

No. 736,674.

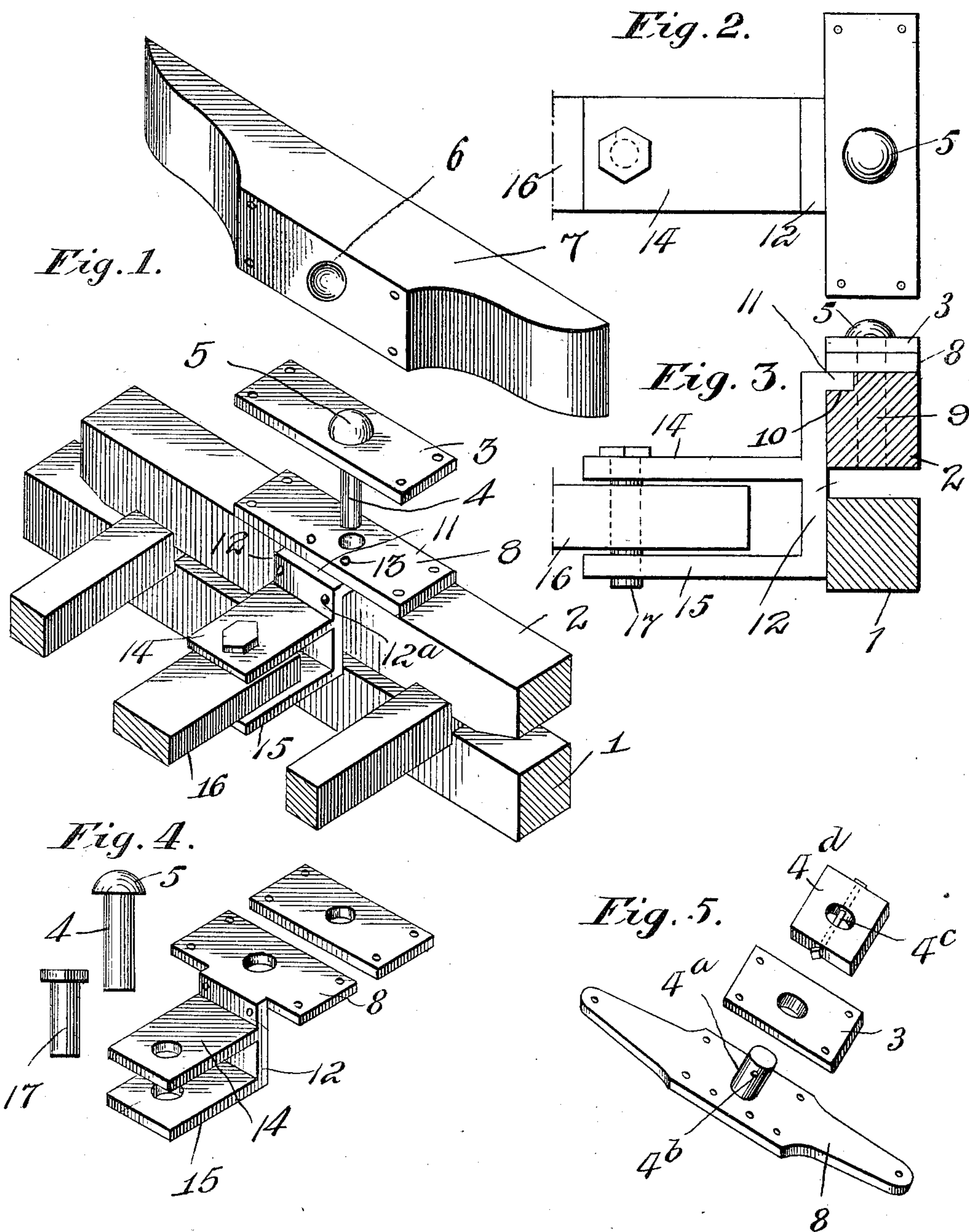
PATENTED AUG. 18, 1903.

J. E. BENNETT.
RUNNING GEAR FOR WAGONS.

APPLICATION FILED MAR. 27, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



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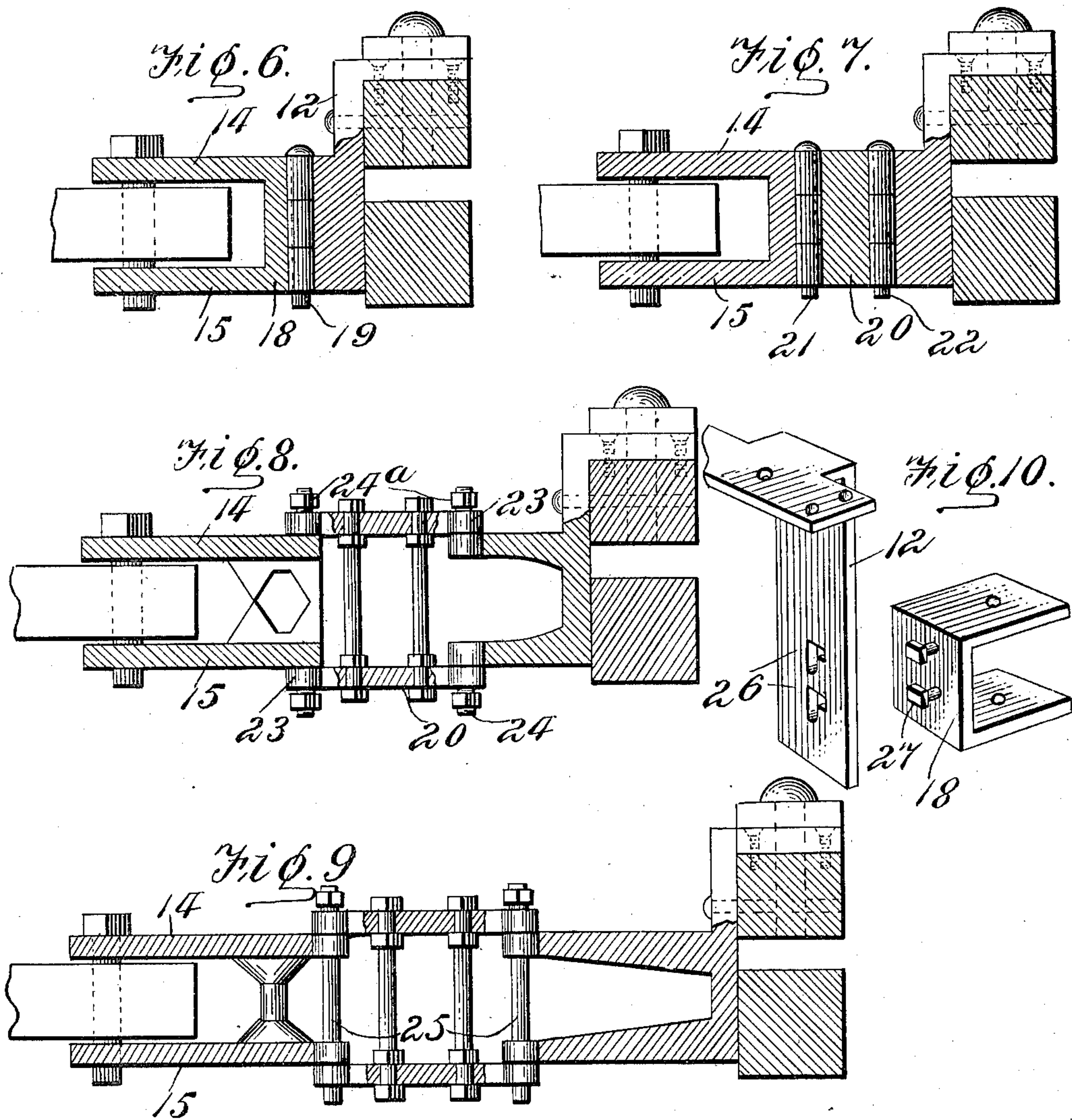
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Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

JAMES EDWARD BENNETT, OF MOMENCE, ILLINOIS.

RUNNING-GEAR FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 736,674, dated August 18, 1903.

Application filed March 27, 1903. Serial No. 149,883. (No model.)

To all whom it may concern:

Be it known that I, JAMES EDWARD BENNETT, a citizen of the United States, residing at Momence, in the county of Kankakee and State of Illinois, have invented certain new and useful Improvements in Running-Gear for Wagons; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in running-gear for wagons and to a peculiar construction of reach coupler or bracket whereby the reach is removably connected with the sand-bar independently of the bolster, and the latter is detachably connected with the king-bolt, which in turn is connected with the reach coupler or bracket.

The present invention embodies certain improvements on the construction of reach-coupler shown in my prior patent, No. 707,896, granted August 26, 1902; and it consists in the peculiarities of construction hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my improved running-gear for wagons, the parts being shown in operative relation to each other, the locking-piece and bolster being separated and the latter inverted to show the socket or concavity therein. Fig. 2 is a top plan view of the same, the parts being connected and the bolster omitted. Fig. 3 is a vertical transverse section through the axle and sand-bar and showing in elevation the connected parts of the coupler. Fig. 4 is a perspective view of the parts of the coupler detached and arranged in operative relation to each other and also showing a slight modification in the construction. Fig. 5 is a perspective view showing a different form of connecting-bolt and also showing the parts separated and arranged in operative relation. Figs. 6, 7, 8, and 9 are sections through the reach-coupler, showing different forms of joints for pivotally connecting the reach to adapt it to compensate for the play of the vehicle; and Fig. 10 is a perspective view of the drop-plate and bracket detached and showing an improved form of connection for uniting the two.

Referring to the drawings, 1 represents the axle of a vehicle, and 2 a sand-bar surmounting the axle and rigidly secured thereto in any approved way.

Secured to the under side of the bolster is a wear-plate 3, which is perforated for the passage of the king-bolt 4, which is provided with a rounded head 5 to seat within a corresponding socket or concavity 6, formed in the under side of the bolster 7, such construction concealing the bolt-head and providing for a direct contact between the under side of the bolster and wear-plate 3. Secured to the upper surface of the sand-bar 2 is a similar wear-plate 8, on which the wear-plate 3 rests and which is perforated for the downward extension of the king-bolt 4, which projects through an opening 9 in said sand-bar and terminates approximately in line with the under side thereof and is removably fitted in place, so that when the wear-plate 3 is detached from the bolster 7 the king-bolt may be readily drawn upward and removed. The upper front edge of the sand-bar 2 is cut away or recessed, as shown at 10, beneath the forward edge of the plate 8, and said recess receives an extension 11 upon a drop-plate 12, extending vertically at the front of the axle and sand-bar and secured to the latter by bolts 12^a. The extension 11 is secured to the plate 8 by rivets 13, so as to practically form a part of the plate, while at the same time acting as a stop and reinforce, which is retained within the socket or cut-away portion 10 and serves to prevent any longitudinal play of the plate 8, and thus relieves the fastenings connecting the same with the sand-bar 2 from undue strain. The drop-plate 12 is formed with upper and lower rearwardly-projecting plates 14 and 15 and forms therewith, in effect, a bifurcated bracket to receive the end of the reach 16. The plates 14 and 15 are perforated for the downward passage of a pin or bolt 17, which also passes through the reach, and thus pivotally connects the reach to the sand-bar 2.

In the construction shown in Fig. 4 the drop-piece 12 is formed as an integral part of the wear-plate 8; otherwise the mode of connection of the parts is the same.

In Fig. 5 the sand-bar wear-plate 8 is pro-

vided with an integral stud 4^a, which projects upwardly through the opening in the bolster wear-plate 3, and is provided with a transverse perforation 4^b to receive a pin 4^c, which
 5 passes through a washer-like locking-piece 4^d, and thus is adapted to secure the bolster upon the stud 4^a and to adapt it to have the usual turning or swinging movement upon the sand-bar.

10 In the construction shown in Fig. 6 the arms 14 and 15 are connected at their inner ends by a vertical bridge-piece 18, and the said bridge-piece and drop-plate 12 are formed with interconnecting knuckles, through which
 15 a pivot-pin 19 passes and forms an additional pivotal connection on which the bracket may swing to give a greater range of movement for the reach.

In the construction shown in Fig. 7 a
 20 double-hinge connection is formed by providing between the bracket and drop-plate a coupling portion 20, which is connected, respectively, to said parts by the vertical pivot-bolts 21 and 22, which adapts the parts to
 25 have a greater range of pivotal movement.

In the construction shown in Fig. 8 the coupling portion 20 is provided with eyes 23 to receive pivot-studs 24, formed upon the bracket and drop-plate, said studs being
 30 threaded for the reception of nuts 24^a, by which the parts are held connected. This construction is modified in Fig. 9, in which vertical bolts 25 take the place of the studs and pass through connecting-eyes upon the
 35 parts and pivotally connect them to swing in a similar manner.

In the construction shown in Fig. 10 the drop-plate 12 is formed with T-shaped slots 26, and the bridge-piece 18 of the bracket is
 40 provided with headed locking members 27, which are adapted to be passed through the transverse portions of the slots and then to be slid down into the vertical portions thereof to detachably connect the bracket to the drop-
 45 plate.

From the foregoing description, taken in connection with the accompanying drawings, the construction and mode of operation of the invention will be readily understood, and it
 50 will be seen that in my improvement either the bolster or reach may be removed independently, the bolster by simply removing,

and the wear-plate 3 and the reach by merely withdrawing, the coupling-pin to release it.

Various changes in the form, proportion, 55 and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention.

Having thus described my invention, what 60 I claim as new, and desire to secure by Letters Patent, is—

1. In combination, an axle, a sand-bar secured thereto, said bar having a vertical bolt-hole and a notch in its upper rear edge, a 65 bolster having a socket in its under side, a pair of wear-plates secured, respectively, to the sand-bar and bolster, the rear edge of the sand-bar plate projecting over the notch therein, a reach-coupler composed of a drop- 70 plate secured to the sand-bar and having an extension projecting into said notch beneath the sand-bar wear-plate and secured to said plate, said drop-plate having a coupling portion for connection of the reach thereto, and 75 a king-bolt passing through the sand-bar and wear-plates and having a head countersunk in said socket in the bolster, substantially as described.

2. In combination, an axle, a sand-bar se- 80 cured thereto, said bar having a vertical bolt-hole and a notch in its upper rear edge, a bolster having a socket in its under side, a pair of wear-plates secured, respectively, to the sand-bar and bolster, the rear edge of the 85 sand-bar plate projecting over the notch therein, a reach-coupler composed of a drop-plate secured to the sand-bar and having an extension projecting into said notch beneath the sand-bar wear-plate and secured to said 90 plate, said drop-plate having a hinged coupling portion for connection of the reach thereto, and a king-bolt passing through the sand-bar and wear-plates and having a head countersunk in said socket in the bolster, sub- 95 stantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES EDWARD BENNETT.

Witnesses:

HENRY C. REINS,
 J. W. TOWER.