

(No Model.)

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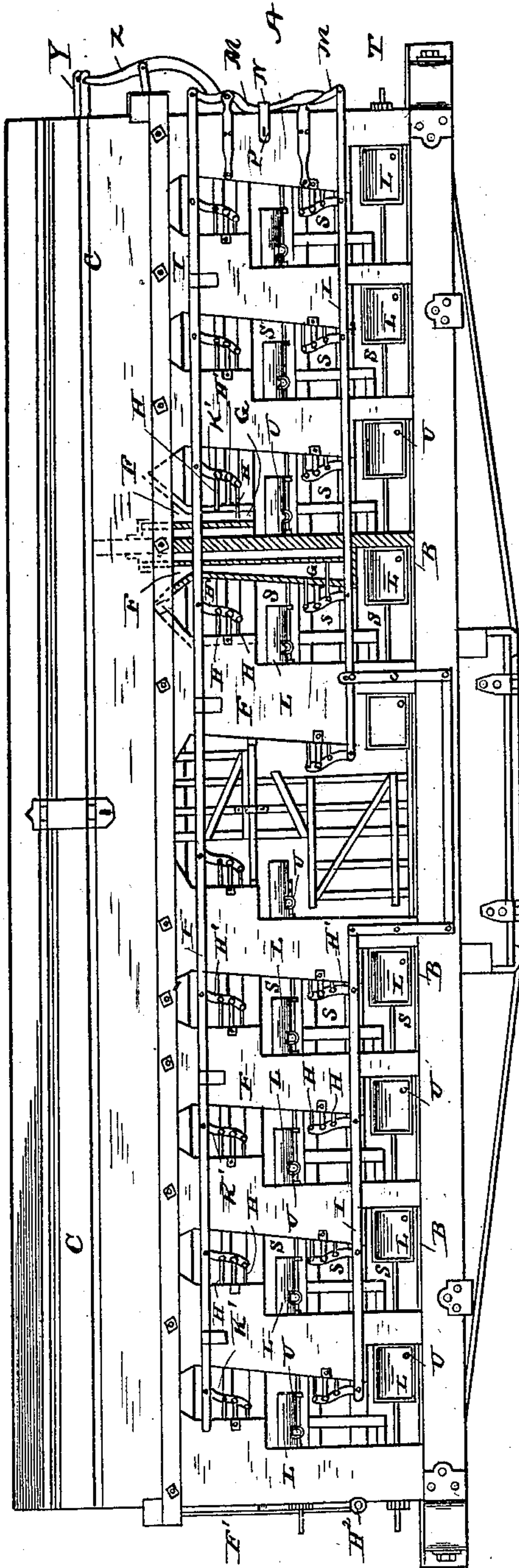
E. KOHLER.

CATTLE CAR.

No. 256,707.

Patented Apr. 18, 1882.

Fig. 1.



Witnesses.

Edwin L. Jewell.

J. Aubrey Toulmin

Inventor.

Elias Kohler

By C. M. Alexander,
his Atty.

(No Model.)

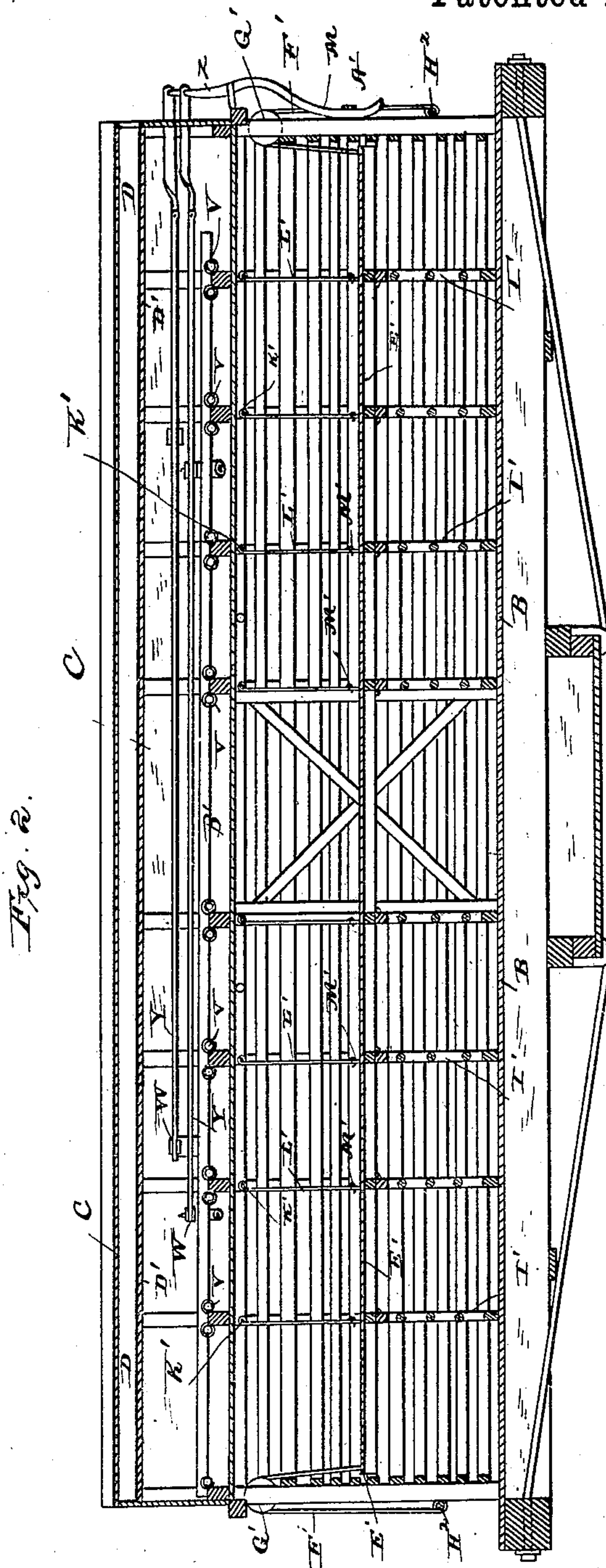
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4 Sheets—Sheet 3.

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Fig. 3.

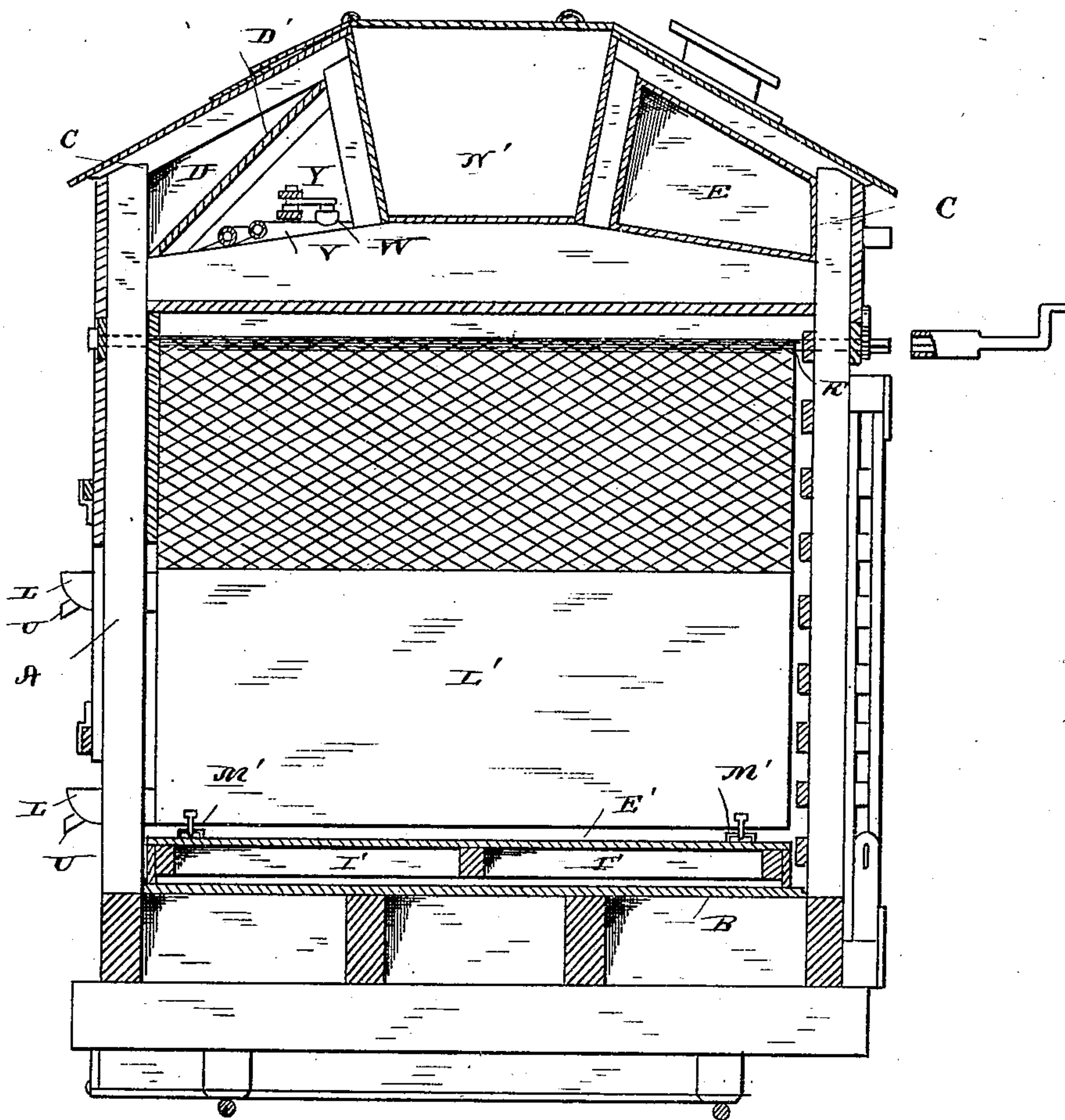


Fig. 4.

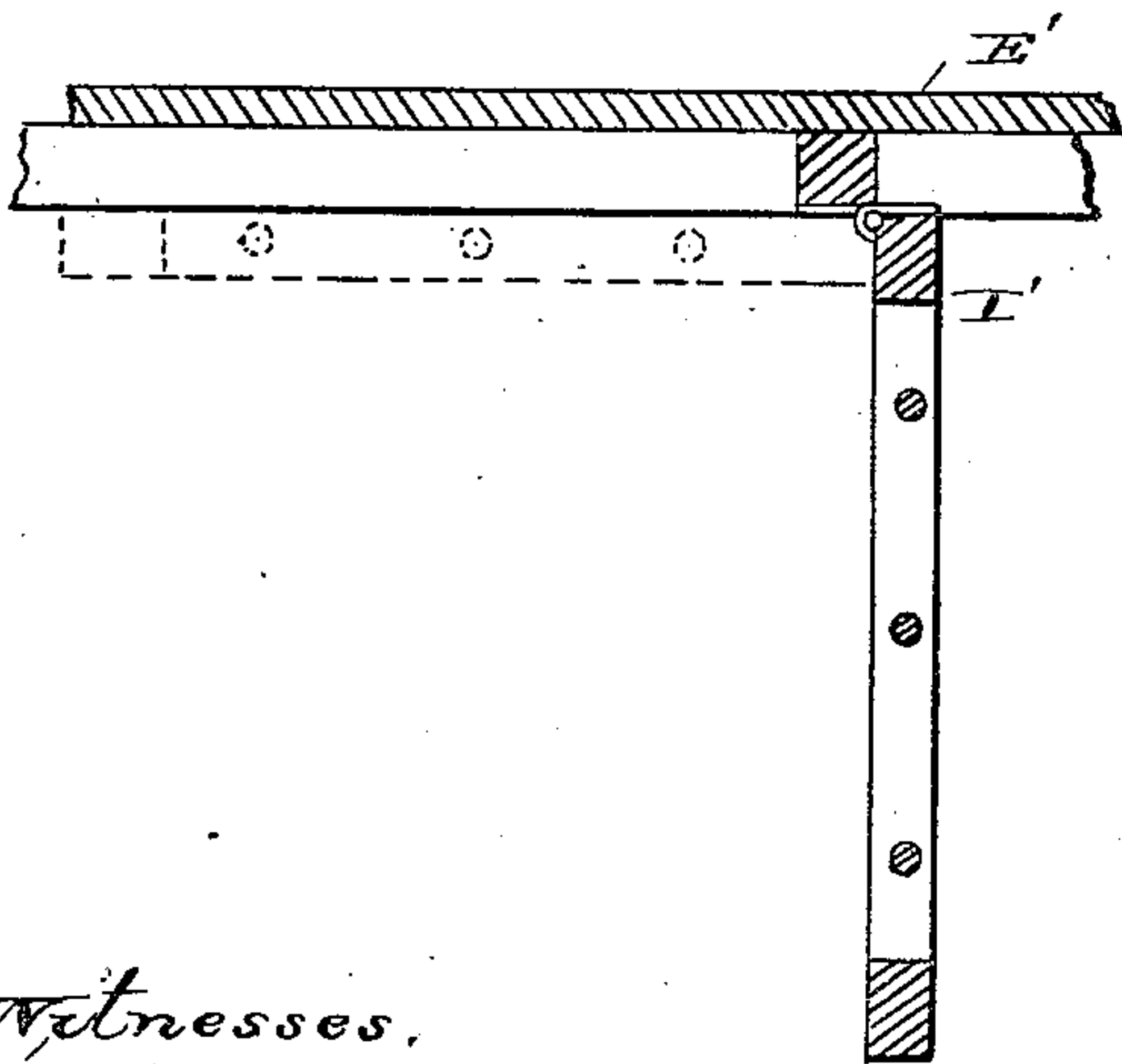
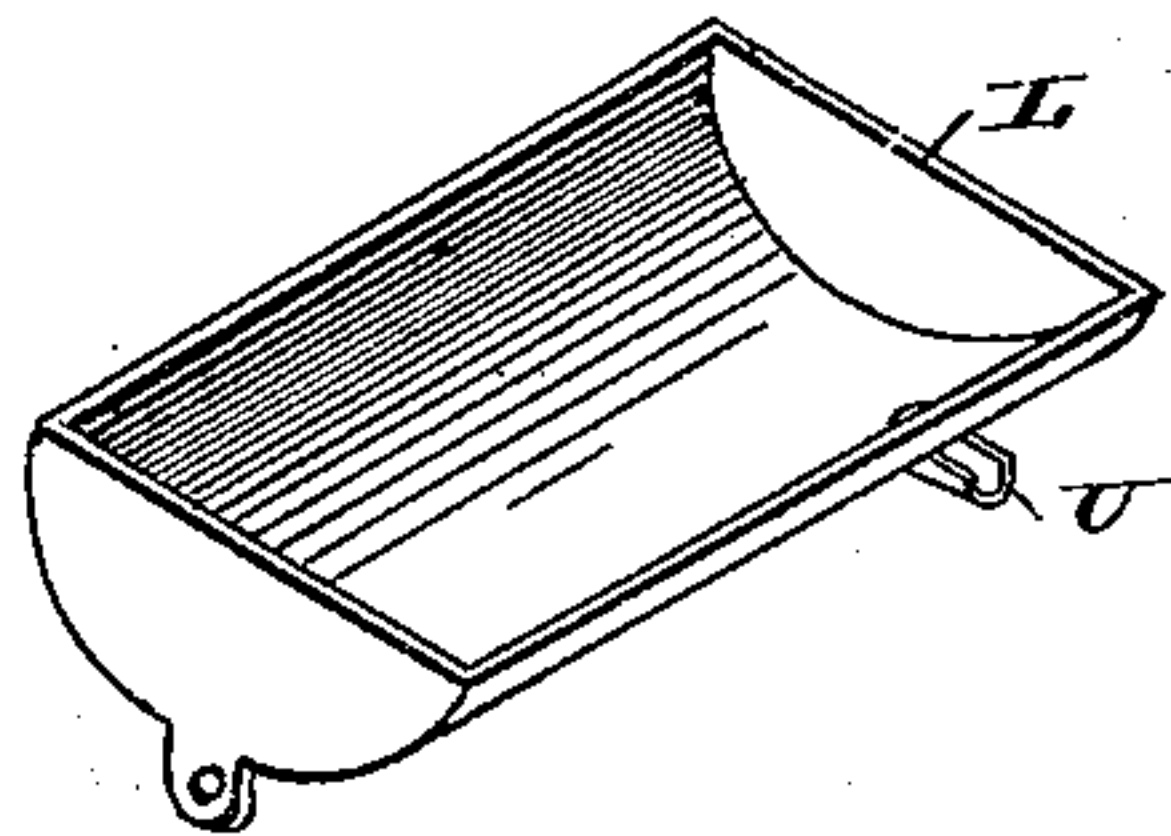


Fig. 5.



Witnesses.

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(No Model.)

4 Sheets—Sheet 4.

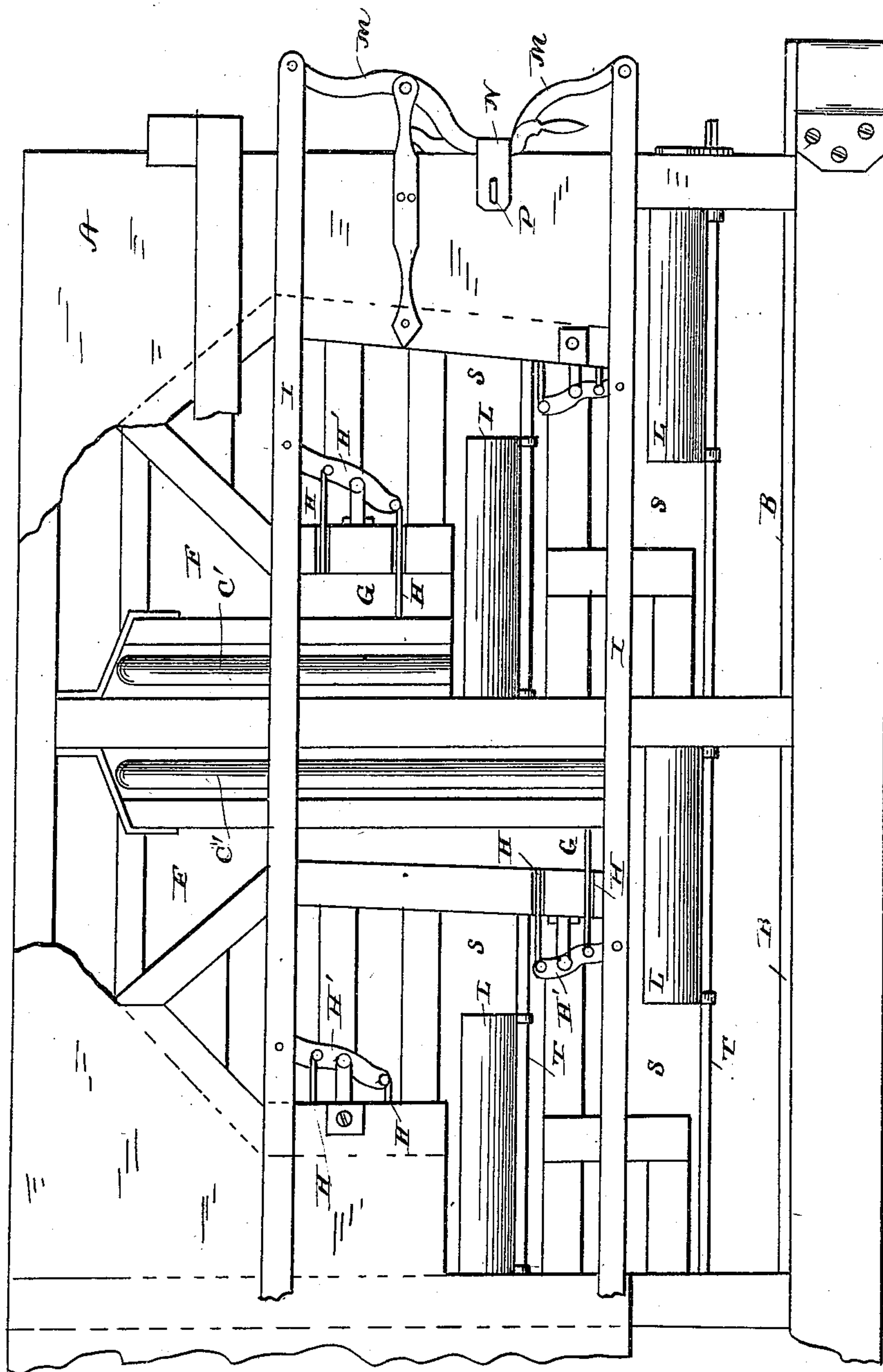
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CATTLE CAR.

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Patented Apr. 18, 1882.

Fig. 6.



Witnesses.

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UNITED STATES PATENT OFFICE.

ELIAS KOHLER, OF YORK, PENNSYLVANIA.

CATTLE-CAR.

SPECIFICATION forming part of Letters Patent No. 256,707, dated April 18, 1882.

Application filed February 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, ELIAS KOHLER, of York, in the county of York, and in the State of Pennsylvania, have invented certain new and useful
5 Improvements in Cattle-Cars; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a
10 part of this specification.

This invention relates to certain improvements in stock-cars; and it has for its objects, first, to provide for the simultaneous feeding or watering of the entire stock while the car
15 is in motion or stationary, and for their safety and comfort, saving them from bruising, trampling, and sickness, and preventing loss of flesh; second, to provide certain means whereby the car can be converted into a "double-decker" having two floors for the reception of
20 small stock—such as hogs, sheep, and the like; third, to provide certain means for bracing and strengthening the car, preventing sagging, and thus keeping the mechanism in working order; and
25 and fourth, to provide certain means whereby the safety and security of employes, when passing over the cars, may be insured. These objects I attain by the apparatus and mechanism illustrated in the accompanying drawings, in
30 which—

Figure 1 represents a view, partly in side elevation and partly in section, of my improved car; Fig. 2, a longitudinal vertical sectional
35 view of the car; Fig. 3, a transverse vertical section of the car; Fig. 4, a detached sectional view of a portion of the movable floor and the partitions hinged thereto; Fig. 5, a detached perspective view of one of the feed and watering troughs; and Fig. 6, a side elevation of a
40 portion of the car with a part broken away, showing the feed mechanism.

The letter A indicates the body, B the floor, and C the top, of the car. The said top contains a grain-bin, D, and a water-tank, E, on
45 opposite sides, running the entire length of the car. The letter F indicates a series of conduits leading from the grain-bin downward to the measuring-chambers G. These chambers are provided with valves H, which are actuated
50 by the small levers H', connected with the sliding bars I in such manner as to deliver the

grain in measured quantities simultaneously to the troughs L, as more fully hereinafter specified. The said bars I are connected with the levers M, fulcrumed at the end of the car,
55 the said levers being provided with suitable means whereby they may be locked, this being accomplished in the present instance by means of the hinged plates N and a suitable lock, P, whereby the feed is kept under control
60 of the person in charge.

The letter R indicates a series of troughs which are located in openings S in the side of the car. These troughs are secured to the longitudinal rock-shafts T, by means of which
65 they can be thrown into a vertical or horizontal position, as may be desired. The said troughs are provided with discharge-spouts U, by means of which the water may be run off to prevent
70 slopping the car or the stock therein. From the tank E extends transversely one or more tubes, V, which are provided with stop cocks W, connected with the sliding rods Y, which
75 extend beyond the end of the car and connect with the levers Z, which are provided with locking devices A'. The said pipes or tubes V connect with the longitudinal tubes B',
80 from which lead the pipes C', extending down through the conduits at the side of the car, and terminate directly over the troughs, so as to supply the same with water when desired. The tubes V and B' and the sliding rods are all located below the inclined partition D', forming the bottom of the grain-bin.

The letter E' indicates a movable floor, which
85 has secured at its ends the cords or chains F', which pass over pulleys G' at the ends of the car, the said cords or chains being attached to the shafts or windlasses H², by means of which the said movable floor may be elevated when
90 desired. The said floor has hinged to its under side, at suitable intervals, partitions I', which fold up when the floor is down, and when elevated assume a vertical position, as indicated in Fig. 2 of the drawings. At the top of the
95 car, at suitable intervals, are arranged transverse rollers K', which carry a series of flexible partitions, L', the lower parts of which are constructed of canvas, sail-cloth, or other suitable material, and the upper parts of net-
100 ting, as indicated in Fig. 3 of the drawings. These partitions may be wound up out of the

way when not required for use, and when in use their lower edges may be hooked to the staples M', attached to the upper floor, thus dividing the car into suitable compartments.

5 The rock-shafts carrying the troughs, the windlasses or shafts for elevating the movable floor, and the shafts of the rollers carrying the flexible partitions are provided with squared ends, by means of which they may be turned
10 by a suitable key.

Extending longitudinally along the top of the car is a depressed way or passage, N', in which the employes can travel in safety over the car. The grain-bin, as well as said way,
15 is provided with a hinged cover to close the same when desired, and the water-tank is provided with suitable covered openings, by means of which it may be filled, and it may be surrounded with a suitable non-conductor of
20 heat—such as cork, charcoal, shavings, or equivalent material—to prevent freezing.

The operation of my invention is as follows: When it is desired to feed the animals the troughs are thrown into a horizontal position,
25 and by giving the longitudinal sliding bars a movement back and forth a measured quantity of food is admitted through the conduits to the troughs. To water the stock the rods controlling the regulating-valves of the tubes
30 V are operated to deliver the necessary quantity of water to the stock.

In order to enable the attendant to manage the upper compartment when the movable floor is elevated, a series of swiveled brackets,
35 P', are provided, which are adapted to support a platform for such attendant. It will be perceived that when the lower floor is down the flexible partitions are employed to divide the car into compartments, and when elevated the
40 lower compartment is divided by means of the hinged partitions.

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

1. In a stock-car, the combination of the 45 conduits leading from the grain-bins, and the water-pipes extending from a water-tank through passages in the conduits, the double valves and levers for operating them simultaneously in opposite directions from the end of 50 the car, the valves in the water-pipes adapted to be operated by suitable mechanism, and the tilting troughs and mechanism for operating the same from the end of the car, the whole arranged in such manner that the troughs may 55 be filled with food or water or emptied, substantially as specified.

2. The combination, in a stock-car, of a water-tank at the top, the pipes leading from the same to the troughs, the said troughs being 60 mounted on rock-shafts, whereby they may be emptied to prepare them for the reception of feed or water, the controlling-valves, and operating-rods and locking devices, all arranged to operate substantially as and for the pur- 65 poses set forth.

3. In combination with the movable bottom of the car, the folding partitions hinged thereto, substantially as specified.

4. In combination with the stock-car and its 70 movable floor and folding partitions, the flexible partitions and their rollers, arranged substantially as and for the purposes specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 19th day of 75 January, 1882.

ELIAS KOHLER.

Witnesses:

H. AUBREY TOULMIN,
J. J. MCCARTHY.