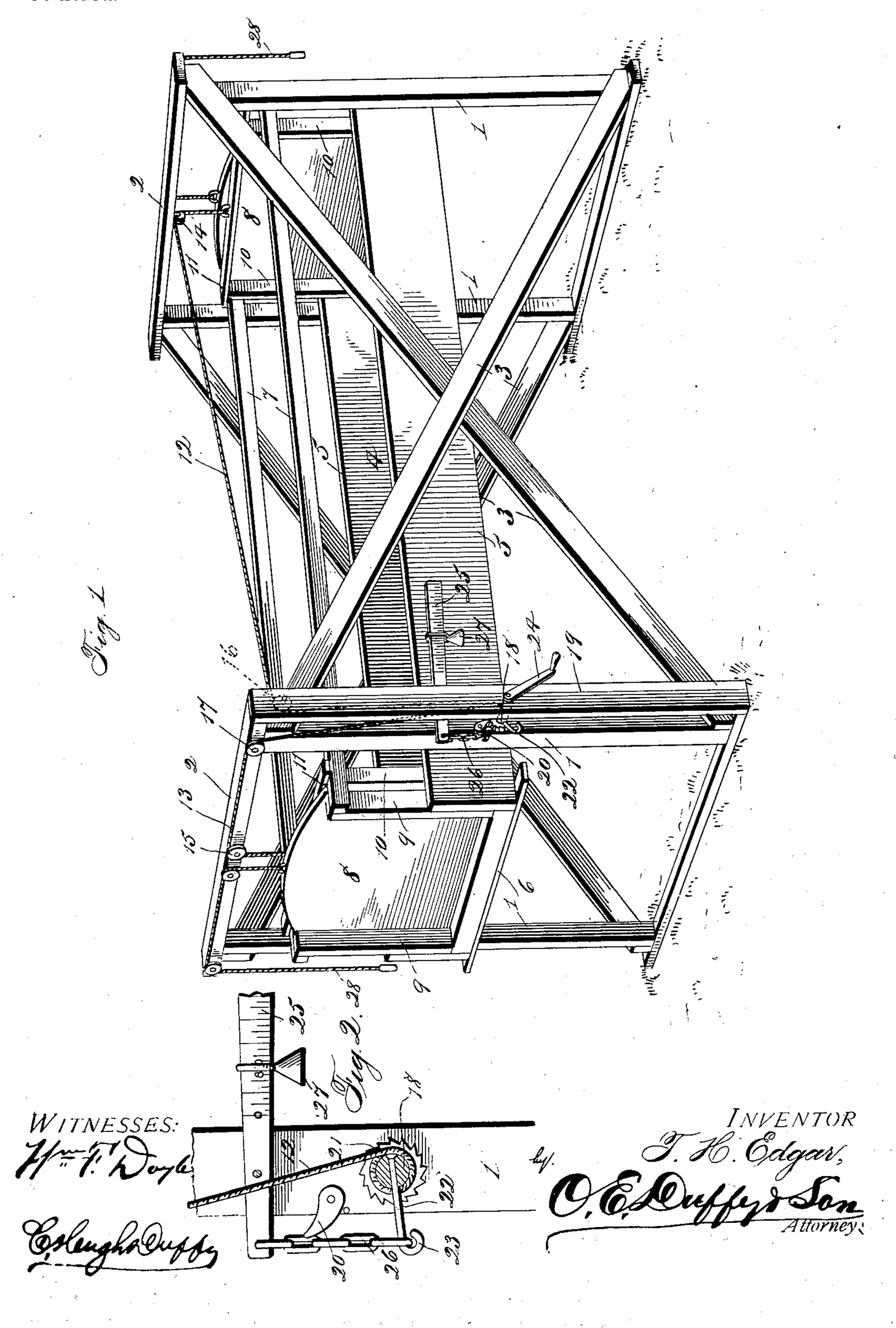
T. H. EDGAR.

DEVICE FOR LOADING OR UNLOADING LIVE STOCK.

APPLICATION FILED DEC. 1, 1902.

NO MODEL.



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## United States Patent Office.

TEA HENRY EDGAR, OF SABETHA, KANSAS.

## DEVICE FOR LOADING OR UNLOADING LIVE STOCK.

SPECIFICATION forming part of Letters Patent No. 740,109, dated September 29, 1903.

Application filed December 1, 1902. Serial No. 133,461. (No model.)

To all whom it may concern:

Be it known that I, TEA HENRY EDGAR, a citizen of the United States, residing at Sabetha, in the county of Nemaha and State of Kansas, have invented certain new and useful Improvements in Devices for Loading and Unloading Live Stock; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to devices for loading and unloading live stock on wagons, cars, &c., and has for its object to provide a device of this class which is simple in construction and

easy of operation.

A further object of my invention is to provide a device of this class which will weigh live stock while the same is being loaded or unloaded onto or from wagons, cars, &c.

With these objects in view my invention consists in the novel construction of my device.

My invention also consists in the novel suspending means and in the weighing apparatus or scale.

My invention also consists in certain other novel features of construction and in combination of parts, which will be first fully described and afterward specifically pointed out in the appended claims.

Referring to the accompanying drawings, Figure 1 is a perspective view of my invention in an operative position. Fig. 2 is a de-

tail view of the weighing-scale.

Like numerals of reference indicate the same parts throughout the several figures.

1 represents the frame-uprights, 2 the top cross-pieces, and 3 indicates the cross-supports.

4 indicates the car, having the sides 5, bottom 6, side rails 7, and sliding doors 8. At either end of the car are vertical posts 9 and 10, and secured to said side rails are top timbers 11, the said door sliding vertically between the end posts 9 and 10. Secured suitably to said top timbers 11 are cables 12 and 13, which pass over suitable pulleys 14 and 15, secured to the cross-pieces 2. The cable

12 runs obliquely from pulley 14 to a pulley 16 in the frame-upright 1. The cable 13 runs from the pulley 15 horizontally to and around 55 the pulley 17, located on the top cross-piece 2.

18 indicates a windlass secured to the frameupright 1 and to the supplemental upright 19, and 20 indicates a pawl secured to said upright 1, which is adapted to engage a ratchet- 60 wheel 21 on said windlass. 22 indicates a pin running transversely through said windlass and provided with a hooked end 23.

24 indicates the windlass-crank.

25 is a scale-beam secured to the upright 1, 65 above the windlass, and 26 indicates a chain secured to one end thereof, which is adapted to engage with the hooked pin 22 on the windlass. A weight 27 is carried on said scalebeam.

Having thus described the several parts of my invention, its operation is as follows: The device may be mounted on wheels, but in either instance the car is lowered as far as possible and one of the doors raised by pull- 75 ing the cord 28, which leads over suitable pulleys. The live stock is then driven into the car and the door is dropped. The windlass is then operated, which winds up both suspending-cables and raises the car evenly. 85 When it has reached the desired height the pawl 20 is swung into engagement with the ratchet-wheel 21, which holds the car in the desired position. The chain 26 of the scalearm is then hooked onto the pin 22 of the 85 windlass, and the pawl is disengaged from the ratchet-wheel. The weight of the car and live stock therein now normally tends to unwind the windlass, but is prevented from so doing by the chain of the scale-beam, 90 which supports the weight of the car and live stock. The scale-weight is moved along the scale-beam until said scale-beam is balanced, and the weight of the live stock in the car is thus indicated. The sliding door 95 leading into the wagon or car is then raised and the live stock driven in. It will thus be seen that the operation of weighing the live stock and loading or unloading them is done simultaneously and in a minimum period of 100 time.

Having thus set forth my invention, I do not wish to be understood as limiting myself to the exact construction herein set forth, as

various slight changes may be made therein which would fall within the limit and scope of my invention, and I consider myself clearly entitled to all such changes and modifica-5 tions.

What I claim as my invention, and desire to secure by Letters Patent of the United

States, is—

1. In a device for loading and unloading to live stock, the combination of a car, and doors at each end, a frame, cables secured to said car for supporting the same, a windlass adapted to wind said cables and raise said car, a pawl and ratchet adapted to lock 15 said windlass, a scale-beam and means for connecting the same with said windlass adapted to weigh said car and contents when said windlass tends to unwind, substantially as described.

2. In a device for loading and unloading live stock, the combination with a frame, of a car, and doors at each end, cables secured to said car for supporting the same, a windlass adapted to wind said cables and raise 25 said car, means for locking said windlass, a

scale-beam connected to said windlass, sub-

stantially as described.

3. In a device for loading and unloading live stock, the combination with a car, of

cables adapted to suspend the same, a wind- 30 lass adapted to wind said cables and raise said car, a scale-beam, means on said windlass for detachably connecting the same with said scale-beam, said means operating said scale-beam when said windlass tends to un- 35 wind.

4. In a weighing device, the combination with a car of cables adapted to suspend the same, a windlass adapted to wind said cables and raise said car, a scale-beam, means on 40 said windlass for connecting said scale-beam, and for throwing the weight of the car upon the same when said car is in a lowered position, raised position, or an intermediate position.

5. In a weighing device, the combination with a car, of means for supporting the same, a windlass adapted to raise said car, a scalebeam and means for connecting the same to said windlass and of throwing the weight of 50 said car on said scale-beam when in a raised or lowered position.

In testimony whereof I affix my signature

in presence or two witnesses.

T. HENRY EDGAR.

Witnesses:

C. F. DIXON, G. W. LANE.