

No. 606,735.

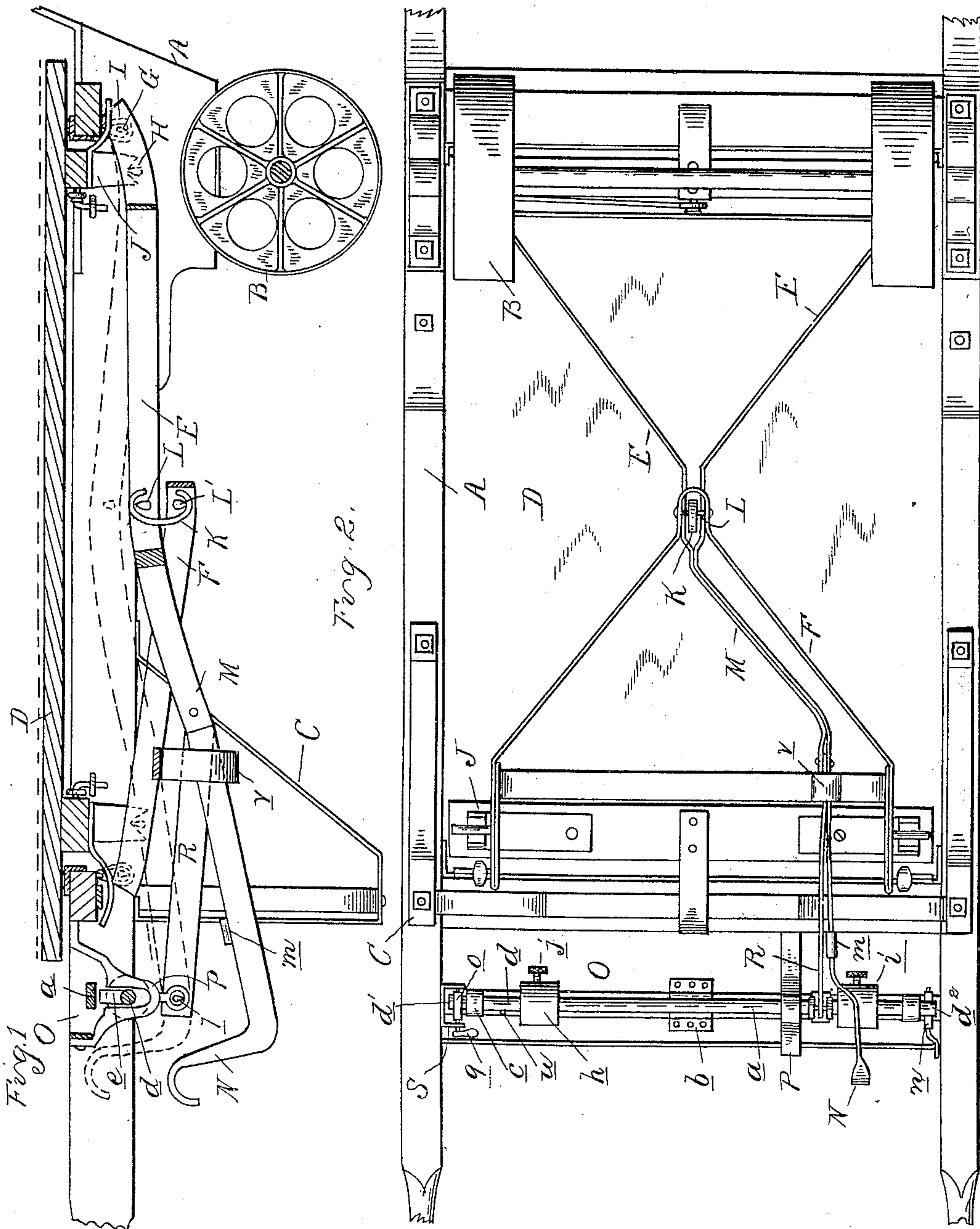
Patented July 5, 1898.

O. W. PARSELL.
WEIGHING TRUCK.

(Application filed Jan. 18, 1897.)

(No Model.)

2 Sheets—Sheet 1.



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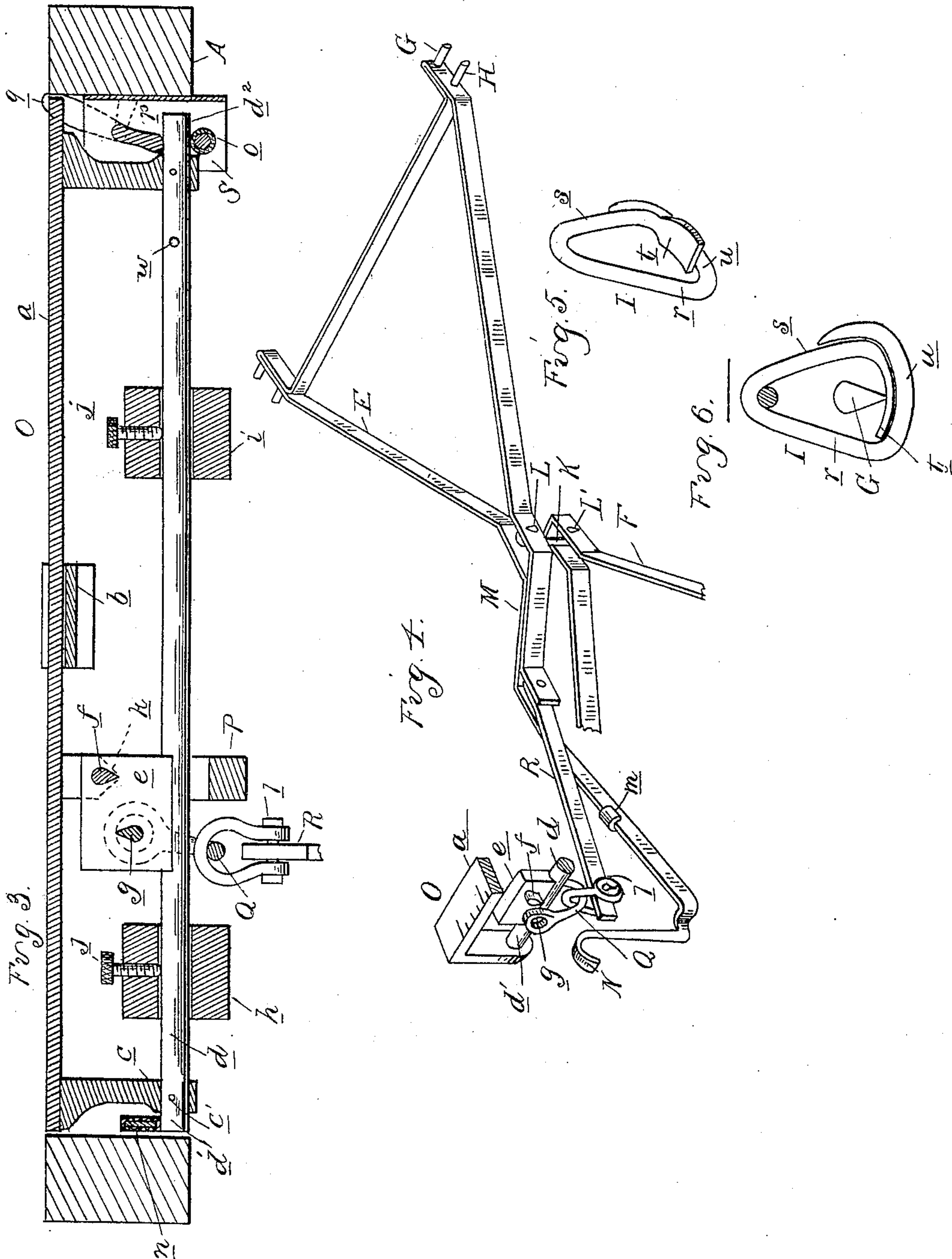
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UNITED STATES PATENT OFFICE.

ORLANDO W. PARSELL, OF FLUSHING, MICHIGAN.

WEIGHING-TRUCK.

SPECIFICATION forming part of Letters Patent No. 606,735, dated July 5, 1898.

Application filed January 18, 1897. Serial No. 619,583. (No model.)

To all whom it may concern:

Be it known that I, ORLANDO W. PARSELL, a citizen of the United States, residing at Flushing, in the county of Genesee and State

5 of Michigan, have invented certain new and useful Improvements in Weighing-Trucks, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The invention consists in the peculiar construction of the scale-beam; further, in the construction of the connection between the scale-beam and the platform-levers; further, in the peculiar construction of the pivot-sup-

15 porting loops, and, further, in the peculiar construction, arrangement, and combination of parts, as more fully hereinafter described and claimed.

In the drawings, Figure 1 is a vertical longitudinal section through my improved weighing-truck. Fig. 2 is a bottom plan view thereof. Fig. 3 is a cross-section showing the construction of the scale-beam. Fig. 4 is a perspective view of the platform-levers and

25 their connection to the scale-beam. Fig. 5 is a perspective view of one of the pivot-supporting loops. Fig. 6 is a side elevation thereof.

A is the frame of the truck, which in the drawings is shown as a two-wheeled truck; but it is obvious that my improvements may be applied equally well to any other form of truck. This frame is supported at its forward end upon the wheels B and at its rear end upon the feet C.

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D is the platform, which normally rests upon the frame A when the device is used as a truck, or which may be lifted and supported upon the scale-levers when used for weighing. These levers E and F are preferably made of bar-

40 iron bent into triangular form and provided at one end with the pivot-pins G and H, the former of which, G, are supported by loops I, depending from the frame of the truck.

J are lugs or feet projecting downwardly from the platform and provided at their lower ends with V-shaped bearings adapted to engage with the pivot-pins H, said pins G and H being provided with the usual knife-edge bearing.

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K is a link connecting the pins L and L', which are secured to the inner ends of the levers E and F. The lever E is provided with

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an inwardly-extending arm M, terminating in the hook N, by means of which the levers may be lifted when the truck is to be used as a

55 scale.

O is a double scale-beam extending transversely of the truck between the side bars of the frame and which is constructed as follows: The graduated beam is formed by a flat bar

60 a, having the markings upon its upper face and upon which is slidingly secured the poise b. C are brackets depending from the opposite ends of the bar a and apertured to receive the bar d, which forms the second beam.

65 This second beam is not graduated and preferably consists of a rod of round iron to which is secured, preferably by brazing, the block e, carrying the pivot-pins f and g. h i are weights sleeved upon the rod on opposite

70 sides of this block and adjustably secured thereto by means of thumb-screws j. In assembling the parts of this beam the weights h and i are first placed in position upon the rod, and the latter is then engaged with the

75 brackets c, to which it is permanently secured in fixed relation to the beam a by pins c' passing through the brackets and rod, the opposite ends e' e² of the rod d projecting beyond the bracket c a short distance for a pur-

80 pose hereinafter described. When the parts of the beam are thus assembled, the weight i forms the poise and the weight h the counter-balance.

P is a U-shaped bracket secured to cross-bars of the truck-frame. In this bracket are formed the V-shaped bearings k, with which the pivot-pins f engage and which form the fulcrum for the beam.

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Q is a double clevis-link the upper member of which engages with the pins g of the beam, the lower member engaging with pivot-pins l at one end of the link R, the opposite end of which is pivoted to the arm M of the lever E.

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m is a hook secured to the arm M of the lever E and adapted to engage with the link R to hold the levers E and F in their raised positions.

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The projecting ends d' d² of the scale-beam are adapted to bear against the stops n and o, secured, respectively, to the opposite side bars of the truck-frame. These stops are provided with rubber bearing-faces, preferably formed

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by sleeving a piece of rubber tube over the pins forming the stops.

p is a locking rock-arm or trig adapted to engage with the end d^2 , opposite the stop o , to lock the beam against said stop. This trig is pivotally secured in bearings, preferably formed by the bracket S , to which the stop o is also preferably secured.

q is a gravity-dog and actuating-arm for the trig p , adapted to hold it either in or out of engagement with the scale-beam.

The links I are preferably formed as shown in Figs. 5 and 6 of the drawings and are constructed as follows: A round metallic rod is first flattened at one end and then bent into a sector shape, having the sides r and s and the arc formed by the overlapping ends t and u of the rod, the end U preferably extending around a portion of the side s . The inner arm t is formed by the flattened end of the rod and forms a bearing for the pivot-pin of the scale-lever. The object of this construction of loop is to admit of a slight spring or yielding of loop whenever any violent jolt is given to the scale, and as the flattened arm t is comparatively thin it will yield sufficiently to prevent the breaking of the loop. At the same time this arm is reinforced by the arm u , of greater thickness, which prevents anything more than a slight movement of the arm t .

The parts being thus constructed, their operation is as follows: When the truck is used for transporting a load, the parts are in the position shown in Figs. 1 and 4 of the drawings, in which the arm M is dropped into its lower position, resting in a yoke v , depending from the lever F . This allows the levers E and F to drop, so that their pins II are out of engagement with the bearings in the feet J , thus allowing the platform to rest upon the truck-frame. When it is desired to use the truck for weighing, the operator raises the arm M by means of the hook N until the hook m engages with the link R . This will raise the parts into the position shown in dotted lines in Fig. 1, where the platform is clear of the truck-frame and rests upon the levers E and F . Thus all that is necessary to change the truck from a scale into condition to be used for carrying a load is to raise or lower the arm M and engage or disengage the hook N , which is readily done by a slight lateral movement of the arm M . In order, however, that the scale-beam may not be injured when the truck is used for transporting the load, it is provided with the locking attachment before described, comprising the stops n and o , the trig p , and its actuating-arm q .

When the parts are in the position shown in Fig. 3 of the drawings, the beam is locked in its position against the stops n and o by the trig p , and as the stops n and o are provided with elastic bearing-faces all injury to the beam from the jolting of the truck is avoided. To unlock the beam, the arm is given a quarter-turn, which will turn the trig

out of engagement with the beam and permit it to swing freely.

All of the parts of my truck are made with a view of securing the greatest strength and at the same time a simple inexpensive structure to build. This is especially true of the construction of the double scale-beam, which in weighing-trucks heretofore made has been one of the most expensive parts of the device. With my construction the bar a is the only part of the beam requiring to be nicely finished, and that only on its upper face, which is graduated. The brackets c may be made of unfinished castings, and likewise the weights h and i , while the second beam d is simply an unfinished piece of bar-iron. Thus the whole beam may be built at small cost and yet answer the purpose as well as if all of its parts were highly finished. The poise i on the rod d is only used for weighing a fixed amount, and that it may accomplish this with accuracy after the beam is balanced by adjusting weight h the poise i is moved to a position on the rod where it will balance the weight and a limit-pin w or stop is then placed in the rod.

What I claim as my invention is—

1. In a scale, the combination with the beam and the platform of the long lever having an extension to form a handle for raising or lowering the same, a link connected at opposite ends to this lever and to the beam, and means for connecting the lever to the link for the purpose described.

2. In a scale, the combination with the beam and the platform of the long lever, a link connecting said lever with the beam, and a hook for supporting the lever on the link intermediate its ends.

3. In a scale, a double beam comprising a graduated member or bar, brackets or extensions at the ends, a second bar engaged in apertures in the brackets, a fulcrum-block attached to this second bar in which the beam-rod and fulcrum-pivots are secured, and counterbalance and weighing poises on this beam on opposite sides of the fulcrum-block.

4. A pivot-loop formed of a single piece bent into loop shape with separated overlapping and concentric end portions the inner one of which portions forms a spring pivot-bearing.

5. A pivot-loop having the separated overlapping and concentric end portions the inner one of which is reduced in thickness to form a spring pivot-bearing.

6. A pivot-loop having overlapping separated ends one of which forms a yielding pivot-bearing and the other of which forms a reinforce for said bearing portion and is adapted to limit the movement thereof.

In testimony whereof I affix my signature in presence of two witnesses.

ORLANDO W. PARSELL.

Witnesses:

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OTTO F. BARTHEL.