To all whom it may concern:

Be it known that I, SAMUEL S. LANGFORD, a citizen of the United States, residing at Craig, in the county of Burt and State of Nebraska, have invented a new and useful SHAFT ATTACHMENT FOR VEHICLES, of which the following is a specification.

This invention relates to a side draft attachment for carriages, wagons, and other vehicles, and has for its object to provide a simple, inexpensive, and efficient device of this character which may be quickly attached to or detached from the front axle of the vehicle and by means of which the draft-animal may travel at one side of the road in the beaten track formed by the continued passage of double teams and at the same time permit the wagon or other vehicle to travel in a straight line with respect to the draft-animal.

A further object of the invention is to provide a pair of thigh-supporting brackets pivotally connected with the axle and disposed in such a manner with relation thereto as to secure an equal draft at both ends of the axle and to prevent undue strain thereon in traveling over rough uneven roads.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

In the drawings, Figure 1 is a top plan view of a portion of a wagon, illustrating my improved attachment applied thereto. Fig. 2 is a side elevation of the same. Fig. 3 is a transverse sectional view on the line 3-3 of Fig. 1. Fig. 4 is a top plan view illustrating a modified form of the device, and Fig. 5 is a transverse sectional view on the line 5-5 of Fig. 4.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a portion of a vehicle—a wagon which in the present instance—i.e., to the front axle 2 of which is pivotally secured my improved side draft attachment 3. The attachment consists of a pair of laterally-extending supporting-brackets 4 and 5, formed of wood, metal, or suitable material, being preferably formed of angle-iron, as shown, and rigidly secured together by means of a diagonally-disposed brace-bar 6, also preferably formed of angle-iron. The rear ends of the brackets 4 and 5 are provided with terminal loops or eyes 7, adapted to engage the outwardly-extending ears or lugs 8 of clips 9, rigidly secured to the axle, the brackets being pivotally connected to the clips by means of pins or bolts 10, which pass through the terminal loops 7 and 65 corresponding openings in the ears or lugs, as shown. Secured to the brackets 4 and 5 and at a point adjacent the free ends thereof is a curved brace or truss bar 11, also formed of angle-iron, the ends of said bar being arranged at right angles to the axle 2 and extending a short distance beyond the ends of the brackets, as shown, to form a seat or support for the thills 12. The thills are detachably secured to the truss-bar 11 by means of bolts or similar fastening devices 13, so that the thills may be readily removed when worn out or broken and replaced by new ones. The bracket 4 is preferably provided with a reinforcing-plate 14 at a point adjacent its juncture with the truss-bar 11, the diagonal brace 6 being riveted or otherwise secured to bar 11, as shown.

In Fig. 4 of the drawings I have illustrated a modified form of draft attachment adapted for use in connection with thills of the ordinary construction. In this case the truss-bar 11 is dispensed with, the thills being detachably secured to the ends of the supporting-bracket by means of bolts or similar fastening devices. By forming the brackets of angle-iron and bracing them in the manner described a strong rigid thigh-supporting structure is obtained, while by having the thills detachably secured to the brackets they may be readily removed when broken and replaced at a small cost without the necessity of renewing the brackets, which is the case where the thills and brackets are formed integral.

From the foregoing description it will be seen that I have provided an inexpensive and efficient draft attachment by means of which the thills are supported to one side of the di-
rect line of draft, permitting the horse to travel in the well-beaten track of the road instead of being compelled to travel upon the ridge created between the beaten tracks by the continued passage of double teams.

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

1. A thill connection comprising laterally-extending thill-supporting brackets, a brace connecting said brackets, thills secured to the brackets, and means for pivotally supporting the brackets on the axle.

2. A thill connection comprising, laterally-extending thill-supporting brackets, a diagonally-disposed brace secured to said brackets, a truss-bar connecting the forward ends of the brackets, thills detachably secured to the truss-bar and means for pivotally supporting the thills on the axle.

3. In a thill connection, a vehicle having a front axle, laterally-extending thill-supporting brackets pivotally secured thereto, a truss-bar connecting said brackets and having its opposite ends arranged at right angles to the axle, and thills secured to the ends of the truss-bar.

4. In a thill connection, a vehicle having a front axle, coupling members secured to the axle, laterally-extending thill-supporting brackets provided with corresponding coupling members adapted to engage the coupling members on the axle, a curved truss-bar connecting the forward ends of the brackets, thills secured to the truss-bar and a diagonally-disposed brace secured to said brackets and the truss-bar.

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

Samuel S. Langford.

Witnesses:

Dean Driswel,
A. L. McPherson.