R. McGAHEY.

LOADED TRUCK COUNTING APPARATUS.

APPLICATION FILED DEC. 3, 1910.

1,000,278. Patented Aug. 8, 1911.

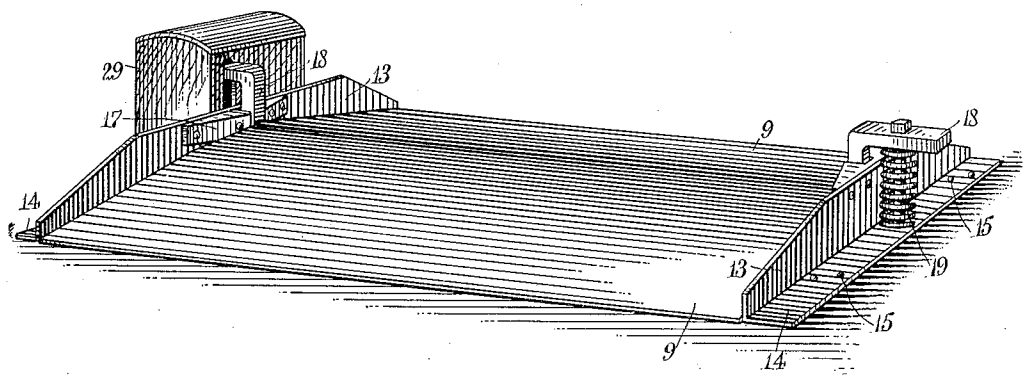


Fig. 1.

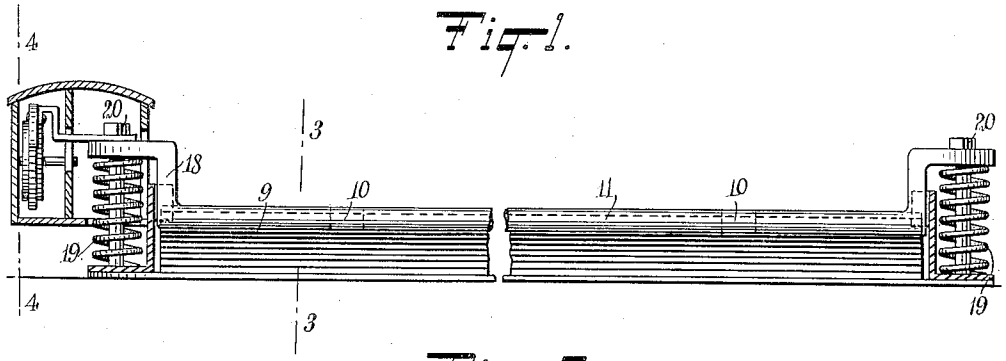


Fig. 2.

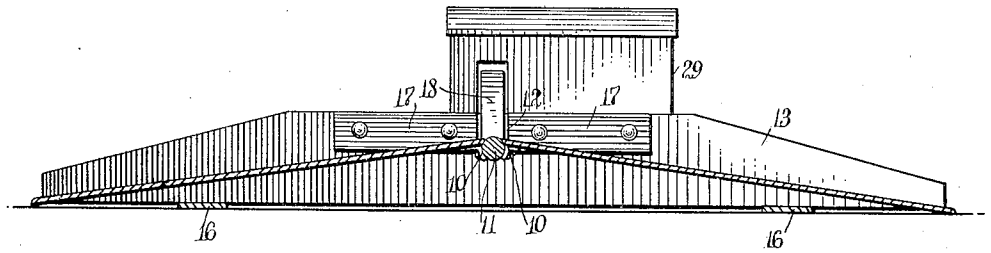
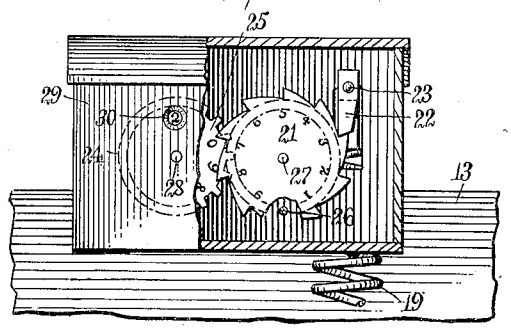


Fig. 3.

Fig. 4.



WITNESSES

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LOADED-TRUCK-COUNTING APPARATUS.

1,000,278. Specification of Letters Patent. Patented Aug. 8, 1911.

Application filed December 3, 1910. Serial No. 595,370.

To all whom it may concern:

Be it known that I, RICHARD McGAHEY, a citizen of the United States, and a resident of Walla Walla, in the county of Walla Walla and State of Washington, have invented a new and Improved Loaded-Truck-Counting Apparatus, of which the following is a full, clear, and exact description.

Among the principal objects which the present invention has in view are: to provide a platform and comptometer operatively connected therewith for tallying the succession of loaded vehicles or conveyances which are passed over the said platform; to provide a platform of the character mentioned, constructed and arranged to operate under conditions of load only; and to provide a platform and comptometer operatively connected therewith constructed and arranged in a manner economical, durable and efficient.

One embodiment of the present invention is disclosed in the structure illustrated in the accompanying drawings, in which like characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a perspective view of a portable platform constructed and arranged in accordance with the present invention; Fig. 2 is an end view of a platform constructed and arranged in accordance with the present invention, the structure being broken away and contracted at the center, and the casing for containing the comptometer being shown in section; Fig. 3 is a longitudinal vertical section taken on the line 3—3 in Fig. 2; and Fig. 4 is a detail view, on an enlarged scale and in section, taken on the line 4—4 in Fig. 2.

The platform, so styled, as shown in the accompanying drawings consists primarily of two floor sections 9, 9. The floor sections 9, 9 are each provided with hinges 10, 10, wherewith they are connected to a shaft 11. The shaft 11 is extended between and mounted in guides 12, formed on the vertical walls of stringer plates 13, 13. The stringer plates 13, 13 are provided with horizontal base flanges 14, as shown best in Fig. 1 of the drawings. The base flanges 14 are connected by means of rivets 15, 15 to cross spacing bars 16, 16. The bars 16, 16 space apart the stringer plates 13, 13 and maintain the operative position thereof rigidly.

The guides 12 are formed between fender blocks 17, 17. The fender blocks are extended over the floor sections 9, as shown best in Fig. 1 of the drawings, to prevent the hooks 18, 18 with which the shaft 11 is provided from being struck or otherwise damaged by the wheels or parts connected therewith of the trucks in which the loads counted by the platform are counted.

The horizontal extensions of the hooks 18 are suspended upon spiral springs 19, 19. The springs 19, 19 are maintained in place by bolts 20, 20. The heads of the bolts 20, 20 further serve to control the upward lift of the hooks 18, 18 and the floor sections 9, 9 connected therewith. The springs 19, 19 are regulated to a tension or strength, set to yield under the load which it is desired, and above the yielding point of a load less than that which it is desired to count. From this it will be understood that the mechanism herein described is particularly designed for the counting of loads of ascertained approximation.

The particular use to which the invention is placed at present by me is to count the number of truck loads of grain passing over the platform. In this employment, it is well known that the hand trucks on which the grain is handled after being sacked will hold a certain number of sacks of a given weight. The springs 19 are set to act at the initial load of the accumulated weight of the full truck, to wit, say 500 lbs. At a less weight than 500 lbs. the springs 19 will not yield to permit the depression of the shaft 11 sufficient to rotate the ratchet toothed dial 21 upon which it operates by means of a pawl 22.

The pawl 22 is pivotally mounted at 23 upon the end of one of the hooks 18, and is suspended in the path of the teeth of the dial 21 to rest upon the face thereof to rotate the dial when the floor sections 9, 9 are level to the extent to which they are permitted by the springs 19, 19.

The major dial 21 is provided with a gear wheel 25, and the minor dial 24 is provided with a pin 26. The gear wheel 25 and dials 21 and 24 are severally mounted on shafts 27 and 28. The dials are provided with display numerals ranging arithmetically from one to ten. The side of the casing 29 is provided with peep holes 30 set opposite each of the dials whereby the numerals on the said dials may be read when disposed opposite said peep holes.

The pin 26 is arranged to impinge upon

and engage the teeth of the wheel 25 successively to move the dial 24 one counting section for each complete revolution of the dial 21, as is usual in comptometers. It will be understood that while I have shown in the drawings two comptometer dials, these dials may be amplified to suit the design and the requirements of the employment for which the machine is intended.

The operation of the invention is as follows: The platform constructed as shown is placed in the passage over which the trucks loaded with the sacked grain or other merchandise are moved. When and as each truck is carried across the platform the floor sections 9, 9 are flattened, depressing the shaft 11 and the hooks 18, 18 carried thereon. Depressing the hooks 18, 18 rotates the dial 21 one counting section by reason of the arrangement of the pawl 22 with the ratchet teeth of the dial 21. As stated, the springs 19 which raise the shaft 11 and hooks 18 connected therewith, are set to yield under the load of 500 lbs., or other weight which it is desired to count. When on the return of the empty truck, the weight of the operative handling the truck is not sufficient to depress the platform, therefore the comptometer is not affected by the passage of the empty truck and the operative. However, as each of the loaded trucks in succession pass from the warehouse to the waiting train or steamer, the tally is made upon the dials 21 and 24, registering a gradually increasing number of truck loads. At the end of the day or other stated period when it is desired to ascertain the number of sacks, the number contained in each load multiplied by the number of loads will give the desired result.

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

1. A loaded truck counting apparatus, comprising a supporting member suspended across the path of said truck; a plurality of floor sections pivotally connected with said member and suspended thereby, one edge of said floor sections being rigidly supported; a plurality of supporting springs for said supporting member; and a comptometer operatively connected with said supporting member to tally the depressions thereof.

2. A loaded truck counting apparatus, comprising a plurality of hingedly connected floor sections; a plurality of stringer plates separated to form a passage between and to limit the depression of said floor sections; a comptometer operatively connected with said floor sections to register the depressions thereof; and yielding supporting means for said floor sections to raise the edges thereof and adapted to yield under pressure of ascertained weight.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

RICHARD McGAHEY.

Witnesses:
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GRACE McGUIRE.