



# UNITED STATES PATENT OFFICE.

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DRAFT ATTACHMENT FOR VEHICLES.

968,730.

Specification of Letters Patent.

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*To all whom it may concern:*

Be it known that I, CHARLES R. BARR, a citizen of the United States, residing at Ashland, in the county of Ashland and State of Ohio, have invented a new and useful Draft Attachment for Vehicles, of which the following is a specification.

This invention relates to draft attachments for vehicles and is more particularly designed as a substitute for the swingle tree ordinarily employed in connection with the thills of a vehicle.

One of the objects of the present invention is to provide a device of this character which, when secured to thills, serves as a brace for holding the thills against displacement relative to the connecting bar therebetween.

Another object is to provide a draft attachment utilizing a spring controlled trace engaging arm which serves to automatically take up all slack in the trace and also constitutes a starting device and absorbs sudden jolts or jerks due to the sudden starting of the draft animal or to the sudden change of speed.

Another object is to provide a device of this character which is simple in construction and which can be readily placed in position upon the thills of a vehicle.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claim.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings, Figure 1 is a plan view of a portion of the thills of a vehicle and showing the present improvements applied thereto, the arms of the draft devices being shown in their normal position and the traces engaging the same being indicated by dotted lines. Fig. 2 is an enlarged longitudinal section through the device, the arm being moved forward to a position perpendicular to the thill engaging portion of the base.

Referring to the figures by characters of reference 1 designates an elongated strip formed of any suitable metal and having openings 2 in the end portions thereof for the reception of suitable securing devices 3 whereby said strip can be firmly attached to a thill A. An arm 4 extends at right angles from the middle portion of the strip 1 and is provided with a desired number of openings

5 for the reception of securing devices whereby said arm may be fixedly connected to the cross bar B which is interposed between and secured to the thills. It will be apparent therefore that when the base formed by the strip 1 and arm 4 is attached to the thill A and the cross bar B, the said bar and thill will be held securely against displacement relative to each other.

A cylindrical stud 6 is formed integral with and extends upwardly from the arm 4 preferably at a point between the openings 5 therein, and a spring 7 is coiled about the stud and has one end, 8, projecting into an aperture 9 formed in the arm 4. The other end 10 of the spring projects upwardly into an opening 11 formed within an arm 12. This arm is provided at one end with a socket 13 into which the stud 6 projects, there being a bolt 14 arranged concentrically within the said stud 6 and socket 13 and serving to hold the stud normally seated within the socket. It will be apparent of course that this stud constitutes the pivot of the arm. The spring 7 obviously holds the arm 12 normally in a predetermined position, preferably extended backwardly at an acute angle to the cross bar B. The free end of arm 12 has oppositely extending retaining fingers 15 and a lug 16 projects upwardly from the arm at a point close to said fingers.

It is to be understood of course that the devices are to be manufactured in "rights" and "lefts" and that they are to be oppositely disposed upon the thills as shown in Fig. 1. The traces, which have been shown by dotted lines at C, are placed in engagement with the free end portions of the arms 12 and are held against displacement by the fingers 15 and the lugs 16. When the draft animal starts forward the arms 12 are swung forward by the traces until the load is started and, obviously, the springs 7 will be maintained under stress constantly during the forward pull. Should either or both of the traces become slack, the arms 12 will be swung backwardly so as to take up the slack. Any sudden increase of speed by the draft animal will result in the further tensioning of the springs 7 and the springs will thus absorb the jerk thus produced so that the occupants of the vehicle to which the thills are connected, will scarcely notice it.

Various changes can of course be made in the construction and arrangement of the



parts without departing from the spirit or sacrificing any of the advantages of the invention, as defined in the appended claim.

What is claimed is:—

- 5 A draft attachment of the character described including a base, a fixed cylindrical pivot stud upstanding therefrom, an arm mounted for swinging movement upon the stud, there being a socket within one end  
10 portion of the arm for the reception of the stud, means extending through the stud and arm for holding them together, a continuously exposed spring coiled about the stud

and having its ends projecting into the base and arm respectively, oppositely extending 15 retaining fingers upon the free end of the arm, and a stud upstanding from said arm and adjacent the fingers.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature 20 in the presence of two witnesses.

CHARLES R. BARR.

Witnesses:

MAURICE I. SEMPLE,  
VELT BARR.