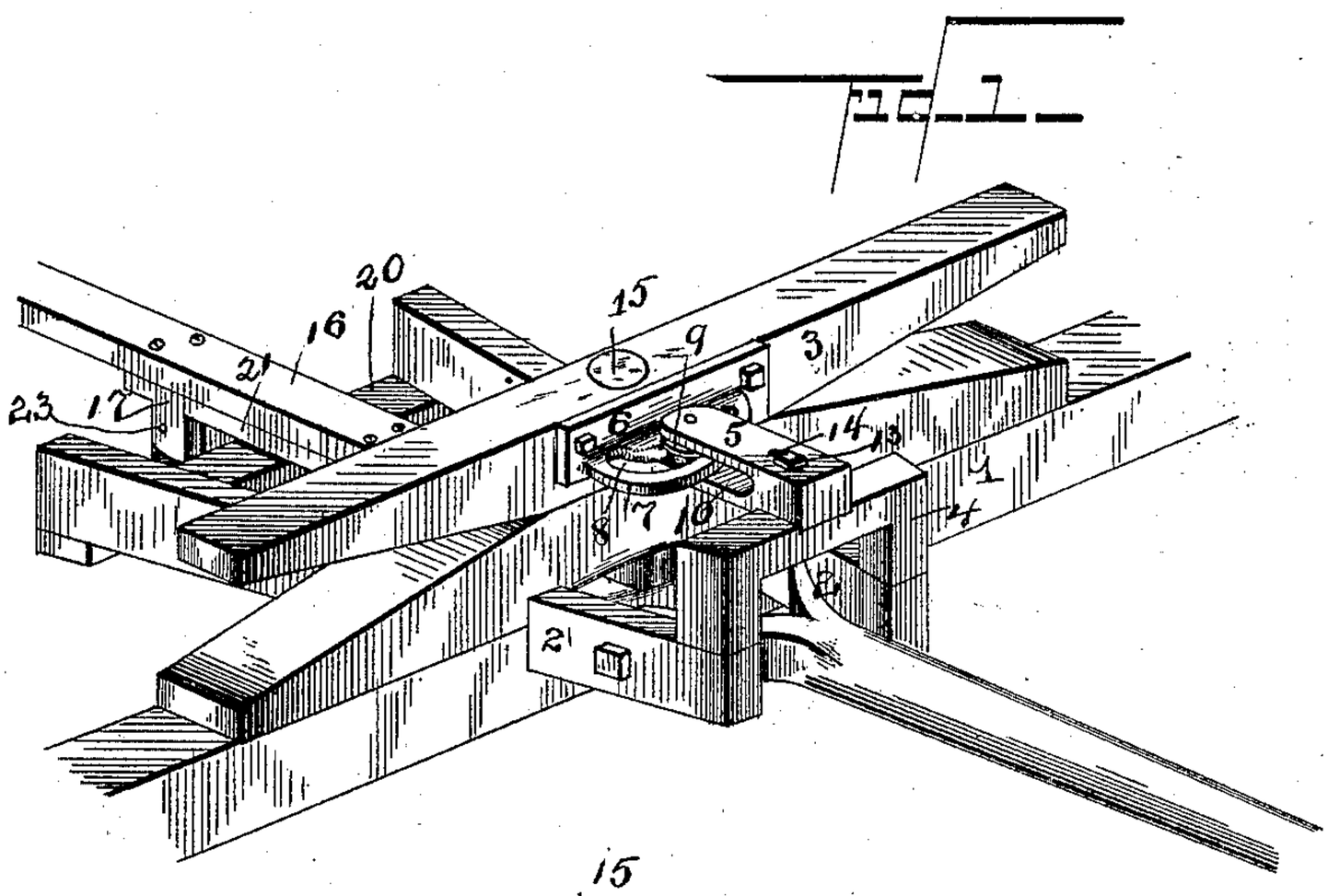
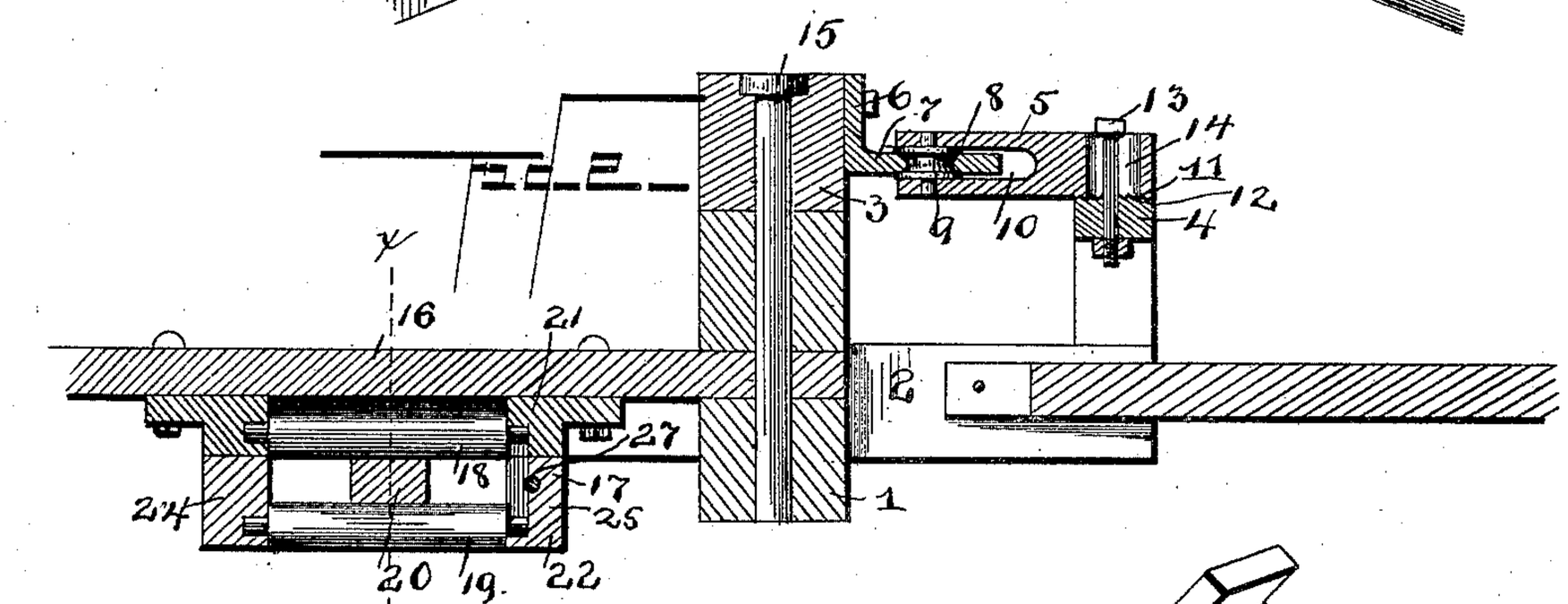
(No Model.)

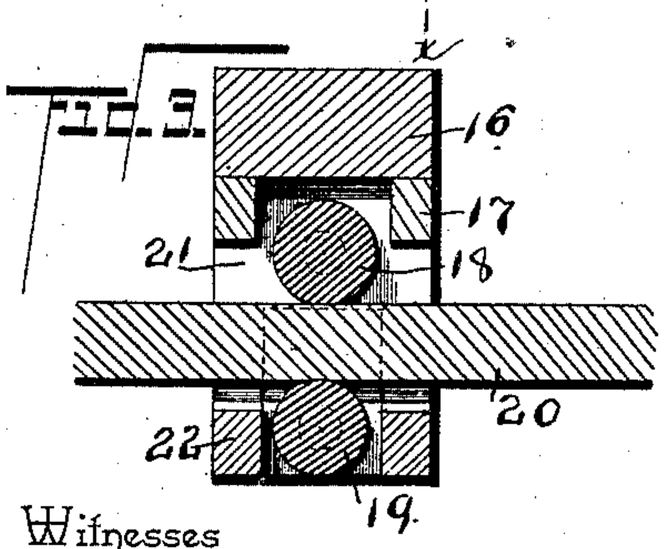
R. L. KIRBY.

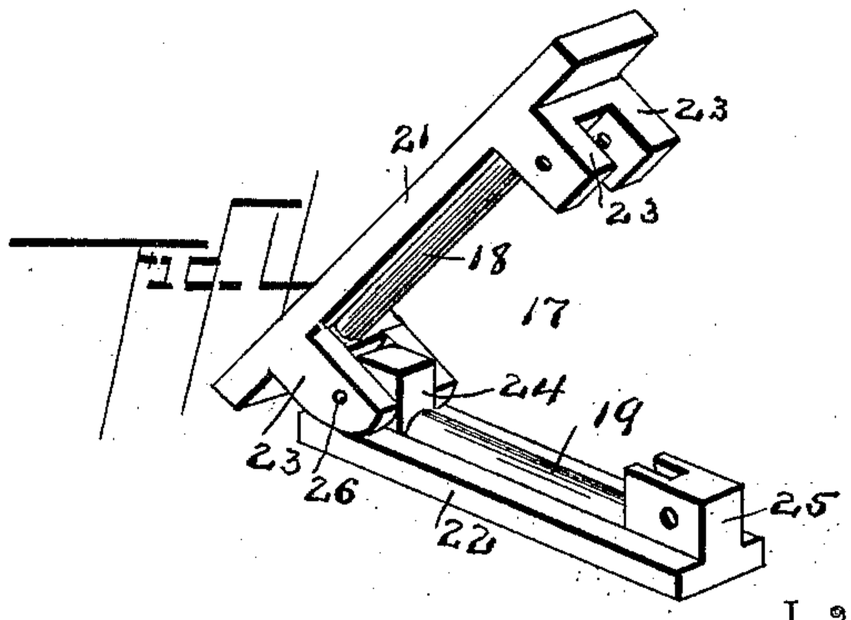
RUNNING GEAR FOR VEHICLES.

No. 461,940. Patented Oct. 27, 1891.









Witnesses

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Inventor

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UNITED STATES PATENT OFFICE.

REMEMBRANCE LINDSAY KIRBY, OF POMEROY, WASHINGTON.

RUNNING-GEAR FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 461,940, dated October 27, 1891.

Application filed June 30, 1891. Serial No. 398,061. (No model.)

To all whom it may concern:

Be it known that I, REMEMBRANCE LINDSAY KIRBY, a citizen of the United States, residing at Pomeroy, in the county of Garfield and State of Washington, have invented a new and useful Running-Gear, of which the following is a specification.

The invention relates to improvements in running-gears.

The object of the present invention is to simplify and improve the construction of running-gears, especially the connection between the front bolster and the front hounds, and to provide means whereby any wear of the king-bolt may be readily taken up to retain the bolster in proper position and to prevent breakage of the king-bolt by the parts of the running-gear assuming an unnatural position.

A further object of the invention is to prevent the reach and the cross-bar connecting the rear ends of the front hounds becoming worn by rubbing against each other in turning the vehicle.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a portion of a running-gear constructed in accordance with this invention. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a detail sectional view on line *x x* of Fig. 2. Fig. 4 is a detail perspective view of the bearing-box, the sections being swung apart.

Referring to the accompanying drawings, 1 designates a front axle, 2 front hounds, and 3 a bolster, which is connected with a cross-bar 4, arranged at the front end of the hounds 2 and connecting the same by an adjustable block 5, secured to the bar 4, and a plate 6, attached to the front face of the bolster 3. The plate 6 is provided with a horizontal flange 7, formed integral with it and having a curved opening 8, in which is arranged an anti-friction roller 9, which is mounted in a bifurcation 10 of the rear end of the adjustable block 5. The block 5 is roughened or serrated at the lower face of its front end, and this surface 11 is secured upon a similar surface 12 of the cross-bar 4 by means of a set-screw 13, which passes through a longitudinal slot 14 of the adjustable block, whereby the block is adapted to be moved longitudinally to take up any wear and to enable the bolster 3 to be maintained in its proper position to prevent the king-bolt 15 being broken by the parts of the running-gear assuming an unnatural position. This construction is especially adapted for rough roads and hilly countries where vehicles are jolted to a considerable extent. The roller 9 bears against the curved edges of the opening 8 and enables the vehicle to be readily turned without friction or wear of the parts. The reach 16 has secured to its lower face a bearing-box 17, which has open sides and is provided at its top and bottom with anti-friction rolls 18 and 19, arranged above and below the cross-bar 20 to prevent friction and wear on the same and the reach when the vehicle is turned. The cross-bar 20 passes through the open sides, and the box is composed of two sections 21 and 22, the former of which is secured to the lower face of the reach and is provided with depending perforated ears 23 and the latter has perforated lugs 24 and 25. The lug 24 is hinged between the adjacent ears 23 by a pintle 26, and the lug 25 is secured between the adjacent ears 23 by a removable pin 27, adapted to be withdrawn to permit the sections to be separated, whereby the reach may be readily removed and replaced. The anti-friction rolls 18 and 19 have their ends reduced and journaled in suitable bearings at the ends of the sections, and each section has an open bearing to enable the rolls to be readily taken out when the sections are separated.

It will be seen that any wear of the king-bolt or its bearings may be readily taken up to maintain the bolster in proper position, thereby enabling vehicles to be successfully employed in rough and hilly countries without danger of the king-bolt being accidentally broken by the parts of the running-gear assuming an unnatural position. It will also be seen that all wear of the reach and the cross-bar which connects the rear end of the front hounds is prevented and that the sections of the bearing-box may be readily swung apart to permit the reach to be removed. The curved opening forms a curved bar at the front of the flange of the plate, and, if desired, a curved

rod may be employed instead of the flange and be suitably secured to the plate and be arranged in the bifurcation to engage the roller.

It will be seen that both of my improvements may be applied to any vehicle without cutting or marring the same, and, in fact, without making any change of any description.

What I claim is—

1. The combination, with a running-gear, of the plate secured to the front bolster and provided with a curved opening and a block adjustably mounted upon the hounds and provided with a roller arranged in said opening, substantially as described.

2. The combination, with a running-gear, of the plate secured to the front face of the front bolster and having a flange provided with a curved opening, a block having its rear end bifurcated and provided with a roller arranged in said opening and provided at its front end with a slot, and a set-screw arranged in said slot, whereby the block is adjustably secured in place, substantially as described.

3. The combination, with a running-gear, of a plate secured to the front bolster and provided with a curved bar and a block adjustably mounted upon the hounds and engaging the curved bar, whereby the bolster is maintained in proper position, substantially as described.

4. The combination, with a running-gear, of a bearing-box secured to the lower face of the reach and having open sides to receive the cross-bar connecting the rear end to the front hounds and composed of sections hinged together at one end of the box and detachably connected at the other end and provided with anti-friction rolls arranged above and below said cross-bar, substantially as described.

5. The combination, with a running-gear, of a bearing-box secured to the lower face of the reach and having open sides to receive the cross-bar connecting the rear ends of the front hounds and provided with suitable bearings, and comprising the upper section 21, secured to the reach and provided with depending perforated ears, the lower section provided with perforated lugs 24 and 25, a pintle hinging the lugs 24 between the adjacent ears, a removable pin securing the lug 25 between its adjacent ears, and anti-friction ears journaled in said bearings, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

REMEMBRANCE LINDSAY KIRBY.

Witnesses:
J. H. SIGGERS,
R. W. DAYTON.