

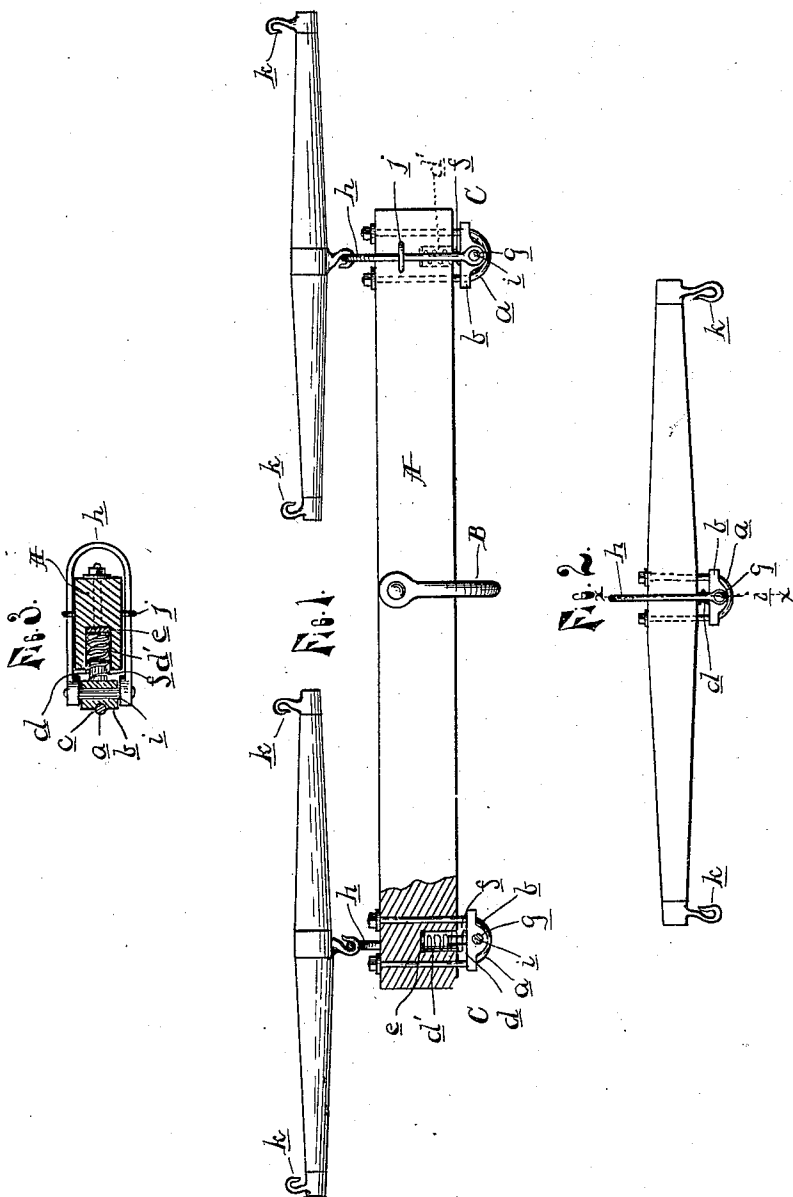
No. 691,496.

Patented Jan. 21, 1902.

A. H. SHUEL.
WHIFFLETREE CONNECTION.

(Application filed Mar. 11, 1891.)

(No Model.)



WITNESSES:

Joseph Lopp
Edw. F. Russell

INVENTOR:

Alfred H. Shuel
By *Edmund J. Scully*
Attorney

UNITED STATES PATENT OFFICE.

ALFRED HERBERT SHUEL, OF EDGAR MILLS, CANADA.

WHIFFLETREE CONNECTION.

SPECIFICATION forming part of Letters Patent No. 691,496, dated January 21, 1902.

Application filed March 11, 1901. Serial No. 50,649. (No model.)

To all whom it may concern:

Be it known that I, ALFRED HERBERT SHUEL, a citizen of Canada, residing at Edgar Mills, in the county of Essex, Province of Ontario, Canada, have invented certain new and useful Improvements in Whiffletree Connections, of which the following is a specification.

This invention relates to new and useful improvements in whiffletree connections, and has for its object to make a connection whereby the whiffletree is yieldingly connected to the wagon or other article to be drawn, so that with the use of my construction I am enabled to start heavy loads more easily by reason of not bringing up with a sudden jerk, which is so injurious to the horses. It also does away with all jar and jolting, which are so apt to disarrange and injure heavy agricultural machinery in drawing it about.

To this end my invention consists in the use of a spring-backed plate guided on the whiffletree and carrying a clevis by means of which the whiffletree is attached to the article to be drawn, free to have a limited yielding movement, all substantially as and for the purpose hereinafter more fully described, and shown in the accompanying drawings, in which—

Figure 1 is a plan view of a doubletree, showing the singletrees attached thereto with my improved connection, one end being in section. Fig. 2 is a plan view showing my improvement as attached to a singletree. Fig. 3 is a section on line *xx*, Fig. 2.

As shown in the drawings, A is a doubletree provided with a clevis B for attachment to the wagon or other article to be drawn, and to the opposite ends of the doubletree are attached the yielding connections C, comprising the U-shaped bolts *a*, having the apertured plate *b* sleeved thereon.

d is a pin formed integral with the plate and at right angles to its front face, adapted to fit into a boring or countersink *d'*, of somewhat larger diameter, in the doubletree, a metal plate or washer *e* being placed in the bottom of said boring, and *f* is a spring of suitable strength sleeved on said pin, fitting into said boring and adapted to press with its opposite ends against the bottom of said boring

and the plate, respectively. *g* is an aperture at right angles to the apertures for the bolts *a* in said plate, and *h* is a clevis adapted to fit over the doubletree and be attached to said plate by a bolt *i*, passing through said aperture, the singletrees being attached to said clevises at the opposite ends of the doubletree.

j is a suitable staple to limit the lateral swinging movement of the clevis.

It will thus be seen that when a pull is exerted on the singletrees by reason of the traces being secured to the eyes *k* and the clevis B attached to the article to be drawn the springs *f* will be compressed until the wagon or other article begins to move. Should sufficient force be exerted to completely compress the spring, the plate *b* will simply butt up against the doubletree, thus acting as a solid connection when required, although under ordinary conditions of use the plate would not be in contact with the whiffletree, but free to give and take, according to the load.

While I have described my invention as used in connection with a doubletree, it is obvious that it may be used as well in connection with a singletree, as shown in Fig. 2. Instead of the clevis B, I may also use my improved connection by simply reversing the connection C to that shown at the ends of the doubletree in Fig. 1.

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

1. In a device of the character described, the combination with a whiffletree having a recess formed therein, of a U-shaped guide in fixed relation thereto, an apertured plate sleeved on said guide free to have a limited movement thereon, a projection formed on said plate, a spring fitting in said recess and sleeved on said projection and adapted to hold said plate in its distended position, and a clevis pivotally mounted in said plate and adapted to encircle the whiffletree.

2. The combination of a whiffletree, having a recess formed therein, a U-shaped guide carried by said tree, a plate adapted to have a limited movement on said guide, and a spring interposed between said plate and tree and

fitting in said boring to hold said plate normally out of contact with the tree for the purpose specified.

3. In a device of the character described, 5 the combination of a whiffletree formed with a boring *d'*, the U-shaped guide *a* carried by said tree, the apertured plate *b* sleeved on said guide free to have a limited movement thereon, the spring *f* interposed between said plate 10 and tree, and the clevis *h* pivotally secured to said plate, substantially as and for the purpose described.

4. In a device of the character described, the combination of a whiffletree, formed with 15 a boring, guides carried by said tree, a plate sleeved on said guides free to have a limited movement thereon, a pin carried by said plate, and a spring fitting in said boring and sleeved on said pin adapted to normally hold said 20 plate away from said tree and a clevis pivoted in said plate.

5. In a doubletree, the combination of a pair of guides carried by the opposite ends thereof, spring-backed plates at the rear side of 25 said doubletree mounted on said guides and free to have a limited movement thereon, and

clevises encircling said doubletree, one at each end thereof, pivotally mounted in said plates.

6. The combination of a whiffletree, having 30 a boring *d'* and guides adjacent thereto, a plate *b* mounted on said guides free to have a limited movement thereon, the pin *d* formed on said plate, and the spring *f* having its opposite ends fitting on said pin and in said boring 35 respectively, a clevis pivotally mounted in said plate and stops to limit the lateral movement of said clevis.

7. The combination of a whiffletree, having the boring *d'* and guides adjacent thereto, a 40 plate mounted on said guides free to have a limited movement thereon, the pin *d* formed on said plate, and a spring *f* having its opposite ends fitting on said pin and in said boring respectively, a clevis carried by said plate, 45 and a plate *e* in the bottom of said boring.

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

ALFRED HERBERT SHUEL.

Witnesses:

JOSEPH COPP,

FRED A. SUTHERLAND.