E. G. PRUISMANN.

TRANSPORTATION TRUCK.

APPLICATION FILED NOV. 12, 1919.

1,340,672. **Patented May 18, 1920.**

2 SHEETS—SHEET 1.

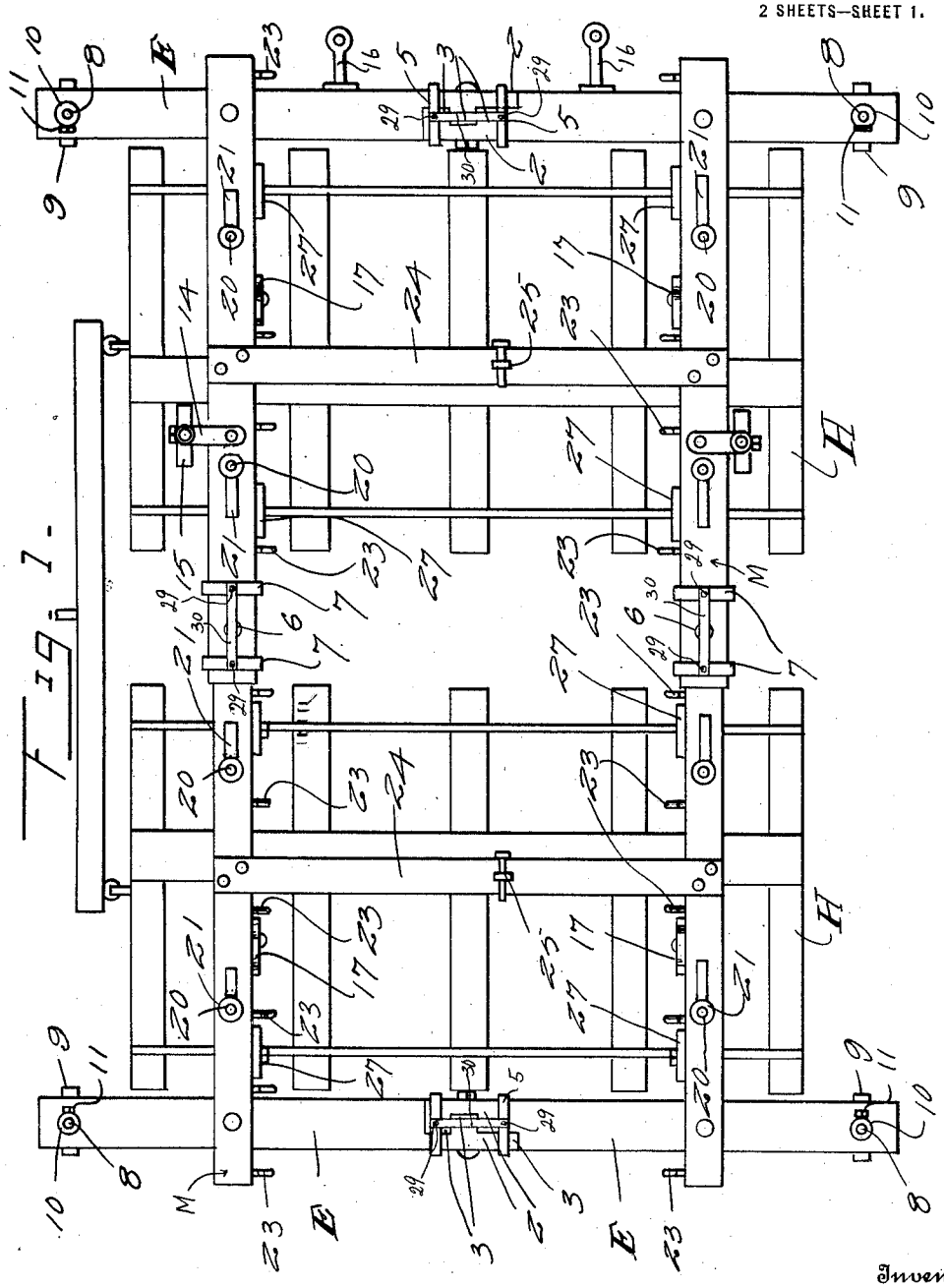


Fig. 1.

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2 SHEETS—SHEET 2.

Fig. 2.

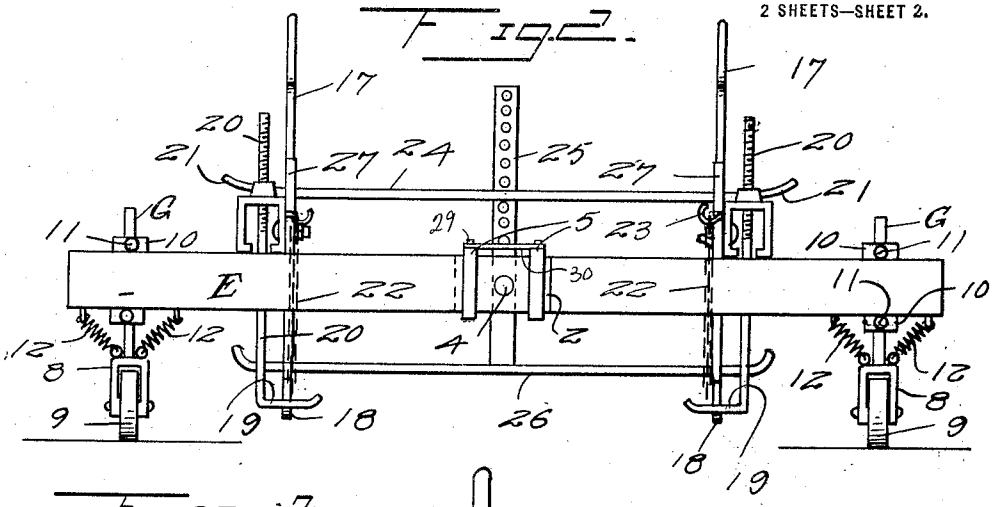


Fig. 3.

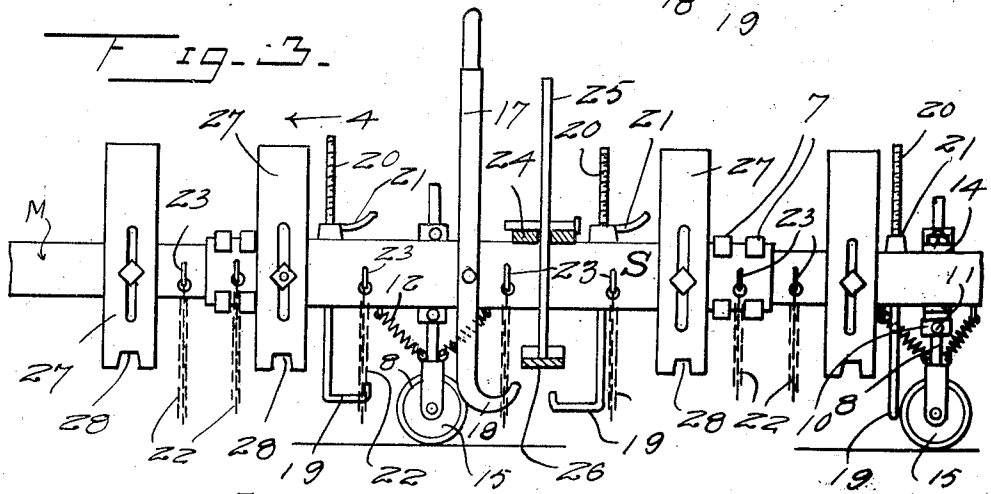


Fig. 4.

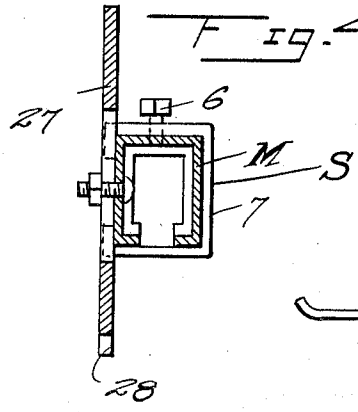
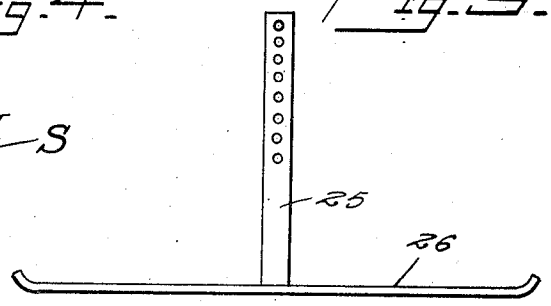


Fig. 5.



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UNITED STATES PATENT OFFICE.

EDWARD G. PRUISMANN, OF WEBSTER CITY, IOWA.

TRANSPORTATION-TRUCK.

1,340,672. Specification of Letters Patent. Patented May 18, 1920.

Application filed November 12, 1919. Serial No. 337,459.

To all whom it may concern:

Be it known that I, EDWARD G. PRUISMANN, a citizen of the United States, residing at Webster City, in the county of Hamilton and State of Iowa, have invented certain new and useful Improvements in Transportation-Trucks, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in trucks, and has relation more particularly to a device of this general character especially designed and adapted for use in the transportation of harrows, and it is primarily an object of the invention to provide a novel and improved truck of this general character whereby a harrow may be readily and conveniently moved from one locality to another, and particularly over roadways, or the like, without the necessity of separating the harrow sections.

It is also an object of the invention to provide a device of this general character having novel and improved means whereby a harrow section may be readily raised or elevated with respect to the truck, and wherein the truck is provided with means for supporting the harrow section elevated or in suspension.

Another object of the invention is to provide a novel and improved device of this general character embodying a frame longitudinally adjustable so that the truck may be employed with convenience and facility in connection with harrows of different sizes.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved truck whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:—

Figure 1 is a view in top plan of a transportation truck constructed in accordance with an embodiment of my invention with a harrow engaged therewith;

Fig. 2 is a view in end elevation of my improved truck with the harrow omitted;

Fig. 3 is a view, partly in side elevation and partly in section, of my improved truck as herein disclosed;

Fig. 4 is an enlarged fragmentary view illustrating the mounting of the holding plate as herein included;

Fig. 5 is a view in elevation of a suspending member for a harrow section as herein included.

My improved truck as herein disclosed comprises the end members E and the side members M. Each of the end members E comprises two sections of desired length and having their inner or opposed end portions provided with extensions 2 adapted to overlap when the sections are in assembled relation, and which extensions are provided with the interlocking elements 3 whereby the coupling of the sections is materially facilitated. The overlapping extensions are held in assembled relation through the medium of a bolt 4 or the like and also through the instrumentality of the sliding clips or bands 5.

Each of the side members M is also sectional and is preferably U-shaped in cross section so that said sections may be telescopically engaged one with the other in order to lengthen or shorten the side member M in accordance with the necessities of practice. The sections are held against relative longitudinal movement by the holding screws 6, and said sections may be further maintained in assembled relation by the sliding clips or members 7.

Coacting with the opposite end portions of each of the end members E are the ground engaging members G. Each of the ground engaging members G comprises a forked shank 8 extending vertically through an end portion of the member E and having rotatably supported within the fork the wheel 9. Fixed to the shank above and below the member E are the collars 10, said collars being preferably held by set screws 11. By this means, the forked shank 8 may be adjusted longitudinally with respect to the

end section E so that said end section E may be maintained at a desired elevation with respect to the ground or other surface, as the occasions of practice may require.

Also coacting with each of the forked shanks 8 are the retractile members 12 secured to opposite sides of the fork and to the end member E at opposite sides of the shank 8. These retractile members 12, herein disclosed as coiled springs, serve to normally maintain the wheel 9 straight ahead, and also operate to prevent said wheel from swinging too far laterally during a turning of the truck. One of the sections of each of the side members M is also provided with a ground engaging member so that additional support may be had for the intermediate portion of the truck, and said ground engaging member comprises a vertically disposed shank secured to the section by the clamps 14, and which clamps operate to hold the shank at different longitudinal adjustments. The lower end portion of the shank 14 is provided with a fork in which is rotatably arranged the ground engaging wheel 15.

The side members M are bolted or otherwise secured to the end members E, and one of said members E is provided with the hitching means, indicated at 16, so that the truck may be conveniently transported by any desired character of power.

There may also be employed in connection with each of the side members M one or more intermediate sections S, also preferably U-shaped in cross section, and the opposite end portions of each of said sections is telescopically engaged with the adjacent sections of the member M and locked thereto in substantially the same manner as hereinbefore described with respect to the first mentioned sections of the member.

Engaged with the sections of each of the side members M are the vertically disposed, swinging levers 17 extending above and below said member, and the lower end portion of each of the levers is provided with a hook 18 adapted to be engaged with a section of the harrow H so that said section may be raised with respect to the truck when it is desired to transport a harrow. When the harrow section has been raised or elevated a desired distance, the same may be engaged by the hook members 19 carried by each of the side members M, and which hook members serve to maintain the harrow section elevated or suspended.

Each of the hook members 19 is arranged at the lower end of a shank 20 loosely disposed through a section of a side member, and in threaded engagement with said shank and contacting with the top of a section is a winged nut 21 or the like so that upon requisite rotation of said winged nut 21, the hook member 19 may be raised or lowered as required.

I also find it of advantage to secure to the sections of the side members the chains or flexible members 22 which may also be employed for raising the sections of a harrow. These chains or flexible members 22 are directed around a harrow section and by requisite pull thereon, the section is elevated. The chain may thus be engaged with a hook or lug 23 carried by the adjacent section of a side member.

To provide further means for maintaining the harrow sections raised or elevated, I find it of advantage to connect the side members M, or more particularly to the sections thereof, with the straps 24 of steel or other material, and to each of which is adjustably engaged a depending strap 25. The lower end portion of the strap 25 is secured to a member 26 which is adapted to underlie the section of a harrow to maintain the same in its elevated or suspended position.

In order to maintain the sections of the harrow, when raised, against swinging movement or undue vibration, I provide the side members M with the vertically adjustable plates 27, and each of the plates 27 is provided in its lower edge with a notch 28 adapted to receive a portion of a harrow section, when raised or elevated, so that the harrow section is supported by my improved truck in a substantially rigid manner.

Each of the clips 5 and 7 have disposed therethrough a set screw 29, whereby said clips may effectually be maintained in working position. Coacting with each pair of clips 5 or 7 is a connecting strap 30, and which strap is maintained in applied position by the set screws 29 hereinbefore referred to. The straps 30 operate to hold said clips against relative movement.

From the foregoing description it is thought to be obvious that a truck constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof, and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:—

1. A transportation truck for a harrow comprising a portable frame, harrow elevating means depending from opposite sides of the frame, and means independently of the elevating means for maintaining the harrow suspended, and means carried by the

frame and engaging the harrow from above when said harrow is elevated.

2. A transportation truck for a harrow comprising a portable frame, harrow elevating means depending from opposite sides of the frame, and means independently of the elevating means for maintaining the harrow suspended, and means carried by the frame and engaging the harrow from above when said harrow is elevated, said last named means being vertically adjustable.

3. A transportation truck for a harrow comprising a portable frame, harrow elevating means depending from opposite sides of the frame, and means independently of the elevating means for maintaining the harrow suspended, said last named means including a transversely disposed member engaging the harrow from below and suspended from the frame.

4. A transporation truck for a harrow comprising a portable frame, harrow elevating means depending from opposite sides of the frame, and means independently of the elevating means for maintaining the harrow suspended, said last named means including a transversely disposed member engaging the harrow from below and suspended from the frame, said member being vertically adjustable.

5. A transportation truck for a harrow comprising a portable frame, harrow elevating means carried thereby, means independent of the elevating means for maintaining the harrow elevated, and vertically adjustable plates carried by the frame, said plates engaging the harrow, when elevated, from above and operating to hold the harrow against swinging movement.

6. A transportation truck for a harrow comprising a portable frame, means carried thereby for suspending the harrow from the frame, and vertically adjustable plates carried by the harrow for movement in a vertical direction, the lower end portions of the plates having notches adapted to receive a portion of the harrow and whereby said plates hold the suspended harrow against swinging movement.

In testimony whereof I hereunto affix my signature.

EDWARD G. PRUISMANN.