

(No Model.)

J. W. VORWICK.
ROAD CART.

No. 411,114.

Patented Sept. 17, 1889.

Fig. 1.

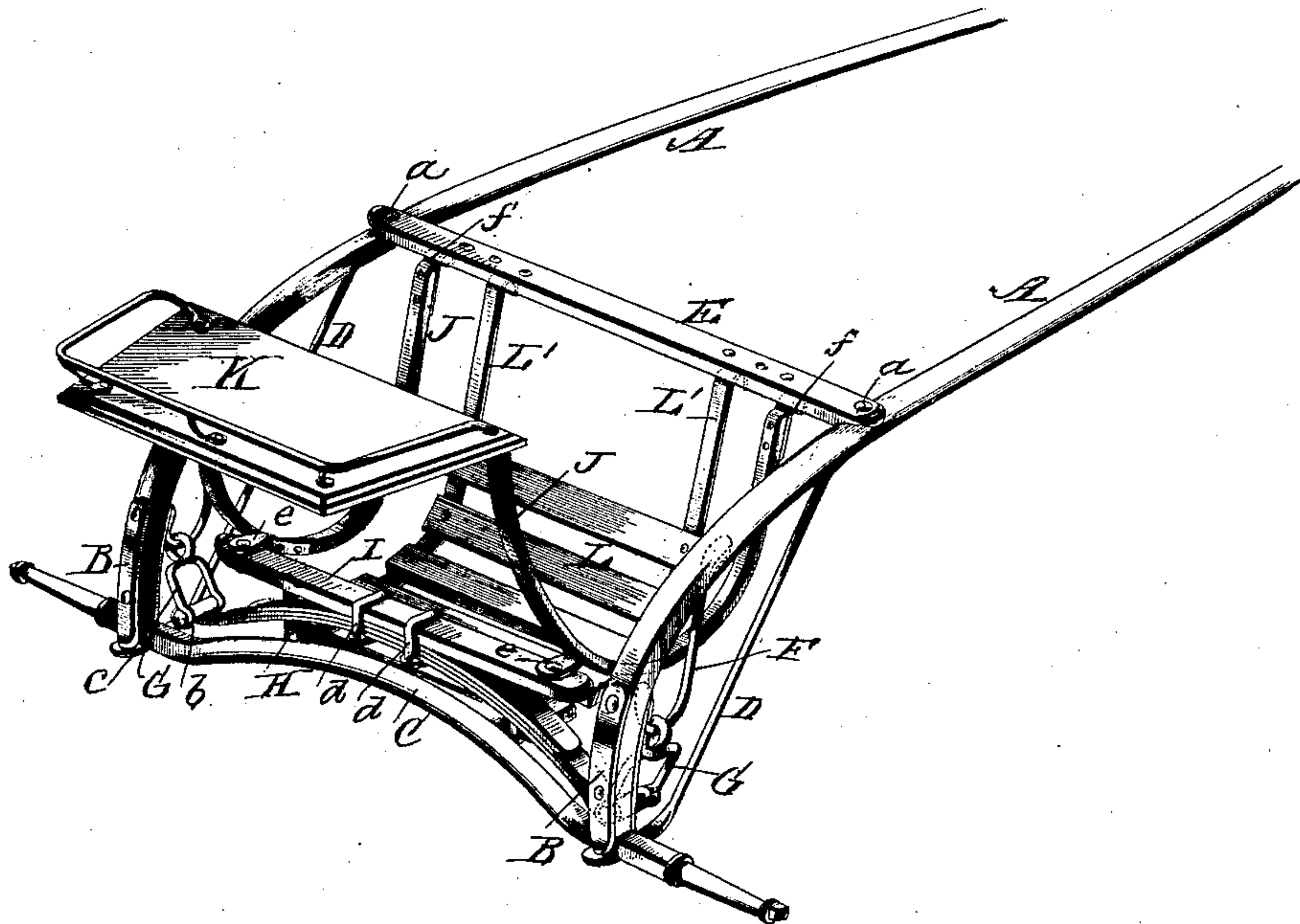
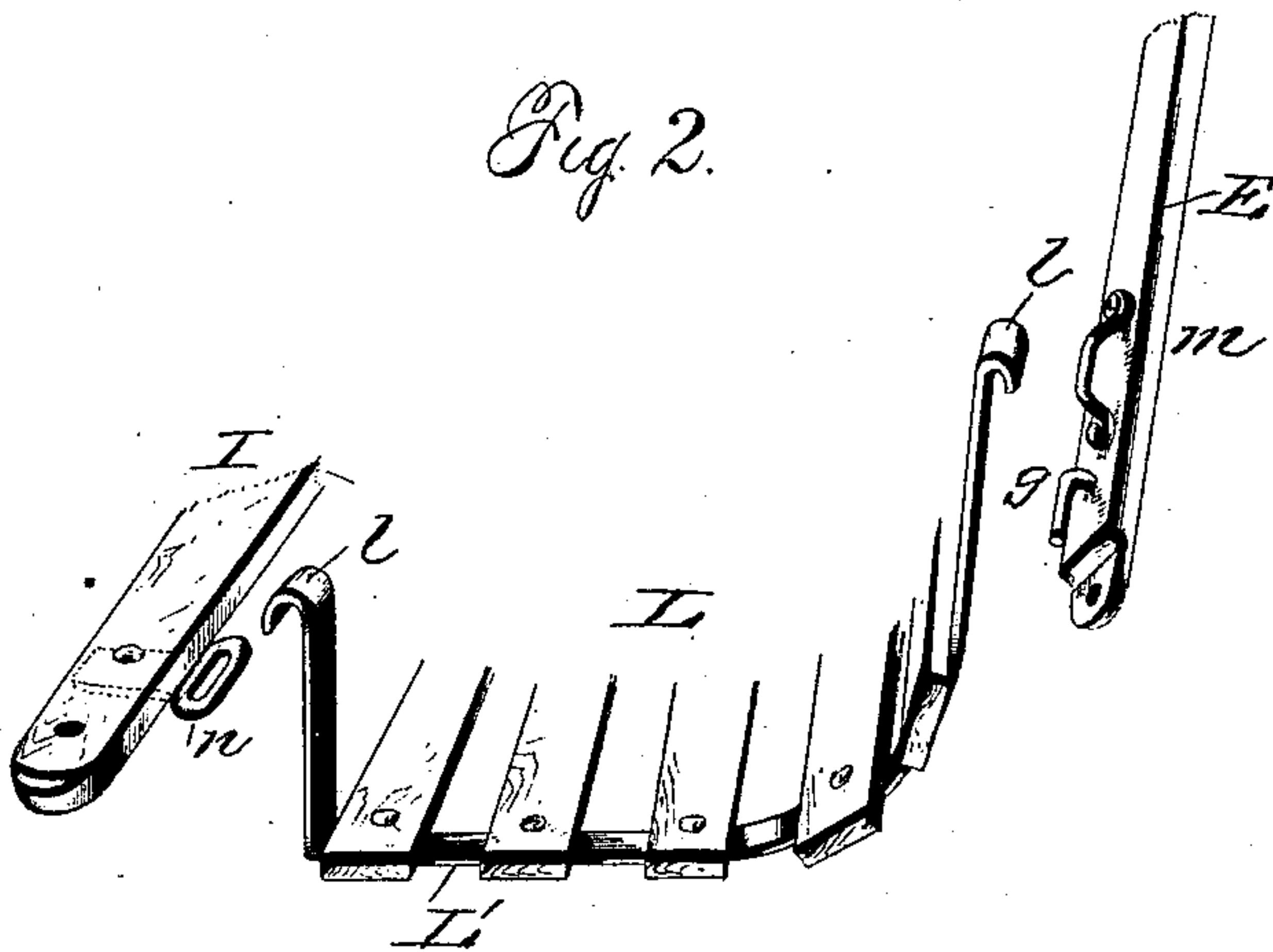


Fig. 2.



Witnesses
Chas. Williamson
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UNITED STATES PATENT OFFICE.

JOSEPH W. VORWICK, OF MONMOUTH, ILLINOIS.

ROAD-CART.

SPECIFICATION forming part of Letters Patent No. 411,114, dated September 17, 1889.

Application filed June 29, 1889. Serial No. 316,005. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH W. VORWICK, a citizen of the United States, residing at Monmouth, in the county of Warren and State of Illinois, have invented certain new and useful Improvements in Road-Carts; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

This invention relates to certain new and useful improvements in road-carts; and it has for its object to provide a cheap easy-riding vehicle of this class, to provide for the ready removal or attachment of the foot-rest, and to otherwise improve upon the construction of this class of vehicles.

The invention consists in the peculiar combinations and the construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of a road-cart constructed in accordance with my invention. Fig. 2 is a perspective detail of a portion of the foot-rest, showing its manner of attachment.

Referring now to the details of the drawings by letter, A designates the thills, which curve downward at their rear ends in the usual manner. To the rear ends of the thills are secured the irons B, the ends of which project beyond the thills and are screw-threaded.

C is the axle, on which the rear ends of the thills rest, and this axle is held between the irons B by means of suitable nuts on the threaded ends of the irons, the rear flattened ends of the braces D being also held in place by the same nuts, the said flattened ends being provided with suitable holes through which the threaded ends of the irons pass.

The other ends of these braces are secured to

the under side of the thills by means of the same bolts *a* that secure the cross-bar E to the thills, as shown in Fig. 1.

F are loops attached to the under side of the thills in the curves thereof, as shown, and held in these loops are the spring-shackles G, preferably of the form shown, formed at their lower ends with eyes *b*, through which pass the bolts or pins *c*, which also pass through eyes on the ends of the transverse spring H and serve to connect the spring to the shackle-loops, as seen clearly in Fig. 1.

The spring H is preferably a semi-elliptic spring, and to this spring is secured by means of the clips *d* the cross-bar or head-block I. To the ends of this cross-bar are attached the arms *e*, the forward ends of which are secured to the curved seat-bars J, the forward ends of which are pivotally connected with the under side of the cross-bar E in any suitable manner. In the drawings I have chosen to show them as provided with eyes *f*, which engage the hooks *g* on the under side of the said cross-bar, so that they may be readily detached by springing them outward to disengage them from the said hooks.

The seat K is attached to the upper ends of the seat-bars.

L is the foot-rest. It is formed of the curved side bars L', the ends of which are formed into hooks *l*, and the transverse bars M, attached at their ends to the bars L'.

To the under side of the cross-bar E there are attached the loops *m*, which engage the hooks on the forward ends of the side bars L' of the foot-rest, and on the cross-bar I are the loops *n*, which are designed to engage the hooks on the rear ends of the bars L' of the foot-rest. In this manner the foot-rest can be readily removed or attached when desired by simply engaging or disengaging the hooks and loops, as will be readily understood, allowing the use of the cart as a sulky for speeding purposes.

The seat being supported entirely by the springs affords a very easy-riding vehicle.

What I claim as new is—

The combination, with the thills and axle, of the loops attached to the thills, the spring-shackles formed with spring-loops loosely

hung on said loops, the transverse spring
hung on the shackles, the head-block secured
centrally to the spring, the seat-bars pivotally
connected with the thills at their forward
5 ends, the horizontal arms *e* on the head-block
and attached to the seat-bars, and the seat-
bar connection with the spring, substantially
as shown and described.

In testimony that I claim the above I have
hereunto subscribed my name in the presence 10
of two witnesses.

JOSEPH W. VORWICK.

Witnesses:

E. C. HARDIN,
H. B. WEBSTER.