

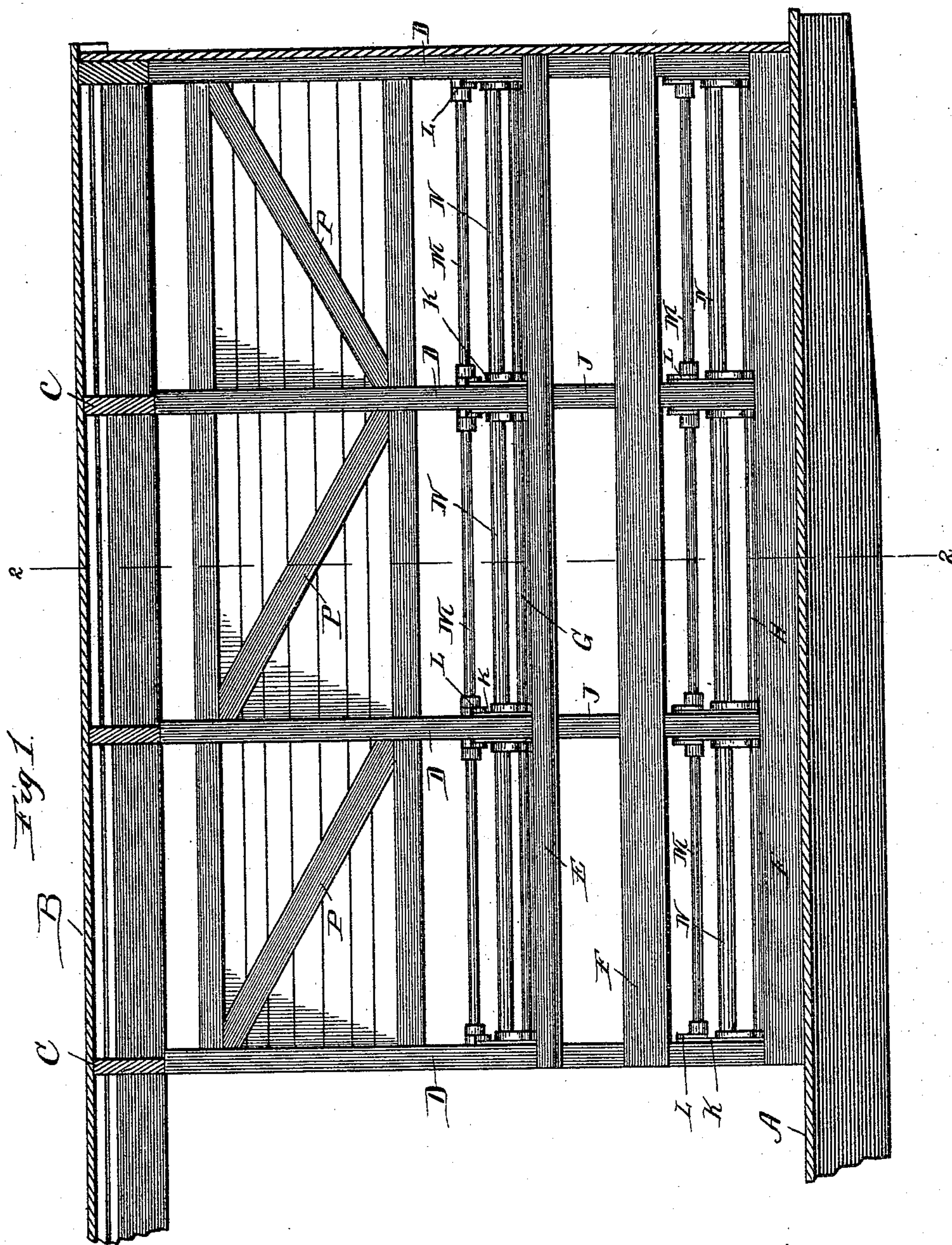
(No Model.)

3 Sheets—Sheet 1.

B. C. HICKS.
STOCK CAR.

No. 455,534.

Patented July 7, 1891.



Witnesses:

Law. C. Curtis
H. W. Munday,

Inventor:

John Chapin Hicks

By Munday, Curtis & Adcock

His Attorneys.

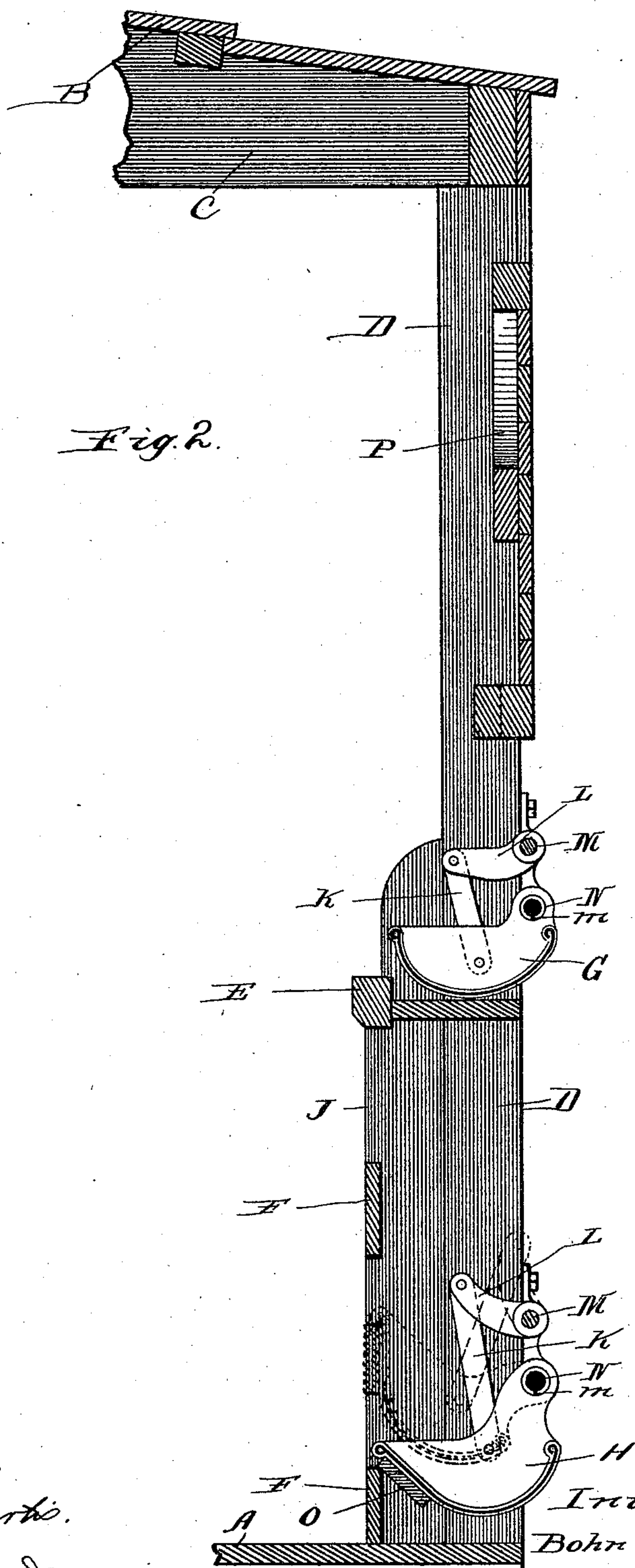
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STOCK CAR.

No. 455,534.

Patented July 7, 1891.



Witnesses:

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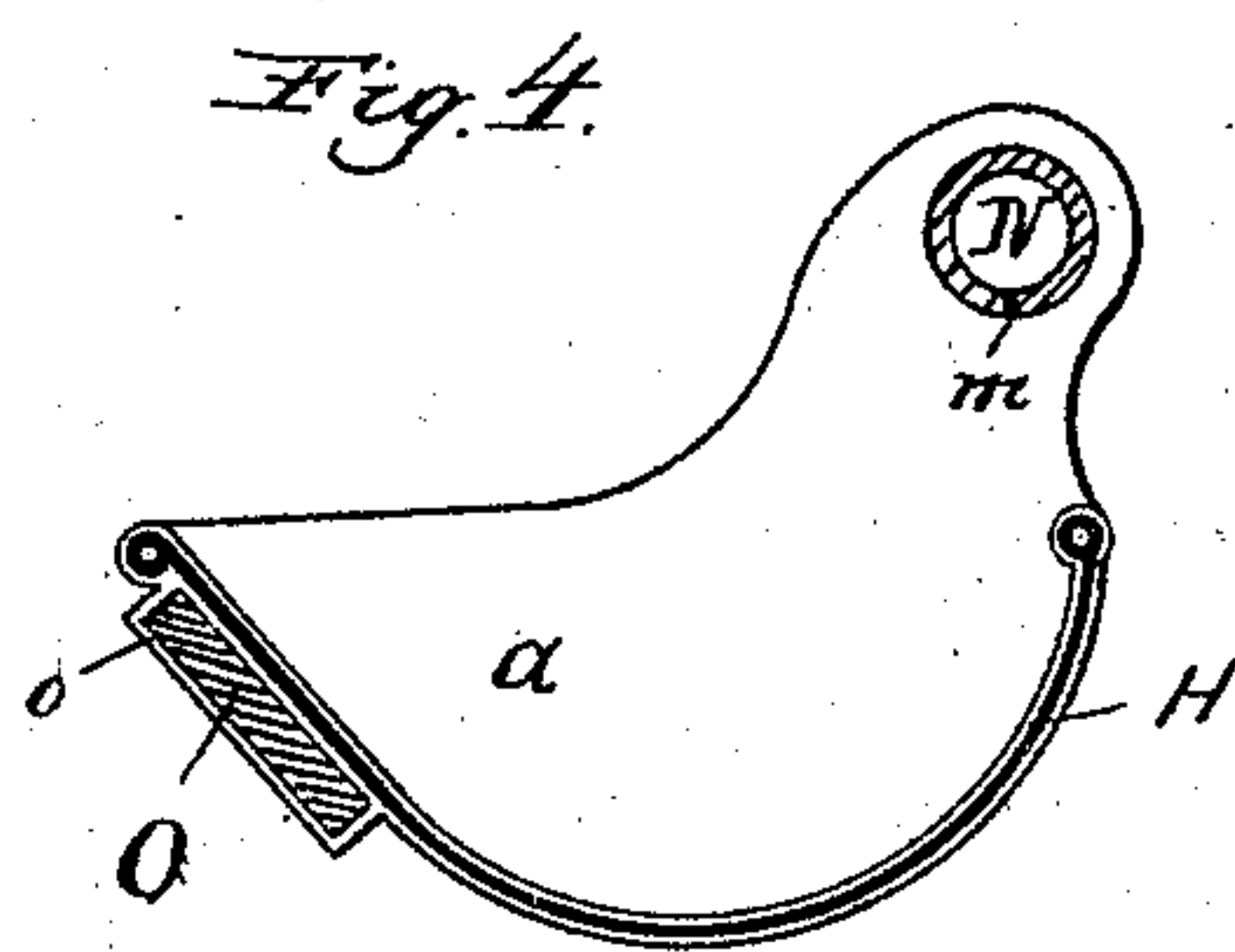
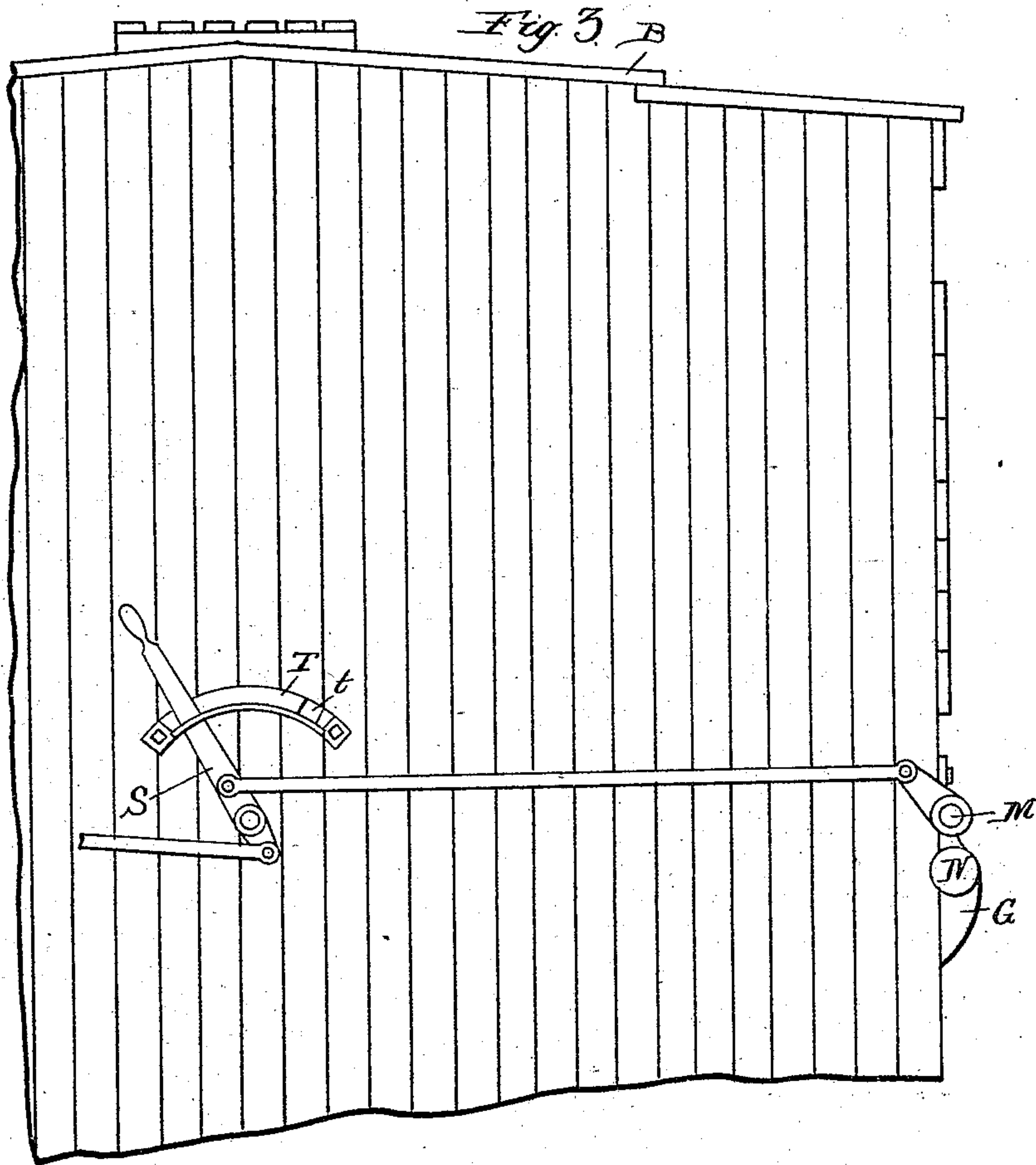
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STOCK CAR.

No. 455,534.

Patented July 7, 1891.



Witnesses:

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UNITED STATES PATENT OFFICE.

BOHN CHAPIN HICKS, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE HICKS STOCK CAR COMPANY, OF WEST VIRGINIA.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 455,534, dated July 7, 1891.

Application filed September 8, 1890. Serial No. 364,239. (No model.)

To all whom it may concern:

Be it known that I, BOHN CHAPIN HICKS, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Stock-Cars, of which the following is a specification.

This invention relates to the construction of that class of stock-cars which are provided with removable upper decks for use in carrying the smaller animals, such as sheep, hogs, &c.

The invention is intended to produce a car superior in certain respects than those heretofore used; and it consists in the novel features hereinafter described, and set forth in the claims.

In the accompanying drawings, which form a part of this specification, and in which similar letters of reference indicate like parts, Figure 1 is a partial longitudinal section of a car embodying my present invention, and Fig. 2 is an enlarged section on line 2 2 of Fig. 1. Fig. 3 is a partial end elevation of the car, and Fig. 4 is a detail section of one of the lower troughs.

In said drawings, A represents the floor; B, the roof; C, the carlings; D, the side studding; E, the beltry-rail, and F the side guards of my improved car.

The removable upper deck, which is not shown and which may be of any ordinary construction, is supported when in use from the beltry-rail E, and the stock thereon are watered from the series of troughs G. The stock riding upon the floor A are watered by means of the troughs H. Posts J are placed along inside the studding and support rail E and guard F. Both series of troughs are provided with devices for raising and lowering them, consisting of pitmen K, cranks L, and operating-rods M, and they are supported loosely by the water-supply pipes N, which are perforated on the under side, as shown at m. These troughs, being thus loosely supported from the water-pipes, are easily operated and without imparting any movement to the pipes. Each of the lower troughs is provided with a guard-rail O, supported thereon between the end castings a of the trough,

having sockets o to receive the rail, and in such position as that it will act as a guard when the trough is inverted or in its position of non-use. (indicated by the broken lines at Fig. 2.) As the trough extends from each stud to its neighbor stud, it will be seen that when the trough is raised the guard O will effectually close the space in front of the trough against the stock. The trough-operating rod is of course provided with means for locking it, so that the guard O will be rigid in this position—such, for instance, as the lever S and the notched keeper T at the end of the car, as shown in Fig. 3.

It will be noticed that there are no diagonal braces in the lower portions of the spaces between the studding; but instead of placing the diagonal braces in such lower portions in the usual manner I locate them in the upper portions of the stud-spaces, and preferably above the upper series of troughs, as indicated at P. By this change in the location of the diagonal braces the car retains its rigidity and strength, while I gain unobstructed and ample room for the lower troughs.

Should any of the troughs require to be removed or replaced, it is only necessary to detach the operating devices and slip the water-pipe out endwise. The latter being loose in the troughs and in its bearings can be removed easily.

When raised, the guard O of the lower trough is braced by the trough ends bearing upon the water-pipe, and is thus able to withstand any pressure the stock may exert upon it.

I claim—

1. A stock-car having a stud-space and side guards F, partly closing said stud-space and separating it from the interior of the car, but leaving a trough-opening, in combination with a swinging trough located in said stud-space outside of said guards, which, when in position for use, is accessible from the interior of the car through said trough-opening, but which, when swung upwardly, closes said trough-opening and prevents access from the interior of the car to the stud-space, substantially as set forth.

2. A stock-car having a stud-space, and side

guards partly closing the same but leaving
a lower trough-opening, in combination with
a swinging lower trough located in said stud-
space, which, when in position for use, is
5 accessible through said trough-opening, and
said trough being provided with a guard O,
which, when said trough is tilted up, consti-

tutes a side guard closing said trough-open-
ing, substantially as set forth.

BOHN CHAPIN HICKS.

Witnesses:

H. M. MUNDAY,
L. E. CURTIS.