June 21, 1927. 1,632,877

K. BRCECINSKI

CLEVIS

Filed July 15, 1925

Fig. 1.

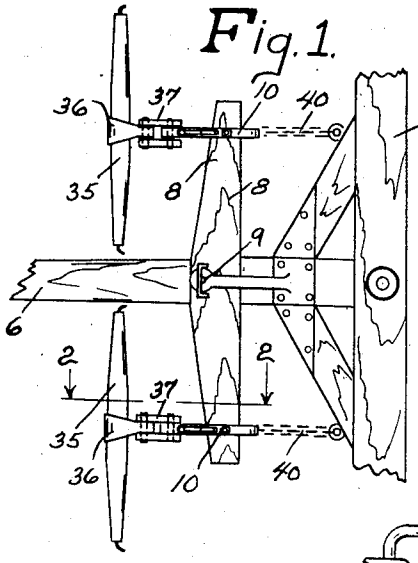


Fig. 2.

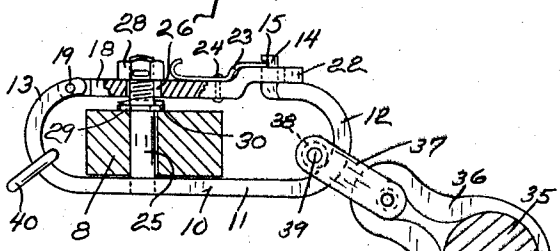


Fig. 3.

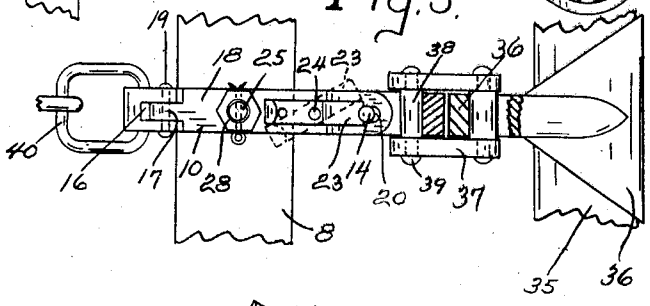
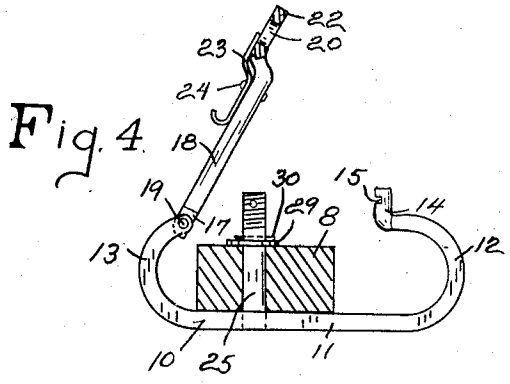


Fig. 4.



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Patented June 21, 1927. 1,632,877

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CLEVIS.

Application filed July 15, 1925. Serial No. 43,878.

This invention relates to improvements in clevises and vehicle draughting arrangements.

It is the object of the invention to provide a novel and improved structure for connecting the whiffletree of a wagon and the tongue or body thereof. More particularly stated, it is the object of the invention to provide a novel and improved type of clevis organized as to permit the independent connection therewith of an evener bar and whiffletree link or a drag chain, the keeper of the clevis being adapted readily to be opened for the attachment of the drag chain or link and being adapted to receive the strain imposed through the evener bar, although separate means may be provided for securing the evener bar to the clevis.

It is a further object of the invention to provide a novel link and clevis combination in which the clevis is formed to provide an arcuate guideway with which the link has roller connections.

In the drawings:

Figure 1 is a plan view of a draughting organization including a wagon tongue, whiffletrees and means including my improved clevis for connecting the whiffletrees to the wagon and tongue.

Figure 2 is an enlarged detail view taken on the line indicated at 2—2 in Figure 1 and showing my improved clevis in side elevation with a portion of the keeper broken away to a central vertical section to expose the aperture which receives the evener post.

Figure 3 is a detail view in plan of the parts shown in Figure 2, a portion of the clevis being broken away to expose the connection of the link roller therewith.

Figure 4 is a view similar to Figure 2 showing the keeper in its opened position and the drag and whiffletree links removed.

Like parts are identified by the same reference characters throughout the several views.

An axial member or bolster comprises part of the wagon body as shown at 5 and is provided with a tongue 6 projecting forwardly therefrom. An evener bar 8 is pivotally connected with the tongue at 9 and is provided adjacent each of its ends with my improved clevises whereby whiffletrees and drag chains may be connected therewith.

The clevis will be designated in its entirety by reference character 10 and includes a clevis bar 11 extending transversely on the underside of the evener bar 8. The clevis is preferably of substantial rectangualr cross section and has arcuately curved upwardly extending ends 12 and 13. The curved end 12 may terminate in an upwardly directed post or extremity 14 notched at 15 as best shown in Figure 4. The extremity of the upwardly curved end portion 13 of the clevis may be mortised at 16 to receive the tongue or tenon portion 17 of the keeper 18. The transverse pin 19 secures the keeper horizontally to the curved end 13 of the clevis.

When the keeper is substantially parallel to the horizontal bar portion 11 of the clevis, an aperture 20 in its offset free end 22 is received upon the upwardly extending terminal portion or post 14 of the end 12 of the clevis. A latch element 23 pivoted at 24 to the keeper may be oscillated between the positions indicated by full and dotted lines in Figure 3. In its full line position the latch member is received into the notch 15 of post 14 and thereby secures the keeper in engagement upon such post. Intermediate its ends each clevis is provided with a post 25 extending vertically through a suitable aperture in the evener bar 8. Post 25 is rigidly connected with the underside bar 11 of the clevis and an opening 26 for the evener bar post 25 is provided in keeper 18. In the closed position of the keeper bar, the rear margin of the keeper bar about opening 26 will preferably substantially abut the evener bar post 25. Opening 26 is off center with respect to this post to provide clearance for permitting the keeper to swing upwardly to its hinged connection with end 13 of the clevis. The contact, or substantial contact however, between the keeper and the rear side of the post 25 serves to transmit from said post to the ends of the clevis any strains to which post 25 may be subject due to the fact that it carries the load transmitted through the evener bar 8.

It will be noted that the evener bar is always confined upon post 25 when the keeper is in its closed position as shown in Figure 2. In order to supplement the latch device 23, post 25 may be threaded if desired and provided with a retaining nut 28. The nut will not be found necessary, however, where the manually operable latch element 23 is employed.

In addition to the keeper I may also use a further means for maintaining my improved clevis in connection with the evener bar in-

dependently of the position on the evener bar. Instead of a nut like 28, I may use for this purpose a washer 29 and a cotter pin 30 extending transversely through post 25. The cotter pin will be backed up and reinforced by the keeper when the clevis is in use, but will be entirely adequate to maintain the clevis and evener bar in connection whenever the keeper is opened merely for the purpose of removing or attaching the drag chain or whiffletree link. It will be noted that there is ample space between the evener bar and the upper portions of the curved ends 12 and 13 of the clevis so that the chain or link members may be positioned or removed while the evener bar and clevis remain in connection.

Each of the whiffletrees 35 is provided in the usual manner with a central strap 36 which connects it with a link 37 which is receivable over post 14 and the curved end 12 of the clevis. The curved end 12 of the clevis is preferably substantially rectangular in cross section as best shown in Figure 3 and the link is provided with a roller adapted to ride upon the inner surface of the curved portion of the clevis end 12. This roller is merely a rounded transverse member forming a part of the link and may comprise a sleeve 38 rotatably mounted on the transverse pin 39 of the link.

The use of a drag chain is well known. The drag chain 40 ordinarily is slack, but is interposed between the ends of the evener and some relatively fixed portion of the wagon whereby to transmit to the wagon any excess pull which is exerted by one of the horses over and above the draught of the other horse. The drag device may comprise an ordinary chain, the last link of which is receivable over the keeper portion 18 of the clevis and the curved end 13 thereof.

Figure 3 illustrates how the parts are secured together when the keeper bar is in its normal horizontal position and Figure 4 shows how the keeper bar 18 may be elevated and the drag chain and whiffletree link removed.

I claim:

A clevis for an evener bar, said clevis comprising side and end members forming a substantially four-sided link, one of said side members being movable to open and close the link, means for securing said member in closed position, a post fixed to one of said side members intermediate the ends of the latter and extending across the link into an aperture in the other member when the link is closed, said post being adapted to extend through the evener bar to permit relative pivotal movements of the bar and clevis about it, and an abutment member disposable adjacent the free end of said post within the bounds of the closed link, said abutment member serving to retain the clevis and bar in operative relation when the link is open, the end members of said link being engageable with draft and drag chains respectively.

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