

(No Model.)

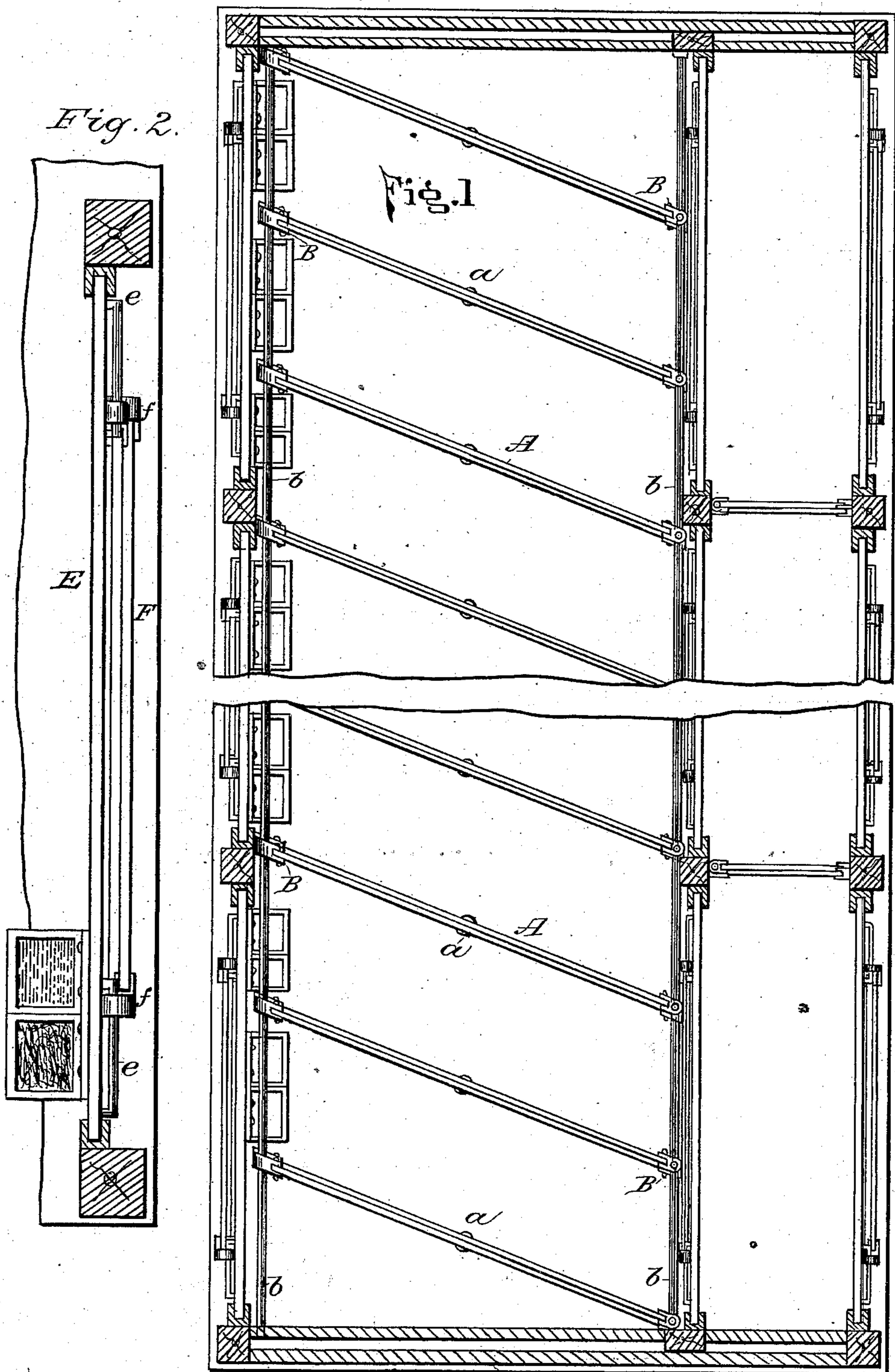
2 Sheets—Sheet 1.

I. KITSEE, H. ILLOWAY, & P. A. KECK.

Stock Car.

No. 239,803.

Patented April 5, 1881.



Attest
C. S. Dewald
W. L. Huntmann

Inventors
Isidor Kitsee
Henry Illoway
Peter A. Keck
By Geo. W. Murray

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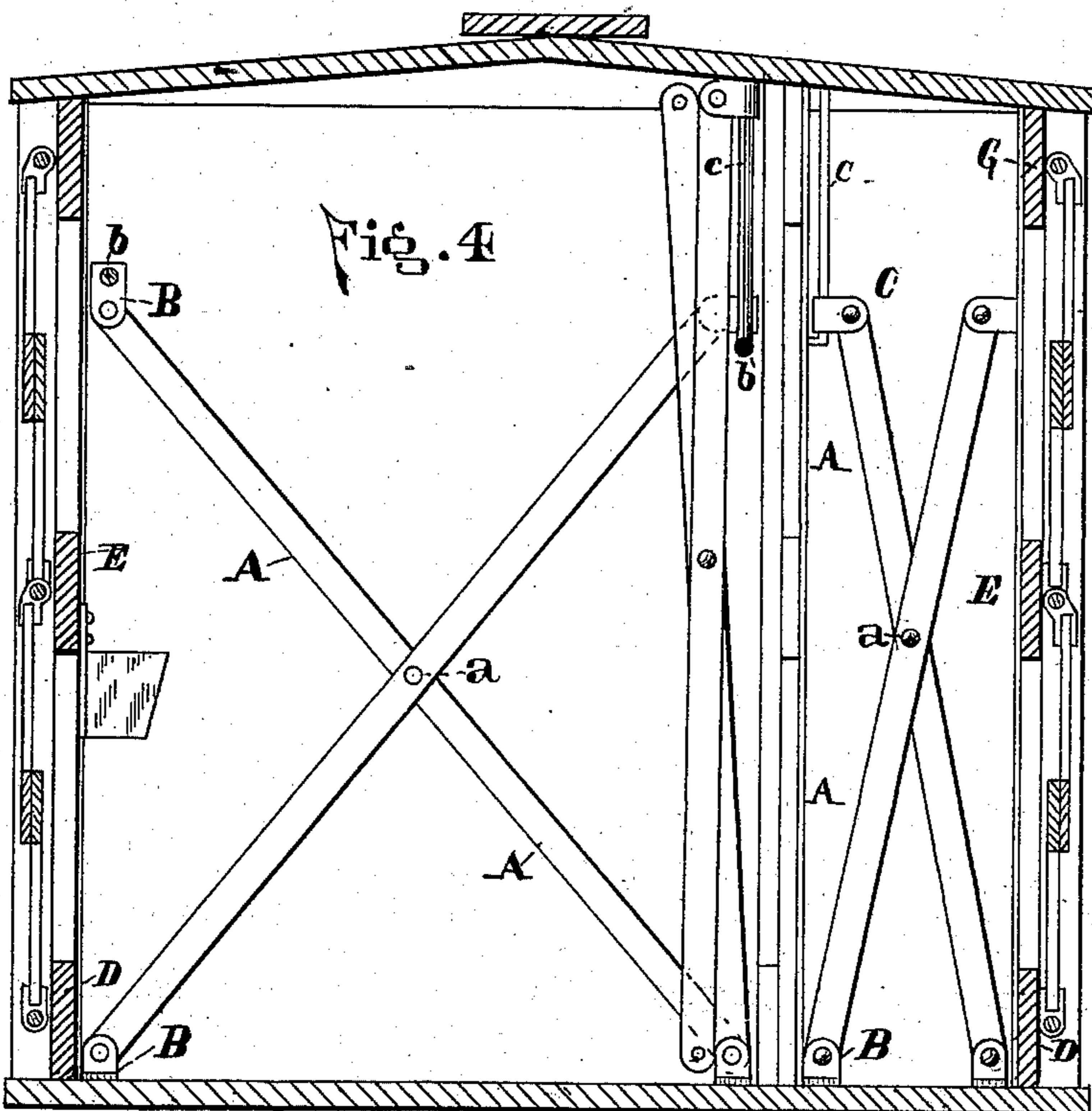
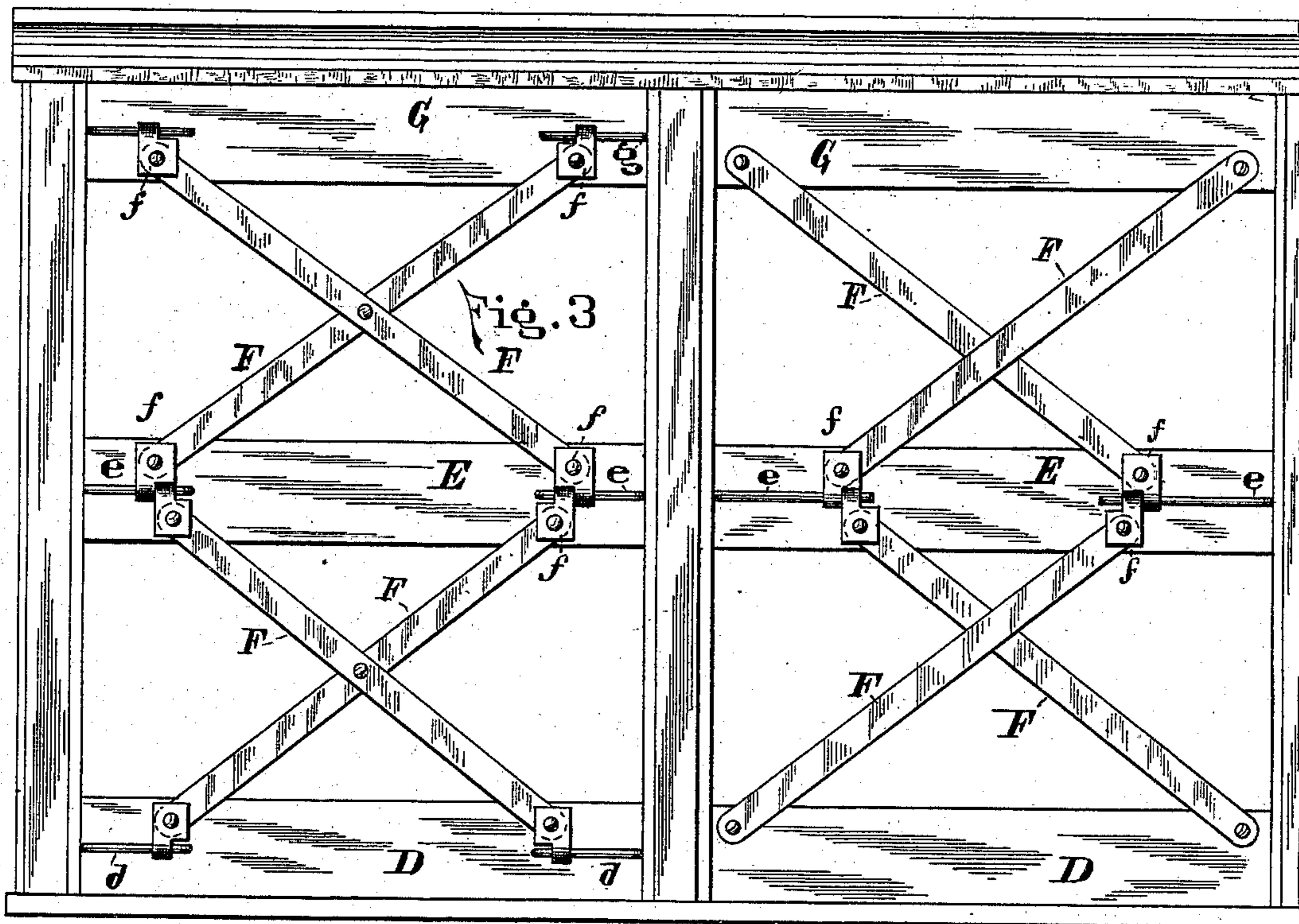
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UNITED STATES PATENT OFFICE.

ISIDOR KITSEE, HENRY ILLOWAY, AND PETER A. KECK, OF CINCINNATI,
OHIO, ASSIGNORS TO THE PARLOR CATTLE CAR COMPANY, OF SAME
PLACE.

STOCK-CAR.

SPECIFICATION forming part of Letters Patent No. 239,803, dated April 5, 1881.

Application filed October 18, 1880. (No model.)

To all whom it may concern:

Be it known that we, ISIDOR KITSEE, HENRY ILLOWAY, and PETER A. KECK, of the city of Cincinnati, county of Hamilton, State of Ohio, have invented certain new and useful Improvements in Stock-Cars, of which the following is a specification.

Our improvements relate to cars for transporting live stock. The objects are, to utilize all the available space within the car consistent with the health and comfort of the animals; to facilitate the loading and unloading of the stock, to provide stall-sides and partitions which may be readily folded, so that the car may be used to convey miscellaneous freight upon the return trip, and to provide a cheap and convenient folding door. These objects are attained by the means illustrated in the accompanying drawings, in which—

Figure 1 is a sectional plan view of a car embodying our invention. Fig. 2 is an enlarged horizontal section view taken through one of the doors and its stiles. Fig. 3 is a partial side elevation of the car with the doors closed down, and Fig. 4 is a vertical transverse section of the car.

The usual size of cars of this class is nine feet wide by thirty-five feet long, inside measurement. When the stalls are arranged diagonally upon each side of a central dividing-partition, it is necessary, in order to obtain stalls of sufficient length for the animals, to place them at such an angle as to render considerable space at each end of the car useless for stalls.

In our present improved car the longitudinal dividing-partition is placed about two and one-half feet from one side the car. This space is divided into five stalls, in which the animals stand lengthwise with the car. The space upon the opposite side of the longitudinal dividing-partition is divided into eleven stalls slightly diagonal to the side of the car. We are thus enabled to load sixteen large animals in a car, and the stalls are amply large to permit them to lie down, while the angular spaces left at each end of the car will contain food enough to supply the stock on a long journey.

Our improved stall-sides and dividing-partitions are made of cross-bars A, centrally united by rivet-bolt *a*, upon which they turn when folded. Three ends of each set of cross-bars are secured between lugs B. Two of the lugs are secured, by their plates, to the car-floor, and the other one is secured to a longitudinal rod, *b*, passing along the car-side. The other ends of the bars are armed with perforated metal slides C, which slide upon vertical staple rods or guides *c*, so that when the outer ends of the bars A are detached from their lug-plates B, the sides may be folded up against the inner dividing-partition, thus leaving the body of the car clear for the reception of miscellaneous freight for the return trip.

The doors are constructed of two bars, D and E, united or linked together by cross-bars F. The bars D E slide in grooves in the upright pieces which support the car-roof, and the folding door is supported by the brace-piece G, which is a part of the car-roof.

The cross-bars F are attached to the sliding bars D E by metal pieces *f*, which are fitted to slide over metal guide-bars *d e g*, which are secured in the bars D E G. (See Fig. 3.) As seen in the door upon the right side of this figure, the bolts or rivets uniting the cross-bars are dispensed with, and two ends of each set of cross-bars are journaled upon stud-bolts in the bars G and D, respectively; but the form upon the opposite side is preferable, as it is more secure, and insures a horizontal movement of the bars D E in opening and closing the doors.

The feed and water troughs are secured to the inside of bars E. These can be readily supplied from the outside of the car, and are elevated and lowered with the vertically-folding doors. They do not thus interfere with the loading or unloading of the stock. The troughs are bolted to the bars and are made tapering upon three sides, so that they may be readily detached from the bars E and "nested" together to occupy but little space upon the return trip.

We are aware that a freight-car for live stock has heretofore been constructed which is divided into longitudinal stalls, which on one

side may be converted into transverse pens for hogs and sheep by means of posts and chains; and we are also aware that partitions in stock-cars have been formed of "lazy-tongs" mechanism; but

What we claim is—

1. A stock-car provided with a series of longitudinal stalls upon one side of the car and a series of oblique transverse stalls upon the opposite side, substantially as described.

2. The stall-sides formed of cross-bars A, in combination with lugs B, longitudinal rod b, slides C, and guide-bars c, said sides adapted

to fold against the dividing-partition, as specified.

3. The vertically - folding doors formed of sliding bars D E and folding cross-bars F, in combination with a stock-car of the character described.

ISIDOR KITSEE.
HENRY ILLOWAY.
PETER A. KECK.

Witnesses:

GEO. J. MURRAY,
CHAS. F. GESSERT.