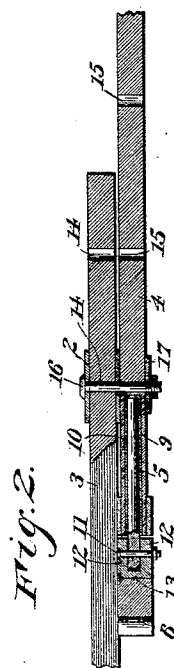
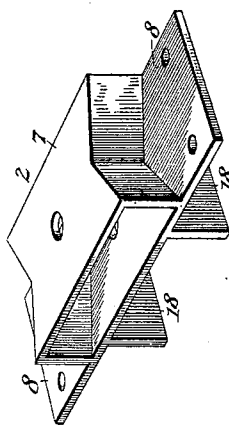
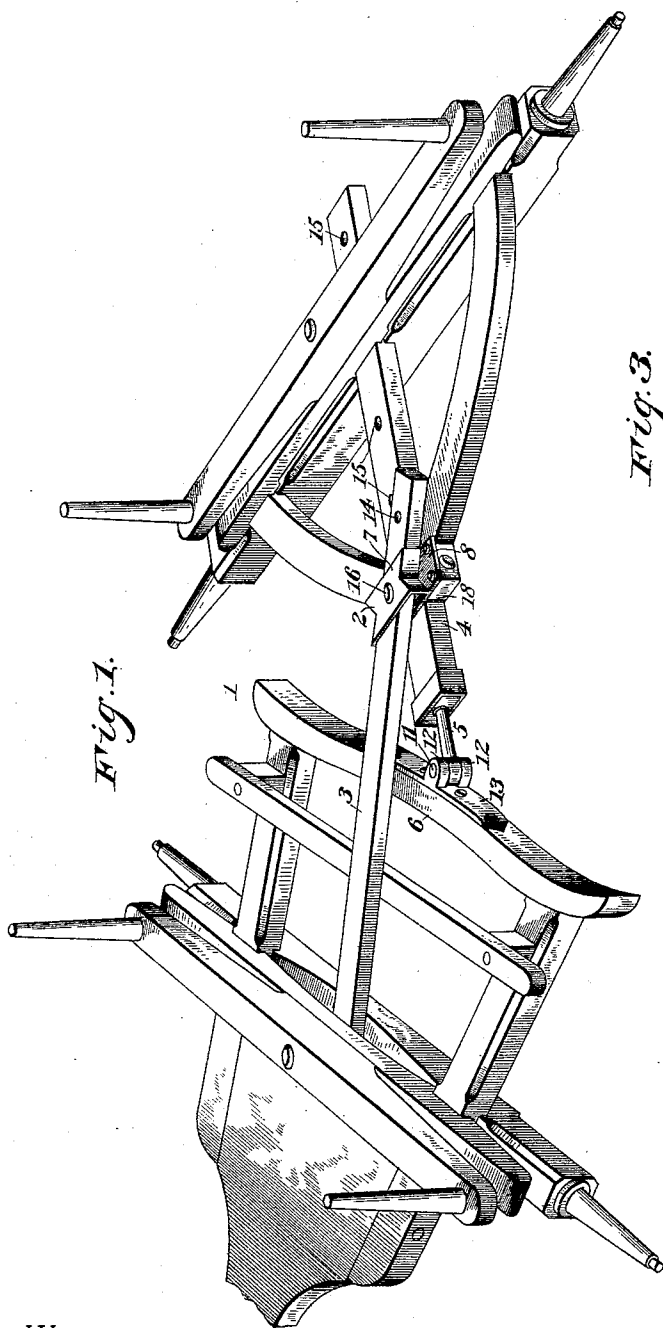


(No Model.)

W. & D. McKEE.
RUNNING GEAR FOR WAGONS.

No. 495,903.

Patented Apr. 18, 1893.



Witnesses :

J. M. Withers
J. H. Riley

By their Attorneys,

C. A. Snow & Co.

Inventors,
Wm McKee & David McKee,

UNITED STATES PATENT OFFICE.

WILLIAM MCKEE, OF PETERSVILLE, CANADA, AND DAVID MCKEE, OF
BARRON, WISCONSIN.

RUNNING-GEAR FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 495,903, dated April 18, 1893.

Application filed January 21, 1893. Serial No. 459,296. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM MCKEE, a subject of the Queen of Great Britain, residing at Petersville, Queens county, Province of New Brunswick, Canada, and DAVID MCKEE, a citizen of the United States, residing at Barron, in the county of Barron and State of Wisconsin, have invented a new and useful Running-Gear for Wagons, of which the following is a specification.

The invention relates to improvements in running-gear.

The object of the present invention is to improve the construction of running-gear and to enable a vehicle to turn very short with safety.

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 running-gear constructed in accordance with this invention. Fig. 2 is a detail sectional view. Fig. 3 is a detail perspective view of the reach-keeper.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a running-gear, to the upper faces of the rear hounds of which is secured a horizontally-disposed reach-keeper 2, which receives the rear end of an upper reach-bar 3; and the latter extends forward from the rear hounds and has its front end pivotally connected over the front axle. The rear hounds have secured between them a lower reach-bar 4, which is adjustably connected by means of a sliding pin 5, with a cross-bar 6, connecting the rear ends of the front hounds, whereby when the front wheels are cramped the lower reach-bar will lengthen to permit such a movement.

The keeper 2 is transversely-disposed and consists of a casing 7, and flanges 8, which are fastened to the front ends of the rear hounds. The casing is approximately X-shaped in horizontal section, and is composed of substantially V-shaped sides and a top-piece, which is recessed at its ends to conform

to the configuration of the sides, and a bottom-plate which is extended beyond the sides to form the said flanges. The front and rear portions of the opposite sides are arranged parallel with each other and enable the upper reach-bar to lie at an angle to the running-gear, and they form stops to limit the lateral swing of the upper reach-bar. The front end of the lower reach-bar is provided with a longitudinal bore 9, in which is arranged a bushing 10; and the adjustable pin 5 is slidingly mounted in the sleeve and is provided at its front end with an eye which is pivoted by a bolt 11 between rearwardly-extending perforated ears 12, of a plate 13, which is secured to the rear face of the cross-bar 6.

It will be seen that the connections between the front and rear portions of the running-gear are simple, strong and durable, and are adapted to permit the running-gear to be readily cramped sufficiently to allow it to turn short with safety.

The upper and lower reach-bars are provided with perforations 14 and 15, to permit the running-gear to be lengthened or shortened.

The upper reach-bar is pivotally connected with the rear hounds by a bolt 16 which passes through perforations of the casing and through a perforation of a transverse plate 17, which is secured to the lower faces of the front ends of the rear hounds and serves to support the lower reach-bar.

The keeper 2 is provided with depending flanges 18 which are arranged parallel with each other and are located on the inner opposed faces of the front ends of the rear hounds.

What we claim is—

1. The combination with a running-gear, of the keeper secured to the upper faces of the front ends of the rear hounds, and consisting of a casing approximately X-shaped in horizontal section, depending flanges and securing flanges arranged at the ends of the casing, the upper reach-bar having its front end pivotally connected with the front axle and having its rear end arranged in said keeper, a transverse plate secured to the lower faces

of the rear hounds, the lower reach-bar arranged between the rear hounds and interposed between the transverse plate and the keeper, a bolt passing through the keeper and
5 the upper and lower reach-bars, a plate 13 connected with the front hounds and provided with rearwardly-extending ears, and a pin having its front end pivoted between said ears and having its rear portion arranged in
10 the longitudinal bore of the lower reach-bar, substantially as described.

2. The combination with a running gear having a lower reach bar hingedly connected with the front hounds and provided with an
15 upper reach bar, of the approximately X-shaped keeper secured to the upper faces of the rear hounds and receiving the rear end of

the upper reach-bar and provided with parallel depending flanges arranged between the front ends of the rear hounds and forming a way for the lower reach-bar, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

WILLIAM McKEE.
DAVID McKEE.

Witnesses to the signature of Wm. McKee:
FRED. ST. JOHN BLISS,
J. DE VEBER NEALES.

Witnesses to the signature of David McKee:
H. RADERMACHER,
GEO. PARRS.