

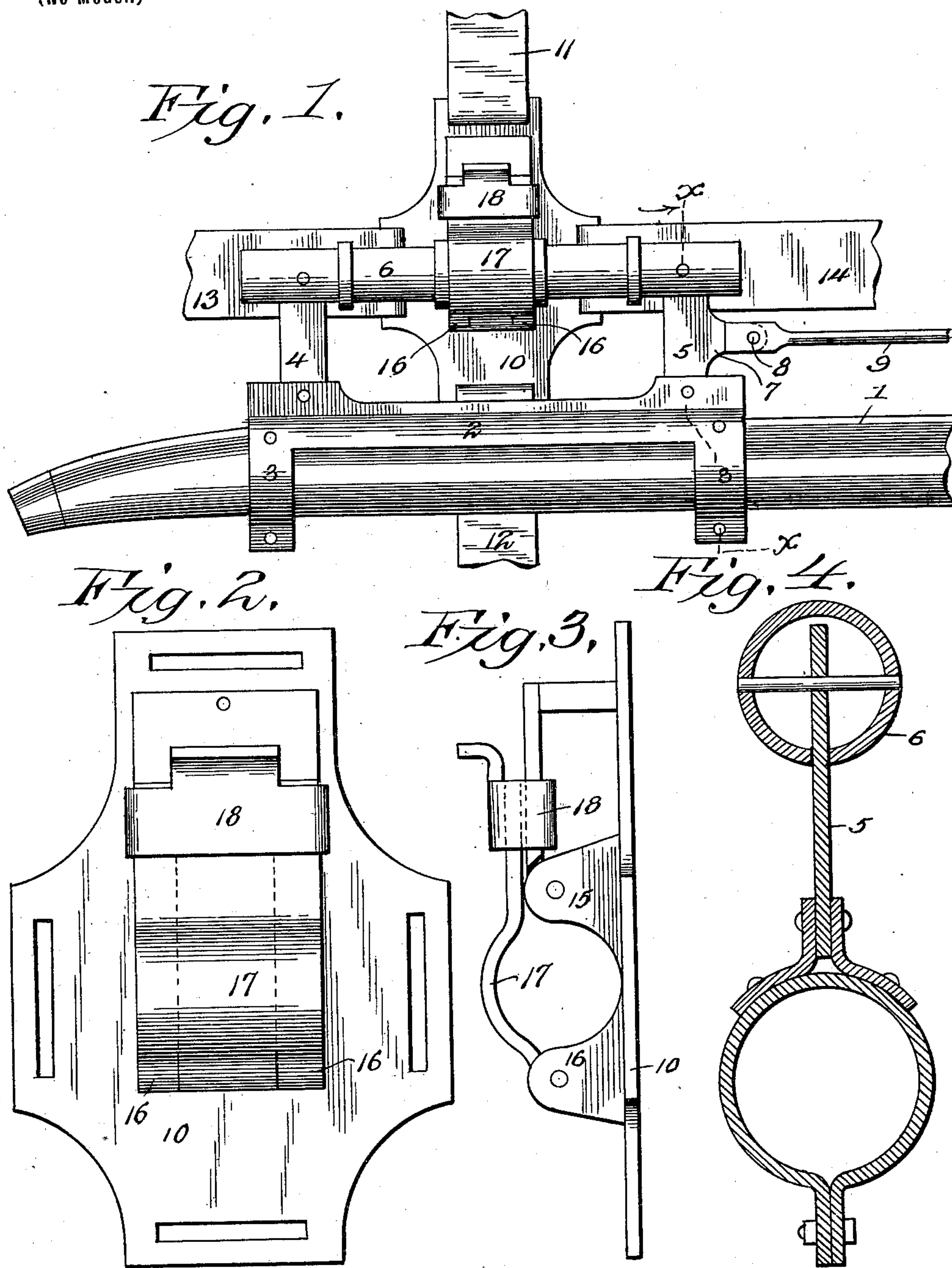
No. 671,706.

Patented Apr. 9, 1901.

J. R. McCORMICK & T. GORDON.  
HARNESS ATTACHING OR DETACHING DEVICE.

(Application filed Oct. 18, 1900.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN R. McCORMICK AND THOMAS GORDON, OF SPARTA, ILLINOIS.

## HARNESS ATTACHING OR DETACHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 671,706, dated April 9, 1901.

Application filed October 18, 1900. Serial No. 33,502. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN R. McCORMICK and THOMAS GORDON, citizens of the United States of America, residing at Sparta, in the county of Randolph and State of Illinois, have invented certain new and useful Improvements in Harness Attaching or Detaching Devices, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to harness, and particularly to attaching and detaching devices.

One object of the invention is to provide a connection between the shafts of a vehicle and the harness-saddle having a yielding action; furthermore, in providing the connection and in combination therewith a pivotally-connected trace-rod.

Finally, the object of the invention is to provide an attaching and detaching device which will possess advantage in points of simplicity, efficiency and durability.

With the above and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail reference will be had to the accompanying drawings, forming part of this specification, wherein like characters denote corresponding parts in the several views, and in which—

Figure 1 is a view in elevation of the invention applied to a vehicle-shaft. Fig. 2 is a face view of the connecting-plate. Fig. 3 is an end view thereof. Fig. 4 is a sectional view on the line  $x x$  of Fig. 1 looking in the direction of the arrow.

In the drawings, 1 indicates the shaft, and 2 a shaft-plate, which through the medium of the clips 3 is clamped to the shaft. Links 4 and 5 are each pivoted at one end between sections of the shaft-plate and at the opposite end in a slot of the bar 6. The link 5 is provided with an ear 7, apertured for the reception of a connecting-bolt 8, by which the trace-rod 9 is pivotally attached to the link 5.

The connecting-plate 10 has a loop 11, a belly-band 12, a trace or breast strap 13, and a backing-strap 14 connected thereto. The ears 15 and 16 project from the surface of the plate,

and the edges of said ears are curved to produce an approximately semicircular recess, which is designed to partially embrace the bar heretofore described. A clamping member 17 is pivoted to the ears 15 and is curved to partially embrace the bar. The end of the clamping member opposite the pivot is straight, and when in operative position, as shown in Fig. 3, the keeper 18 will engage the straight portion and hold it against accidental displacement.

As the bar 6 is provided with a series of annular ribs, the locking members of the plate may lie between any two ribs of the series. By this arrangement the shaft-plates or their connections may be employed with horses of varying sizes without changing the position of said plates.

In operation the pivotal connections between the shaft-plate and the bar will serve to absorb a certain amount of vibration resulting in comfort to the occupants of the vehicle and ease to the animal.

The construction and advantages will, it is thought, be understood from the foregoing description, it being noted that changes in the proportions and details of construction may be resorted to for successfully carrying the invention into practice without departing from the scope of the claims.

Having fully described the invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a harness-attaching device, the combination of the plates attached to a vehicle-shaft, bars having a series of annular ribs, links pivotally connecting the bars and shaft-plates, trace-rods connected to the rear links, and plates carried by the harness engaging the bars, substantially as described.

2. In a harness-attaching device, a shaft-plate, a rod connected thereto by pivoted links, a trace-rod pivoted to one of the links, a plate with loops for the back-band, belly-band, breast-strap and backing-strap, and means for connecting the plate to the bar at varying positions.

3. In a harness-attaching device, a plate having ears having curved edges, a clamping member hinged to the ears and acting in conjunction therewith, a keeper for retaining the

clamping member in position, means whereby  
various parts of the harness are connected to  
the plate, a bar having ribs between which  
the clamping member acts, links pivoted to  
5 the bar, a shaft-plate to which the lower ends  
of the links are pivoted, an ear formed on one  
link, a trace-rod pivoted to said ear and clips  
for attaching the shaft-plate to the shaft.

In testimony whereof we affix our signatures in the presence of two witnesses.

JOHN R. McCORMICK.  
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Witnesses:

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