No. 618,525. Patented Jan. 31, 1899.

H. VESSEY.

PORTABLE ENGINE TRUCK.

(Application filed Aug. 8, 1898.)

(No Model.) 3 Sheets—Sheet 1.

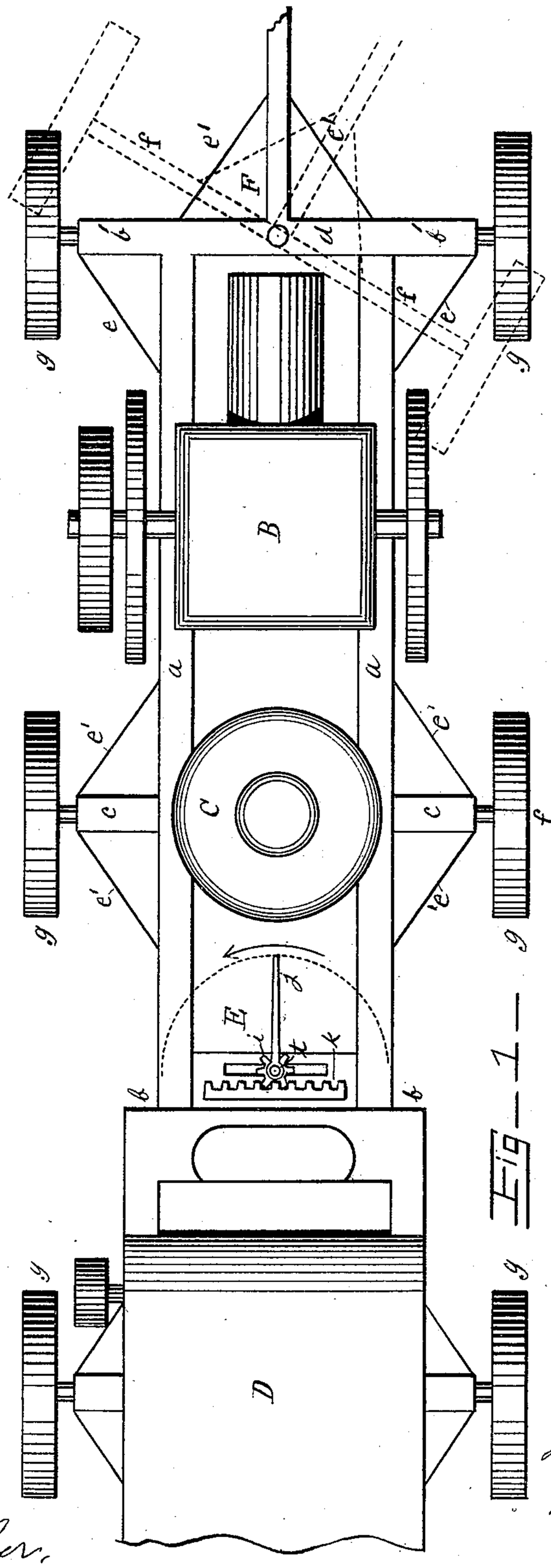

Fig. 1.

WITNESSES

J. W. Ward

E. A. Taylor.

INVENTOR

Henry Vessey

By J. W. Powers

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(No Model.) 3 Sheets—Sheet 2.

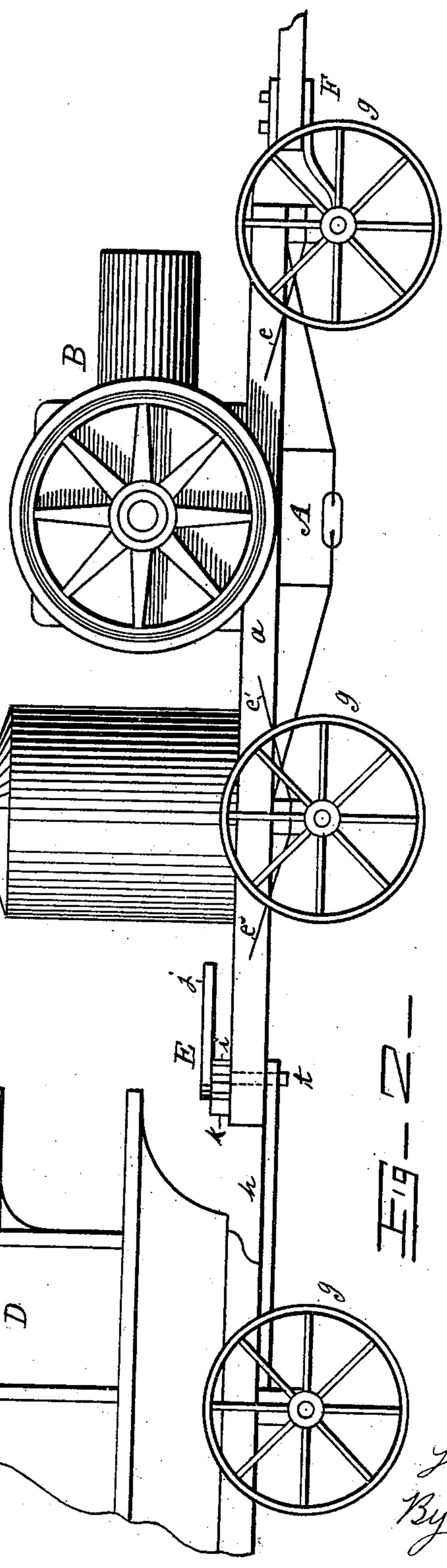

FIG. 2.

WITNESSES

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No. 618,525. Patented Jan. 31, 1899.

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PORTABLE ENGINE TRUCK.

(Application filed Aug. 8, 1898.)

(No Model.) 3 Sheets—Sheet 3.

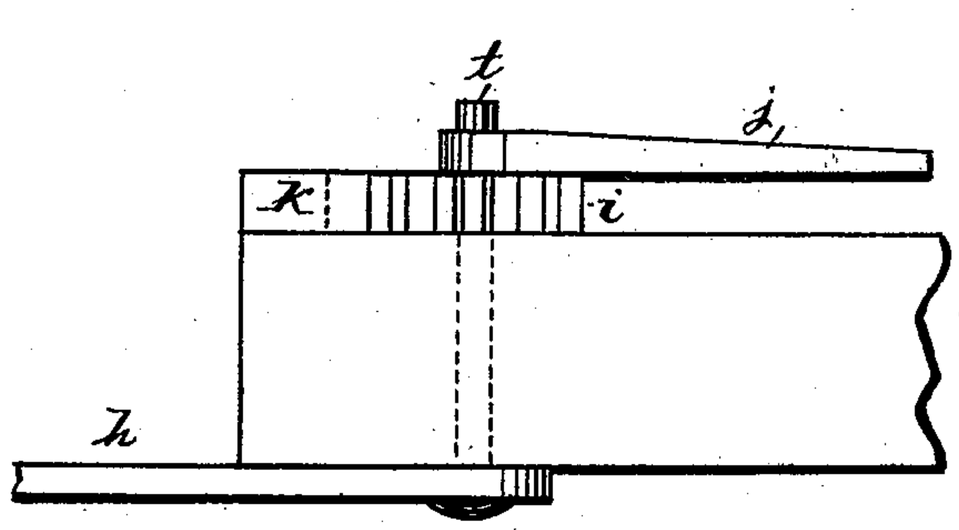

Fig. 3.

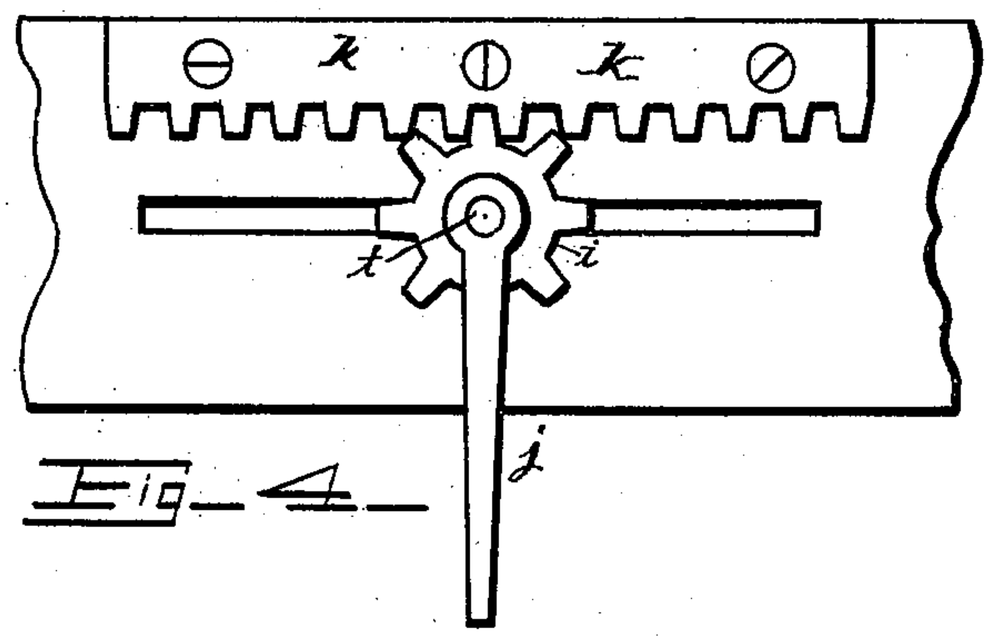

Fig. 4.

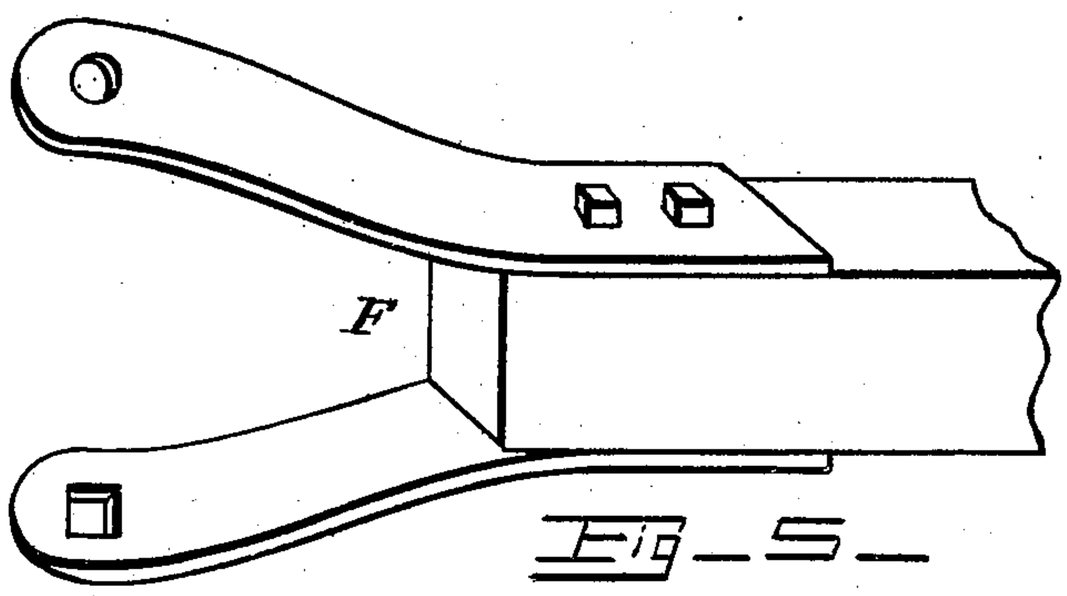

Fig. 5.

WITNESSES

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INVENTOR.

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UNITED STATES PATENT OFFICE.

HENRY VESSEY, OF JAMESTOWN, NORTH DAKOTA.

PORTABLE-ENGINE TRUCK.

SPECIFICATION forming part of Letters Patent No. 618,525, dated January 31, 1899.

Application filed August 8, 1898. Serial No. 688,143. (No model.)

To all whom it may concern:

Be it known that I, HENRY VESSEY, a citizen of the United States, residing at Jamestown, in the county of Stutsman and State of North Dakota, have invented a certain new and useful Truck for Portable Engines and Separators, of which the following is a specification.

My invention relates especially to farm machinery; and it consists in the construction of a truck for transporting gas, gasolene, or steam engines used for threshing-machines from one farm to another or from one portion of a farm to another portion, which, among other advantages, is adapted to be turned around within a smaller area than those at present in use and to be shifted laterally to bring the band-wheel of the engine mounted thereon in line with the band-wheel of its accompanying separator, (the threshing-machine,) as will hereinafter be described.

To these ends my invention consists of the truck herein shown and hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation of my truck, an engine mounted thereon, and a portion of a separator attached thereto. Fig. 2 is a top view of the same, and Figs. 3, 4, and 5 details.

My truck may be fashioned either of iron or of wood or may be partly of iron and partly of wood, as the manufacturer may elect; but I prefer to fashion it entirely of iron and in the manner hereinafter described.

Similar letters refer to similar parts, A being the truck; B, the engine mounted thereon; C, the tender or water-tank; D, the separator; E, the shifting mechanism, and F the draw-bar. The truck A consists of the side bars *a a*, which I fashion of either T or L iron. To these I rivet or bolt the end rails *b* and *b'*, the former being flush with the side rails *a a*, both longitudinally and laterally, and the latter being flush therewith longitudinally, but projecting laterally therefrom in either direction. The tie-beam *c* is of equal length with the end rail *b'* and in like manner is secured to the parallel side bars *a a* and projects laterally therefrom at either end. The end rails *b* and *b'* are vertically pierced intermediate their length, the former having a slotted opening therein adapted to receive a vertical shaft and the latter being provided with a round hole adapted to receive the king-bolt *d*.

The braces *e* are secured to the outer ends of the end rail *b'*, extend diagonally rearward, and are secured to the side bars *a a*. Similar braces *e'* are secured to the tie-beam *c*, extend diagonally forward and rearward, and are in like manner secured to the said side bars *a a*. The forward axle *f* is pierced intermediate its length to receive the before-mentioned king-bolt *d*, upon which it swings in turning my truck around, as indicated by the dotted line. The rear axle *f'* is rigidly affixed to the under side of the tie-beam *c*. The wheels *g* are journaled and rotated upon the axles *f* and *f'* in the usual manner.

The forward end of the grain-separator D is provided with a coupling *h*, shown detached in detail Fig. 3. This coupling *h* is provided with the before-mentioned vertical shaft extending upward through the slotted opening in the rear end rail *b*, which shaft serves in part as a coupling-pin by which the said separator D is drawn and as a part of the shifting device, hereinafter described.

The engine B and tender C are mounted upon and are secured to the truck A in any convenient manner, the tender C serving when a steam-engine is employed to furnish water to the boiler and where a gas or gasolene engine is employed to furnish water to the cooling-chamber.

The shifting device E is designed to shift the separator D laterally for the purpose of "lining up" the belt-wheels. It consists of a pinion *i*, journaled upon the vertical shaft *t* of the coupling *h*, a lever *j*, affixed to the said pinion *i*, and a rack *k*, rigidly affixed to the upper surface of the end rail *b*, the teeth of which engage those of the said pinion *j*. Its operation is as follows: Swinging the lever *j* in the direction indicated by the arrow will (through the operation of the revoluble pinion and the fixed rack) carry the said pinion along the rack, thereby shifting the separator in the same direction and thereby bringing the belt-wheels into line. The draw-bar F (shown in detail Fig. 5) consists of a bifurcated beam the ends of which are vertically pierced to receive the before-mentioned king-bolt *d* and the obliquely-diverging braces

e, connected to the forward axle *f* by means of eyebolts or their equivalents.

It will be seen that through the configuration of my truck the forward axle *f* is free to swing upon the king-bolt *d*, the wheels thereon coming between the forward end rail *b'* and the tie-beam *c*, as indicated by the dotted line. It will further be seen that the forward end of the separator D swings on the vertical shaft *t* and over the rear end of the truck A, and that therefore my truck and separator may be turned within a limited area and the declared purposes of my invention are attained.

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

1. In a truck the combination of the side bars, the end rails affixed thereto, one of which projects laterally therefrom; the tie-beam secured to and laterally projecting from the said side bars; diagonal braces, extending from said side bars to the said projecting end rail and tie-beam; and the shifting mechanism, substantially as shown and described.

2. In a truck the shifting mechanism E, consisting of the slotted hole, a vertical shaft extending upward therethrough; a pinion rotating upon said shaft; a lever affixed to said pinion, and a rack, the teeth of which engage those of the said pinion, whereby when the said lever is swung around, the said pinion will travel along the said rack, as described and for the purposes specified.

HENRY VESSEY.

Witnesses:
G. E. SMITH,
H. WILLIAMS.