No. 726,407. PATENTED APR. 28, 1903.

C. E. CROFFORD.

ANTIFRICTION CHAFE IRON FOR VEHICLES.

APPLICATION FILED JAN. 17, 1902. RENEWED OCT. 17, 1902.

NO MODEL.

Fig. 1.

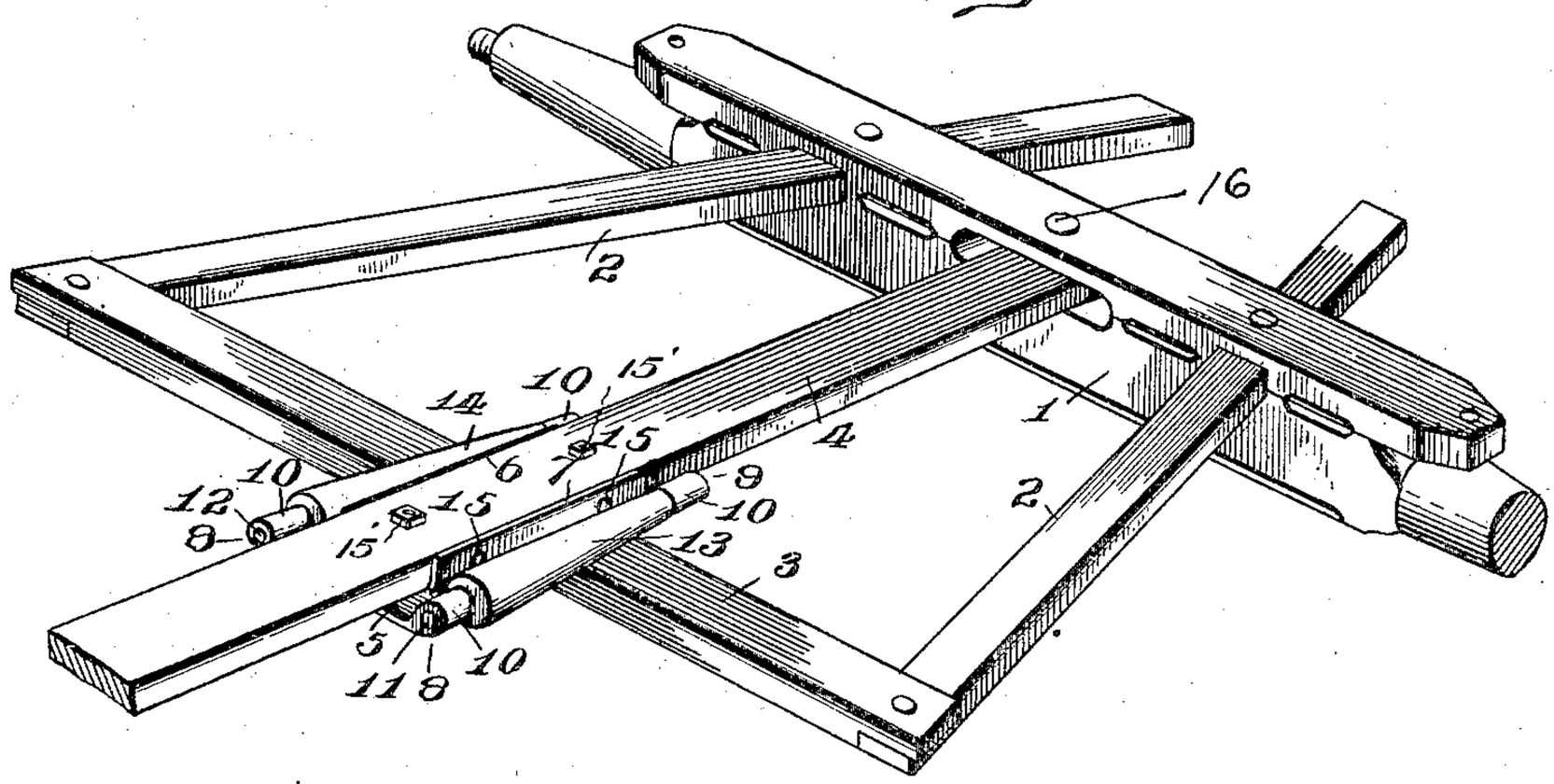
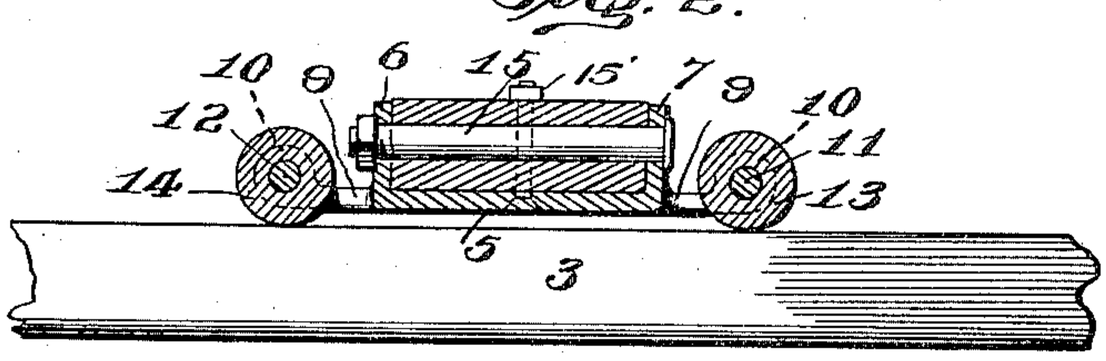


Fig. 2.



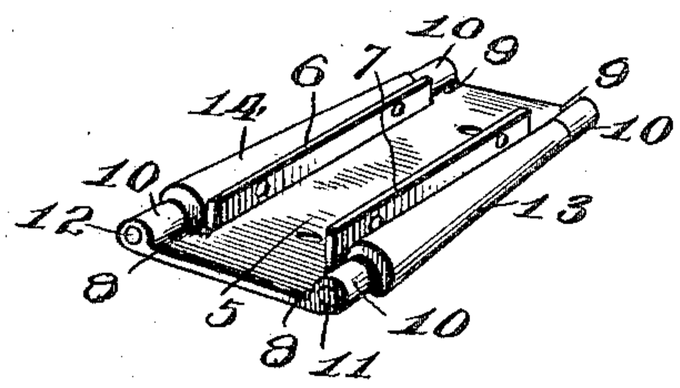


Fig. 3.

Witnesses

L. B. Bandy

Geo. A. Hamlin

Inventor

Chester E. Crofford

By Henry N. Copp

his Attorney

UNITED STATES PATENT OFFICE.

CHESTER E. CROFFORD, OF NEWCASTLE, WYOMING.

ANTIFRICTION CHAFE-IRON FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 726,407, dated April 28, 1903.

Application filed January 17, 1902. Renewed October 17, 1902. Serial No. 127,740. (No model.)

To all whom it may concern:

Be it known that I, CHESTER E. CROFFORD, a citizen of the United States, residing at Newcastle, county of Weston, and State of Wyoming, have invented certain new and useful Improvements in Antifriction Chafe-Irons for Vehicles, of which the following is a specification.

My invention relates to antifriction chafe-irons for vehicles.

The object of the invention is the provision of an antifriction chafe-iron of improved and novel construction which can be easily attached at the proper position to the reach of a wagon or other vehicle and which will be adapted to prevent contact of the reach with the sway-bar, and thus obviate friction in turning. The present invention is designed to provide a device of the class described which will be simple, durable, strong, and capable of being manufactured cheaply.

Having the foregoing objects in view, the invention consists of a frame of novel construction having portions adapted for attachment to the reach and other portions extending laterally and tapered antifriction-rollers journaled on bolts extending through the lateral extensions of the frame, said rollers being located on opposite sides of the reach and bearing on the sway-bar, as fully described hereinafter.

The novel features of the invention are recited in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of the forward portion of a wagon running-gear, illustrating the invention as applied thereto; Fig. 2, a transverse section, and Fig. 3 a perspective detail, of the invention.

The numeral 1 designates the front axle of an ordinary wagon running-gear, and 2 the hounds, while 3 is the sway-bar, and 4 the reach.

The present invention is designed to prevent friction between the reach and the sway-bar where the former overlaps the latter.

The frame of my improved device is preferably cast in a single piece comprising the body 5, having upright flanges 6 and 7 and the lateral arms 8 and 9 on each side of the reach, all of the arms having the portions 10, which receive the bolts 11 and 12, extending longitudinally in relation to the reach, while on these bolts or rods are loosely mounted the tapered antifriction-rollers 13 and 14. The flanges are conveniently secured to the reach by the manner in which they embrace its opposite edges and by the bolts 15 and 15′.

It will be observed that the arms are at the ends of the body with the flanges intermediate the pair at each end and that the arms 8 extend out laterally a greater distance than the arms 9 and that the arrangement and construction are such that the bolts 11 and 12 converge in lines which if extended would intersect at the pivotal point 16, constituting the king-bolt of the vehicle. In consequence of this construction, as also the tapered form of the antifriction-rollers, there is absolutely no resistance or friction between the rollers and the sway-bar as they move thereover, as every point of the sway-bar where it contacts with either roller will move in the arc of a circle struck from the king-bolt 16 as a center. The interposition of the device between the reach and the sway-bar relieves these parts entirely of friction and facilitates the turning of the vehicle without wear and tear on the sway-bar or on the reach. At the same time the manner in which the device is attached to the reach renders it easy to affix it thereto by any user of a vehicle employing running-gear of this general type, and the device does not, therefore, necessarily have to be applied to the running-gear in the first instance.

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

1. The combination with the sway-bar and reach of a vehicle running-gear, of tapered antifriction-rollers carried by the reach on opposite sides thereof and bearing against the sway-bar and having their longitudinal axes coinciding with lines which converge and intersect each other approximately at the pivotal point of the reach.

2. The combination with the sway-bar and reach of a vehicle running-gear, of a pair of laterally-extending arms at different points of the reach, said arms extending out beyond opposite sides of the reach, and antifriction-rollers bearing on the sway-bar journaled to

said pairs of arms, the rollers being located on opposite sides of the reach and disposed with their axes converging toward each other.

3. The combination with the sway-bar and reach of a vehicle running-gear, of a frame having an intermediate portion secured to the reach and pairs of arms at its ends which extend out laterally beyond the sides of the reach, bolts secured to said pairs of arms on opposite sides of the reach and converging toward each other, and tapered antifriction-rollers journaled on said bolts and bearing on the sway-bar.

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

CHESTER E. CROFFORD.

Witnesses:
L. GARDNER,
A. L. CROFFORD.