

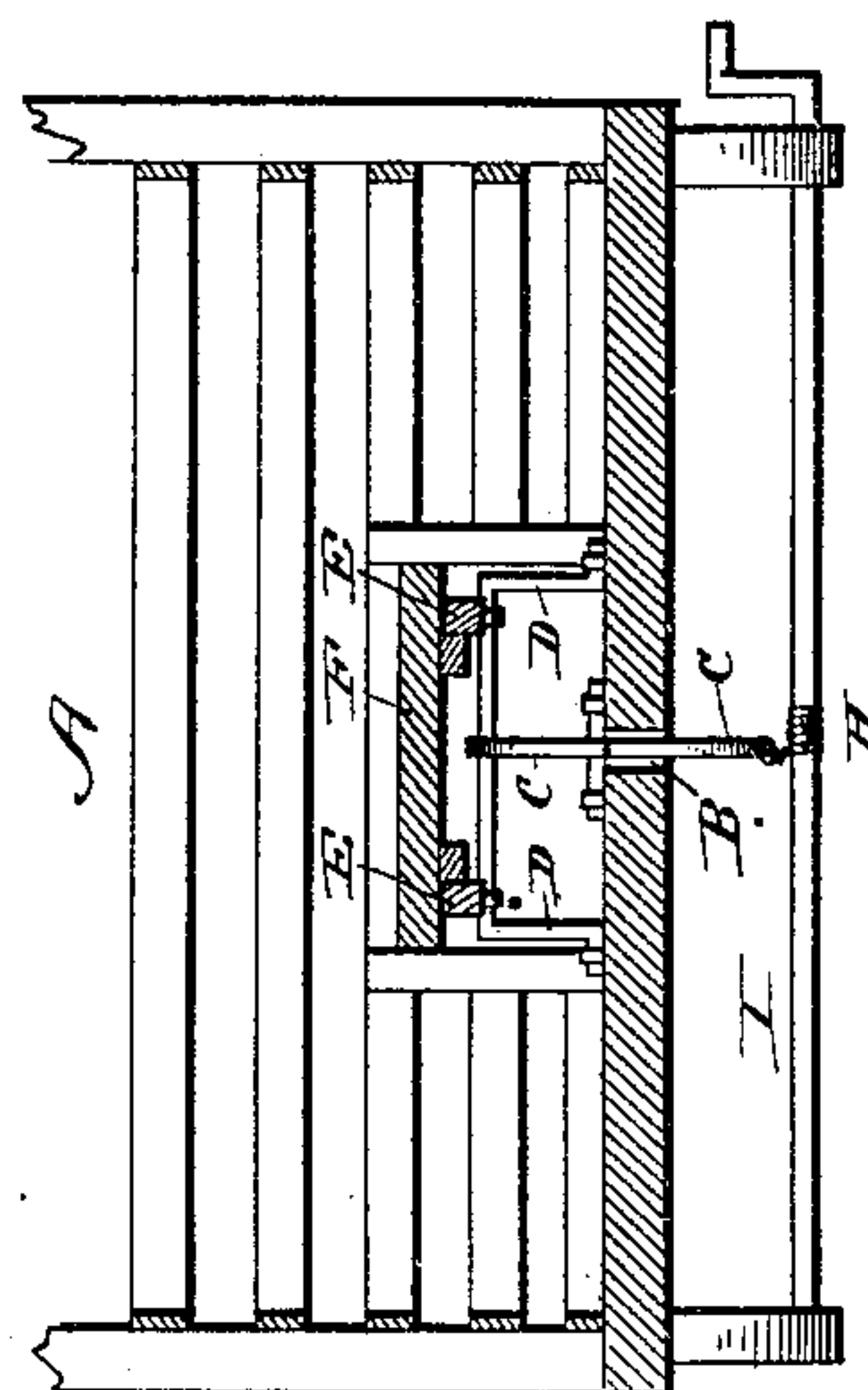
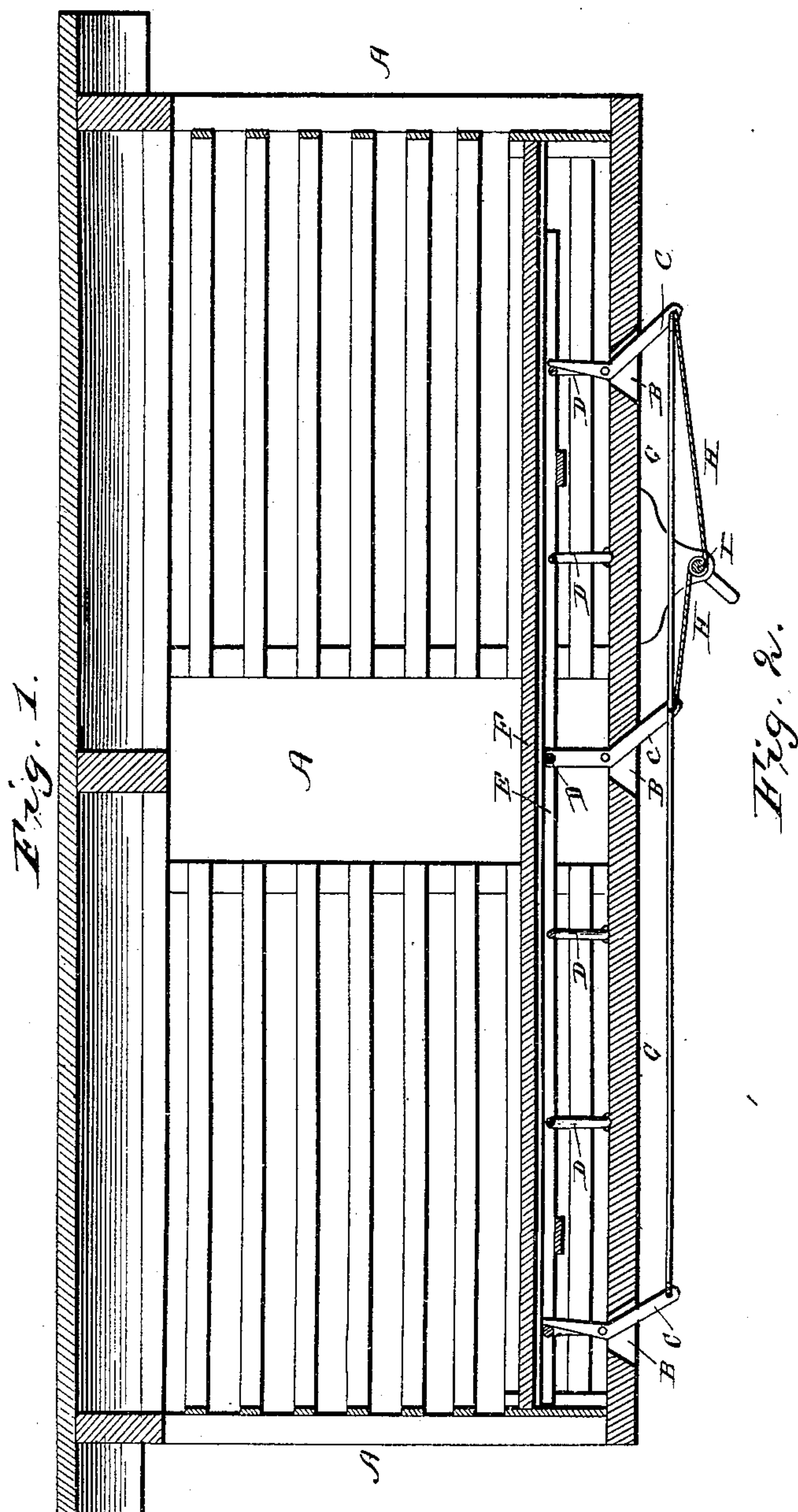
(No Model.)

G. A. SMITH & J. G. VAN ORMAN.

STOCK CAR.

No. 353,983.

Patented Dec. 7, 1886.



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE A. SMITH AND JOHN G. VAN ORMAN, OF MARSHALLTOWN, IOWA.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 353,983, dated December 7, 1886.

Application filed April 15, 1886. Serial No. 198,913. (No model.)

To all whom it may concern:

Be it known that we, GEORGE A. SMITH and JOHN G. VAN ORMAN, citizens of the United States, residing at Marshalltown, in the
5 county of Marshall and State of Iowa, have invented certain new and useful Improvements in Stock-Cars, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain improvements in that class of stock-cars for which Letters Patent were granted to Lorenzo D. Smith the 28th day of September, 1880, No. 232,770, in which a movable longitudinal platform was
15 arranged in the center of the car to keep the cattle on their feet, in order to facilitate their management, and to provide for using the car for other purposes without removing the device, as more fully hereinafter specified.

20 The present invention is designed to provide improved means whereby the platform may be elevated and lowered, so that the operation may be more readily and conveniently effected.

25 In the accompanying drawings, forming part of this specification, Figure 1 represents a longitudinal vertical sectional view of a stock-car, showing our invention applied thereto; and Fig. 2, a transverse vertical sectional view
30 of the same.

The letter A indicates the body of an ordinary stock-car having angular openings B in its bottom at suitable intervals. In the said openings are journaled or fulcrumed the angle-levers C, which have their respective arms
35 set at such an angle to each other that when in an elevated position the upper arms will be vertical, and when in a depressed position they will lie horizontally and flat upon the upper surface of the bottom of the car, for the
40 purpose more fully hereinafter explained. To the upper ends of the upper arms of the said levers are loosely connected or pivoted one or more of a series of cranks or stirrups, D, which
45 in turn are pivoted to the upper surface of the bottom of the car, and to these cranks or stirrups are pivoted the longitudinally-movable bars E, which support and carry the platform F. To the lower arms of the angle-levers are
50 secured the connecting-rods G, by means of which the levers may be simultaneously and

positively moved to raise or lower the bars and the platform supported thereby. From the lower ends of two of the contiguous levers extend the cords or chains H to a transverse
55 crank-shaft, I, being arranged to wind in opposite directions thereon, so as to move the levers in reverse directions as the crank-shaft is turned in one direction or the other. The said shaft has its bearings in hangers below the bot-
60 tom of the car, and has cranks on one or both ends, by means of which it may be operated from either or both sides of the car.

The operation of the invention is as follows: The platform being down, the cattle are driven
65 in at either side through the doors, where, by reason of the width of the car, they are compelled to take a position over the platform, after which the platform is elevated to keep them to their feet during transportation.
70 When designed for general purposes, the platform is lowered so as to set flat against the floor, where it will be out of the way and give the full capacity to the interior of the car.

Having thus described our invention, what
75 we claim, and desire to secure by Letters Patent, is—

1. The combination, in a stock-car, of the angle-levers fulcrumed in angular apertures in the car-bottom, with the pivoted cranks or
80 stirrups, the elevating bars and platform, the connecting-rods connecting the lower ends of the levers, and the cord or chain and crank-shaft, whereby the levers are operated to raise and lower the platform, substantially as speci-
85 fied.

2. The combination, with the supporting-rods and platform, of the pivoted cranks or stirrups and the angle-levers, the arms of such
90 levers being set at such an angle and so fulcrumed that the upper arm may be made to assume a truly vertical or truly horizontal position, substantially as and for the purposes set forth.

In testimony whereof we affix our signatures
95 in presence of two witnesses.

GEO. A. SMITH.
JOHN G. VAN ORMAN.

Witnesses:

O. L. BINFORD,
J. M. JONES.