted to have such flexible partition wound upon it, extending transversely across the car near the top thereof, sprocket-wheels rigidly secured to such roller at each end thereof, sprocket-wheels underneath the car on each side thereof, and sprocket-chains extending over such sprocket-wheels, whereby rotation of the sprocket-wheels underneath the car will rotate the roller, a loose pulley underneath the car on each side thereof, and a cord extending from each end of the cross-piece forming the lower end of the flexible partition around the pulleys underneath the car and from thence to the roller near the top of the car and secured thereto, whereby when the flexi-

ble partition is completely unwound from the upper roller by the turning in a given direction of the lower sprocket-wheels and such turning is continued the movement of the upper roller is also continued and the flexible partition partially rewound upon such roller and the parts of such partition thereby made taut, substantially as described.

2. In a stock-car, a series of rollers extending transversely across the car near the top thereof, a series of rollers underneath the first-named series and near the platform of the car, and a series of flexible partitions having, respectively, a cross-piece secured thereto, forming the lower edge thereof, each of such flexible partitions attached at its upper end to one of the series of rollers near the top of the car and adapted to be wound on and unwound from such roller, in combination with a series of flexible connections secured to and extending from the cross-pieces forming the lower edge of the flexible partitions, respectively, downward around the rollers underneath such cross-pieces and from thence upward and secured to the roller thereover near the top

of the car in such manner that when any one of the series of rollers near the top of the car is turned so that the flexible partition thereon is unwound therefrom the flexible connections are wound upon such roller and when the flexible partition is wholly unwound from the roller further continuous turning of the roller will continue to wind the flexible connections thereon and will also rewind the flexible partition on such roller, and a series of dogs intermeshing, respectively, with a series of ratchet-wheels, each of such ratchet-wheels secured to the rollers underneath the cross-pieces, and such rollers geared as by sprocket-wheels and a chain to a roller of the series near the top of the car, whereby when the flexible partition on any one of the series of rollers has been unwound and drawn taut it will be maintained in its taut position by the dog and ratchet-wheel geared to the roller thereof, substantially as described.

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Witnesses:

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