

No. 820,850.

PATENTED MAY 15, 1906.

W. T. DAUM.  
WAGON.

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Fig. 1.

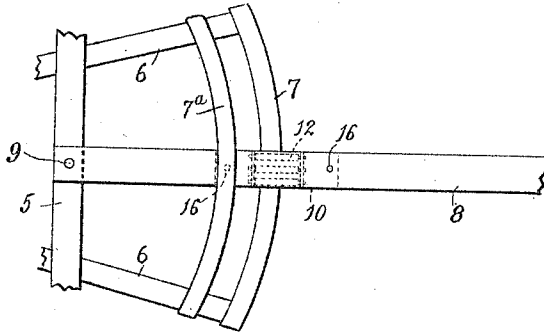


Fig. 2.

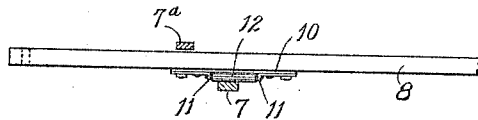


Fig. 3.

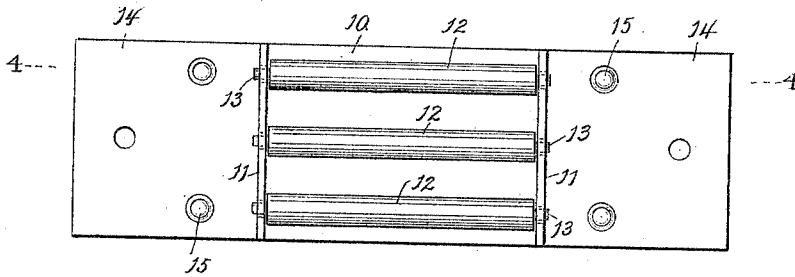
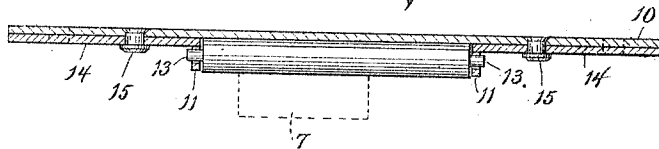


Fig. 4.



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# UNITED STATES PATENT OFFICE.

WILLIAM T. DAUM, OF CHICAGO, ILLINOIS.

## WAGON.

No. 820,850.

Specification of Letters Patent.

Patented May 15, 1906.

Application filed December 12, 1904. Serial No. 236,567.

*To all whom it may concern.*

Be it known that I, WILLIAM T. DAUM, residing in Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Wagons, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention relates to an improvement in that class of wagons in which a reach connecting the front and rear axles of the running-gear is employed in connection with hounds or sway-bars fixed to the front axle and bearing movably against the reach.

The object of the invention is to provide a suitable and improved bearing for the sway-bar or transverse bar of the hounds where it contacts with and moves on the reach, thus obviating friction, the wear of the parts, and the necessity for frequent lubrication.

The invention consists of the device, its parts and combinations of parts, as herein described and claimed, or the equivalents thereof.

In the accompanying drawings, Figure 1 represents a fragment of a front axle of a lumber-wagon with the hounds affixed thereto and the reach pivoted by a king-bolt in the front axle and provided with my improved device for a bearing against the transverse bar or sway-bar of the hounds. Fig. 2 shows a fragment of the reach with my improved device secured thereto on its under side, the sway-bar of the hounds being shown in section. Fig. 3 is a view from the under side of my improved device. Fig. 4 is a longitudinal section of the device.

In the drawings, 5 is a fragment of an axle of a wagon provided with hounds secured rigidly to the axle, which hounds may be in the form shown in this figure, which consist of the side arms 6 6 and the transverse sway-bars 7 7<sup>a</sup>. The reach 8 is pivoted by a king-bolt 9 or in any other convenient manner and extends rearwardly therefrom, usually, as shown in the drawings, passing underneath the upper sway-bar 7<sup>a</sup> and above the lower sway-bar 7.

The particular form of the hounds or sway-bar is not material, and the invention may be applied as well to a wagon in which the hounds consist solely of a curved bar fixed at its ends in the axle and sweeping therefrom in a curve or practical semicircle around to the rear and passing underneath the reach. The hounds in the wagon bear against the

reach, and thereby prevent the tilting of the front axle over toward the front and downwardly, especially by reason of the weight of the tongue, which in such wagons is mounted on the axle in front thereof, whereby the weight of the tongue has a tendency to tilt the axle downwardly at the front. Also other strains on the axle produced by the weight of the load and shocks occurring in starting and stopping thereof have a tendency to tilt the axle, and thus bring the action of the hounds against the reach into work.

The object and work of the lower sway-bar 7 is chiefly to prevent such downwardly tilting of the axle at the front, and in doing this the sway-bar 7 bears upwardly against the reach 8, and as the front axle is turned to right or left by the change of the direction of movement of the wagon the bar is caused to move endwise on and against the under surface of the reach, the bearing and movement of which under ordinary circumstances involve considerable friction, much wear of the parts, and a consequent necessity for frequent lubrication.

My improved device consists of a plate 10, advisably of metal, having therein medially thereof two transverse ribs 11 11 at a distance apart, between which ribs I employ one or more roller-bearings 12. The number of these bearings may vary in accordance with the uses to which the wagon is to be put, having reference to the loads the wagon will probably carry, and as an advisable number of rollers I have shown three of them in the drawings. These bearings bear upwardly against and roll on the under surface of the plate 10; but they are provided with axial terminal pintles or arbors 13, which project from the ends of the rollers, enter apertures therefor in the ribs 11. The apertures in the ribs 11, into which these pintles are inserted, are considerably larger in diameter than the diameters of the pintles 13, so that the pintles do not fit in the apertures like shafts in a box, so as to be supported and rotate thereon; but these pintles fit very loosely in the apertures, having considerable play therein, the bearings of the rollers when at work—that is, when the sway-bar 7 bears upwardly against them—being against and on the plate 10. The pintles serve to retain the rollers in place on the plate, while the upward thrust of the sway-bar against the rollers is put directly against the surface of the plate 10 upwardly and not in any manner on the pintles.

For convenience of construction the ribs 11 are each formed as a flange at and across one end of a short plate 14 of a size and form to fit on and conform to the under surface of the plate 10 at and near the end thereof, and these ribs, with the plates 14 on which they are thus formed, are secured to the plate 10, conveniently by rivets 15.

The device is placed on and against the under surface of the reach 8 in such position that the lower sway-bar 7 will bear upwardly against and transversely of the roller-bearings 12, whereby when the sway-bar moves endwise on and laterally as to the reach the bearing of the sway-bar will be upwardly and against these roller-bearings and through them against the under side of the reach.

The device may be secured to the reach by pins or bolts 16 through the plates 14 and 10 and through the reach.

What I claim as my invention is—

1. In a vehicle, a front axle, a hounds sway-bar secured to the axle, a reach extending rearwardly from the front axle and passing the sway-bar, a flat bearing-plate on the reach having transverse ribs thereon, a plurality of rollers throughout their length bear-

ing and rotating on the plate between the ribs and on which rollers the sway-bar bears and travels, and pintles on the ends of the rollers loosely fitting holes therefor in the ribs whereby the rollers are held against displacement.

2. A sway-bar roller-bearing, comprising a flat roller-bearing plate, shorter rib-plates each provided with a flange across one end forming a rib, said plates secured one at each end to the roller-bearing plate providing two ribs on and transversely of the roller-bearing plate at a distance apart said ribs having pintle-receiving apertures, one or more rollers disposed longitudinally of and bearing throughout their lengths on the plate between the ribs, and pintles on the rollers which pintles enter loosely the apertures in the ribs but have no bearing therein toward the roller-bearing plate.

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

WILLIAM T. DAUM.

Witnesses:

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