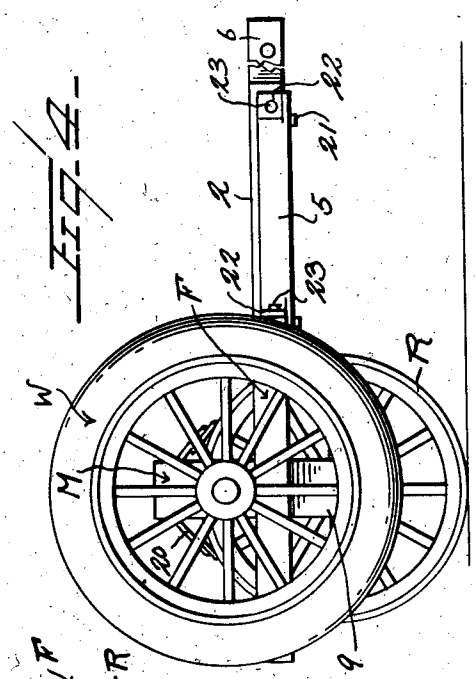
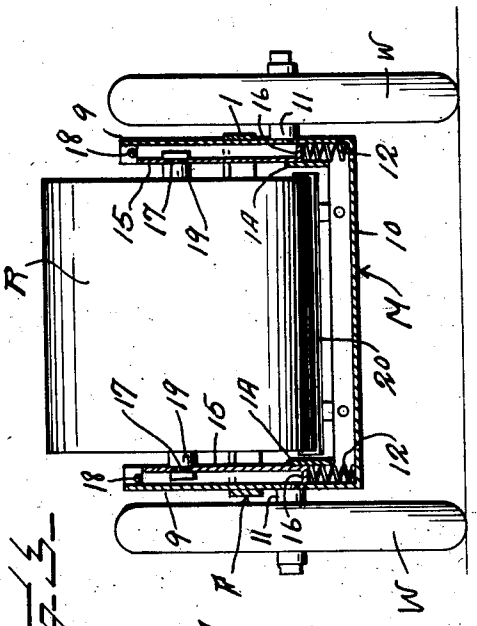
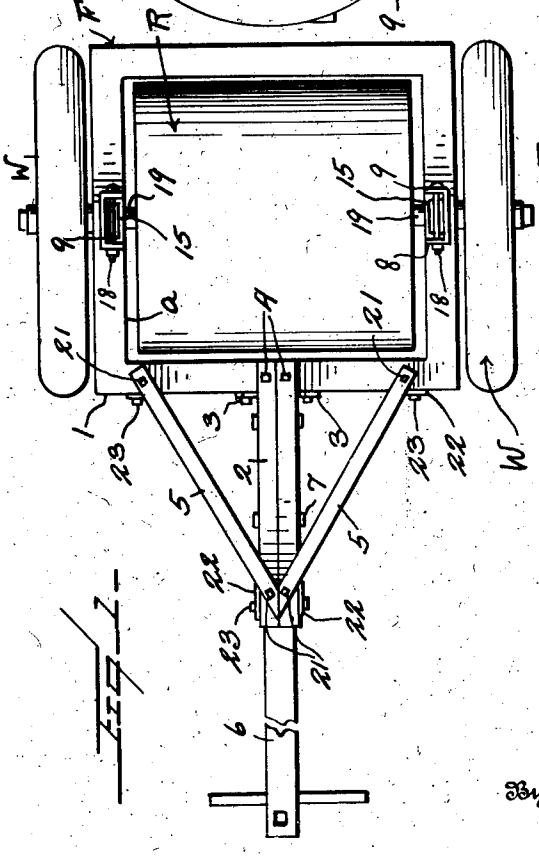
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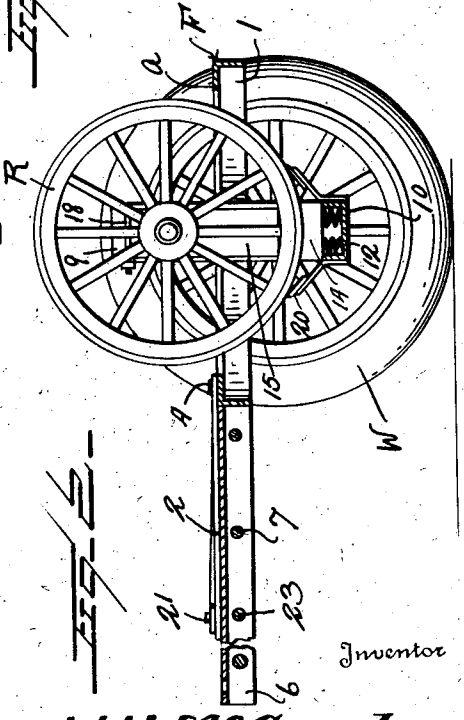
ROAD ROLLER AND TRAILER

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ROAD ROLLER AND TRAILER

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3 Claims. (Cl. 94—50)

This invention relates to a road roller and trailer, and it is an object of the invention to provide a device of this kind which when in one adjustment can be effectively employed as a road roller and when in a second adjustment can be readily transported from one location to another and also when the roller is removed allows the device to be employed for various purposes.

Another object of the invention is to provide a device of this kind comprising a vertically disposed frame together with a horizontally directed frame both being connected, the vertically disposed frame having means providing for the mounting of a road roller or other device or load and in a manner to substantially absorb the shocks and jars upon the roller or the like incident to travel.

A still further object of the invention is to provide a device of this kind embodying means for permitting detachable securing of a draft tongue or the like as may be required in practice.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved road roller and trailer 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 drawing, wherein:—

Figure 1 is a view in top plan of a combined road roller and trailer constructed in accordance with an embodiment of my invention with the road roller in raised or inoperative position;

Figure 2 is a view in side elevation of the device as illustrated in Figure 1 with certain of the parts in section;

Figure 3 is a transverse sectional view taken through the device as illustrated in Figures 1 and 2 with certain of the parts in elevation;

Figure 4 is a view in side elevation of the device inverted with respect to Figure 1 with the road roller in working position.

As herein disclosed my improved device comprises a rectangular and normally substantially horizontal frame F, the members 1 of which being preferably of angle iron with a flange *a* of each of said members inwardly directed. Secured to and extending forwardly from the front member 1 of the frame F is a tongue section 2 of channel formation and herein illustrated as divided longitudinally into two parts. The side flanges of this tongue section 2 at the frame end portion thereof are laterally extended, as at 3, to provide lugs whereby said tongue section 2 may be bolted or otherwise secured to the front member 1 of the frame F.

The portions of the tongue section 2 extending beyond the lugs 3 overlie the top of the front member 1 and are bolted or otherwise secured as indicated at 4. The outer extremity of the tongue section 2 and the opposite end portions of the front member 1 of the frame F are connected by the brace members 5 whereby this tongue section 2 is rigidly maintained in applied position with respect to the frame F. This tongue section 2 is adapted to have snugly engaged therein a draft tongue 6 of desired length and which is detachably held in place by removable bolts 7 or the like disposed through the side flanges of the tongue section 2 and through the inserted end portion of the draft tongue 6. This tongue 6 may be of a type to permit its ready hitching to a tractor or other vehicle or may be provided with suitable means to allow the same to be manually used. By having the draft tongue 6 removable the same can be readily replaced by a suitable tongue for use in connection with draft animals or otherwise as the requirements of practice may deem best.

The side members 1 of the frame F substantially midway the ends thereof have the flanges *a* recessed, as at 8. Snugly fitting within the recesses 8 of the side members 1 of the frame F are the vertically disposed side members 9 of a U-shaped frame M. The side members 9 of this frame M as well as the intermediate or base member 10 thereof are of channel formation with the open faces thereof inwardly disposed. The members 9 of the frame M are secured to the side members 1 of the frame F by welding or otherwise as may be preferred.

The side members 9 of the frame M extend a desired distance beyond the opposite sides of the frame F and said members 9 at a point between the intermediate member 10 and the connections between the frames M and F are provided with outstanding stub shafts 11 upon which are mounted in a conventional manner the tired wheels W preferably of any of the well known types used in connection with motor driven vehicles.

Extending upwardly within each of the side members 9 of the frame M and welded or otherwise secured to an end portion of the intermediate member 10 are the coil springs 12 of desired tension. Secured to the side flanges of each of said members 9 and bridging the space therebetween is a plate 14 which serves to maintain the springs 12 in desired arrangement. These springs 12 serve as a yieldable support for a bearing plate 15 freely positioned from within each of the members 9 and which has its lower end provided with a flange 16 with which the springs 12 directly engage. As illustrated in

the accompanying drawing, each of these plates 15 has operatively engaged therewith a supporting axle 17 for a road roller R. The axle 17 when the plates 15 are applied within the members 9 is positioned at the side of the frame F remote from the stub shafts 11 whereby the axle 17 is eccentrically positioned with respect to the wheels W so that when the frame M is in a position to have the members 9 upwardly directed the wheels W riding upon the ground or other surface whereas when the device is thrown over with the members 9 disposed downwardly the wheels W are raised out of contact with the ground or kindred surface and the roller has desired direct contact with the surface to be treated thereby.

The springs 12, as before stated, comprise a yielding support for each of the plates 15 and this of course is of advantage in view of the fact that it relieves the roller R or other device which may be applied of excessive shocks and jars incident to travel. After a plate 15 has been properly applied with respect to each of the members 9 a pin 18 is directed through the side flanges of said member adjacent to the outer end portion of said plate 15 whereby the device is effectively held against displacement. Obviously any tendency of inward movement of the applied plates 15 is resisted by contact of said plates 15 with the hubs 19 of the roller R. Upon removing the pins 18 the plates 15 together with the roller R may be readily removed and when the roller is removed the device may be employed for other purposes.

The base or intermediate member 10 of the frame M has secured to the opposite sides thereof the scrapers 20 for coaction with the applied road roller R and the axle 17 within the roller R is adapted to have suspended therefrom a suitable pan for holding a supply of asphaltum or the like when it is desired to heat the roller or other material may be put into the pan for adding weight to the roller.

When the device is in the position as particularly illustrated in Figures 1, 2 and 3 and with the roller R removed a barrel or tank may be supported by the structure and which is of particular advantage in connection with a spraying operation.

When the device is used in transporting a tank or barrel the tank of course is supported by the intermediate or base member 10 of the frame M. If desired the tank may be provided with trunnions engaged with plates similar to the plates 15.

With the roller R removed the device may also be conveniently employed in the transporting of logs or timber and when so used the load of course is rested directly upon the frame F between the members 9 of the frame M. It is, therefore, believed to be clearly apparent that the device as herein disclosed can be readily and conveniently employed for many different purposes and which multiplicity of uses is permitted particularly on account of the construction and assembly of the frames F and M and the parts associated therewith.

Each of the brace members 5 is also preferably an angle iron and has its extremities resting from above upon an end portion of the forward member 1 of the frame F and upon the outer end portion of the tongue section 2 and secured thereto in any suitable manner, as indicated at 21. The flanges of these brace members 5 at the opposite ends thereof are also formed to provide the feet 22 contacting with the side faces of the tongue section 2 at the outer extremity thereof and also contacting with the depending flange of the front member 1 of the frame F. These feet are also secured to such parts in any desired manner as indicated at 23.

From the foregoing description it is thought to be obvious that a road roller and trailer 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 device of the class described comprising a substantially horizontal frame, a U-frame extending through the horizontal frame and secured thereto, the base member of the U-frame being positioned to one side of the horizontal frame, ground engaging wheels carried by the side members of the U-frame at the opposite sides of the horizontal frame, the side members of the U-frame comprising inwardly facing channel members, and expansible members arranged within the lower portions of said channel side members of the U-frame.

2. A device of the class described comprising a substantially horizontal frame, a U-frame extending through the horizontal frame and secured thereto, the base member of the U-frame being positioned to one side of the horizontal frame, ground engaging wheels carried by the side members of the U-frame at the opposite sides of the horizontal frame, the side members of the U-frame comprising inwardly facing channel members, expansible members arranged within the lower portions of said channel side members of the U-frame, bearing plates freely mounted within the channel side members, the expensible members engaging said bearing plates from below, and means for limiting the upward movement of the bearing plates within the channel side members.

3. A device of the class described comprising a substantially horizontal frame, a U-frame extending through the horizontal frame and secured thereto, the base member of the U-frame being positioned to one side of the horizontal frame, ground engaging wheels carried by the side members of the U-frame at the opposite sides of the horizontal frame, the side members of the U-frame comprising inwardly facing channel members, expansible members arranged within the lower portions of said channel side members of the U-frame, bearing plates freely mounted within the channel side members, the expansible members engaging said bearing plates from below, means for limiting the upward movement of the bearing plates within the channel side members, and a road roller operatively engaged with said bearing plates.

WILLIAM H. McCOMBS.