(No Model.)

G. HACKNEY.

STOCK CAR.

No. 395,323. Patented Jan. 1, 1889.

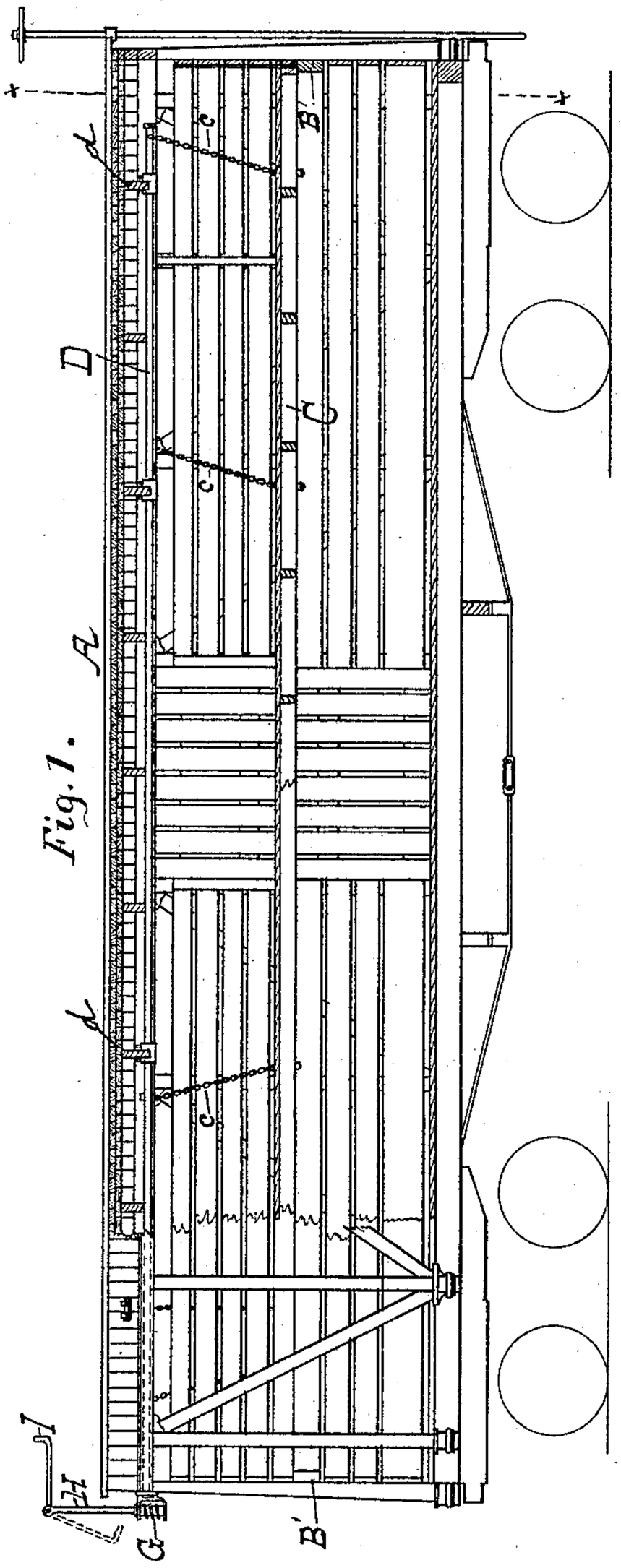

Fig. 1.

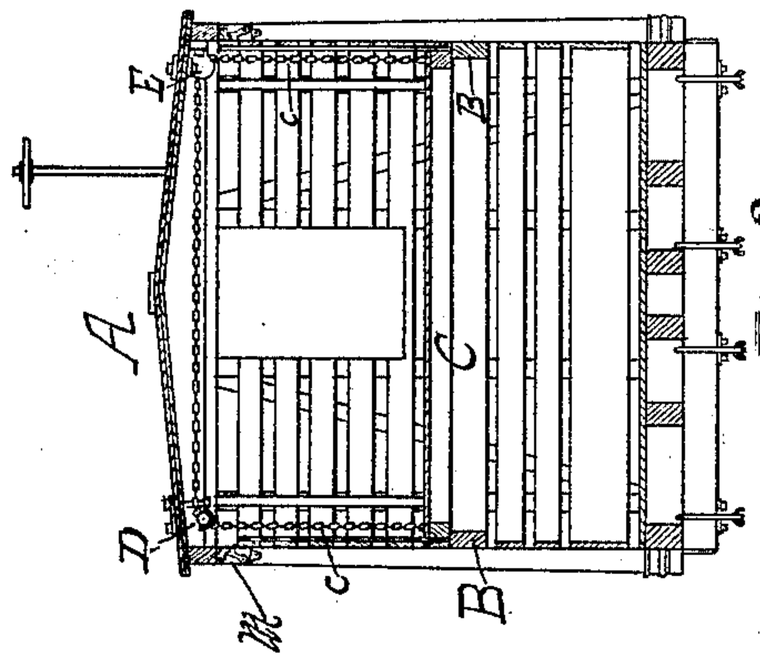

Fig. 3.

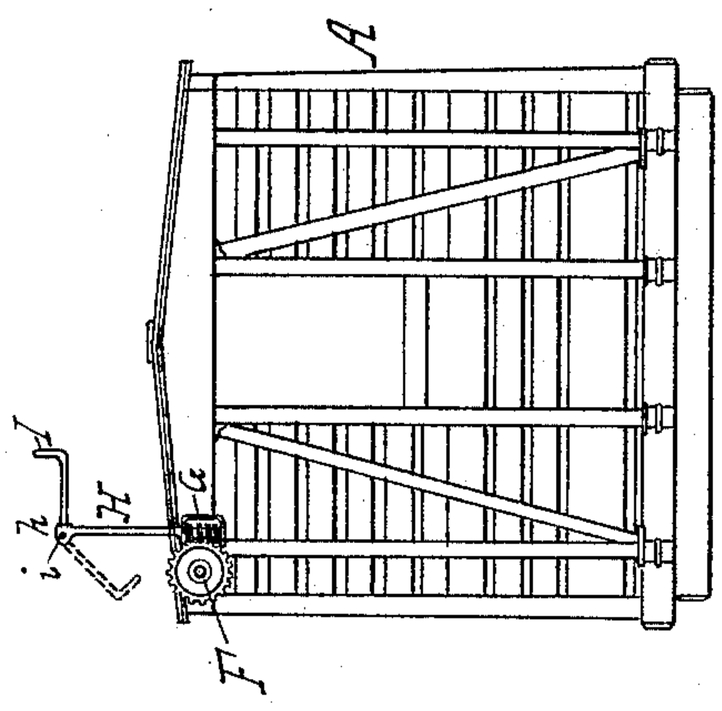

Fig. 2.

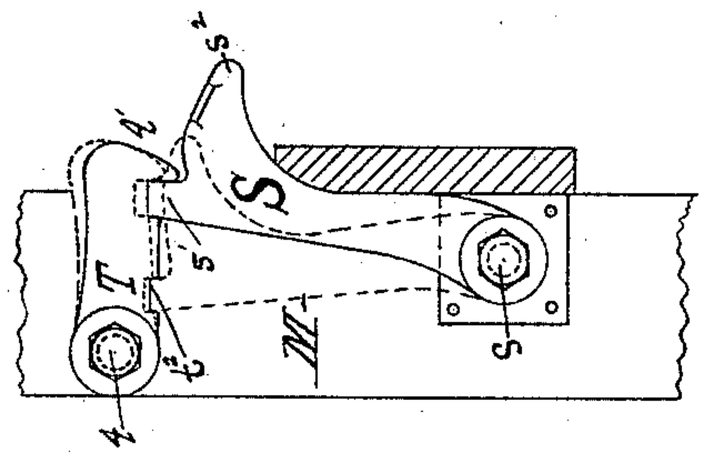

Fig. 4.

Witnesses:

Harry Bitner
W. H. Hill.

Inventor

George Hackney.
By his Attys.
Hill & Dixon.

UNITED STATES PATENT OFFICE.

GEORGE HACKNEY, OF TOPEKA, KANSAS.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 395,323, dated January 1, 1889.

Application filed June 23, 1888. Serial No. 278,021. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HACKNEY, a citizen of the United States of America, residing at Topeka, in the county of Shawnee and State of Kansas, have invented certain new and useful Improvements in Stock-Cars, of which the following is a specification.

My invention relates to that class of stock-cars which are termed "double-deck" cars, and which are primarily designed to carry sheep or other small animals. As enough of these to make a load for the car cannot be crowded upon a single floor, such cars are provided with an upper or second floor about half-way between the bottom and roof of the car, thereby doubling its capacity. It is very desirable that this second or upper floor be so constructed that when it is not needed it can be raised up against the roof of the car and held there securely, as the car can then be used for the transportation of larger stock or other freight which requires its entire height. To provide means by which this upper floor may be easily raised and held beneath the roof secure against all jolts or jars is the object of my invention.

I am aware that various means have been devised for accomplishing this, and my invention is in the nature of an improvement upon such devices with a view to rendering them at once more reliable and less expensive.

In the accompanying drawings, Figure 1 is a side elevation, partially in section, of my improved stock-car; Fig. 2, an end elevation of the same; Fig. 3, a vertical cross-section in the line *x x* of Fig. 1; and Fig. 4 is a detail view of my improved stop or catch, which holds the movable floor in position when raised up to the roof of the car.

My invention consists in combining with a movable floor resting upon rigid supports about half-way between the bottom and top of the car means for raising such floor, which will not allow it to drop back by its own weight when left for a moment in any intermediate position, and an improved stop or catch, so constructed as to enable it to hold said floor securely under the roof of the car, and which can also be readily thrown back and held out of the way when desired, and in other features hereinafter described, and pointed out definitely in the claims.

Referring to the drawings, in which like letters of reference indicate the same parts, A represents a stock-car of any desired construction; B B, side timbers of the same of sufficient thickness to project out into the car beyond the inner walls, and B′ B′ end timbers of like proportions and on the same level with the timbers B B. Upon the shoulders formed by these timbers rests the upper or movable floor, C, which may be constructed in any suitable manner to give it strength enough to sustain the load it is designed to bear. Attached to this floor or platform, at different points along the sides thereof, are several chains, *c*, extending up to the top of the car and fastened to a horizontal shaft or roller, D, suspended from the roof of the car by means of hangers *d d*. In order to avoid the use of more than one of these shafts the chains from one side of the platform are passed through pulleys E, attached to the top of the car, and thence across to the shaft D. One end of this shaft is extended through the end of the car and the outside portion provided with means for turning the same, thereby winding up the chains *c* upon the roller D, and raising simultaneously all portions of the platform C. I use for this purpose a spur-wheel, F, intermeshing with a worm or spiral wheel, G, the latter being fitted upon a shaft, H, and having a handle, I, by which it may be turned. This gearing requires the exertion of but little force upon the handle I in raising the platform C, and at the same time the resistance of the worm G will prevent the platform from falling back by its own weight, thereby dispensing with the use of any separate device for accomplishing this purpose.

A minor improvement consists in fastening the handle I in a fork, *h*, upon the shaft H, by means of a pivot, *i*, out of the vertical line of the shaft, so that the handle, when thrown to one side, will rest upon the top of the shaft at right angles to the same, as shown in the drawings; but when thrown to the other side will drop down by the side of the shaft and out of the way, as indicated by the dotted lines in Figs. 1 and 2.

When the car is at rest, the worm G will offer sufficient resistance to the turning of the wheel F to prevent the platform C from falling by its own weight; but when the car is in

motion the constant jarring and jolting to which it is subject will gradually turn the worm and lower the platform. It seems to have been found quite a difficult problem to construct a stop or catch which would hold the platform firmly and securely in its raised position and at the same time be easy to operate, and not in the way when not in use. A simple little device, stop, or catch, M, by means of which I accomplish this, is shown in Fig. 3, and the construction of the same is illustrated in Fig. 4. It is composed of a boot-shaped pawl, S, pivoted to the upright post of the car at *s*, and a detent, T, pivoted to the post at *t*, the latter containing two notches, *t'* and t^2, fitted to receive the heel *s'* of the boot. When the heel *s'* is held by the notch *t'*, as shown in Fig. 4, the toe s^2 of the boot projects out into the car and serves as a rest for the platform C, while by simply raising the detent T and dropping the heel *s'* back into the notch t^2, as indicated by the dotted lines in the figure, the boot will be held back out of the way of the platform. It will be evident from an inspection of the drawings that every jolt of the car only forces the detent T more tightly upon the heel *s'* and holds the boot-shaped pawl S the more firmly in place. As many of these catches may be used as is desirable, and I find it best to place several at intervals along both sides of the car, so that the platform will be supported at all points.

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

1. In a stock-car, the combination of a movable platform with the stop M, composed of the pivoted boot-shaped pawl S, provided with the heel *s'*, and the detent T, containing the recesses *t'* and t^2, fitted to receive the heel *s'*, as and for the purpose stated.

2. A stock-car provided with a movable platform, C, chains *c*, shaft D, spur-wheel F, worm G, shaft H, and stop M, composed of the boot-shaped pawl S, bearing the heel *s'*, and detent T, containing the recesses *t'* and t^2, as and for the purposes stated.

3. In a stock-car, the combination of the movable platform C, chains *c*, shaft D, spur-wheel F, worm G, shaft H, handle I, and stop M, composed of the boot-shaped pawl S with its heel *s'*, and the detent T with its recesses t^2 and *t'*, as and for the purposes stated.

GEO. HACKNEY.

Witnesses:
CHAS. S. HILL,
HARRY BITNER.