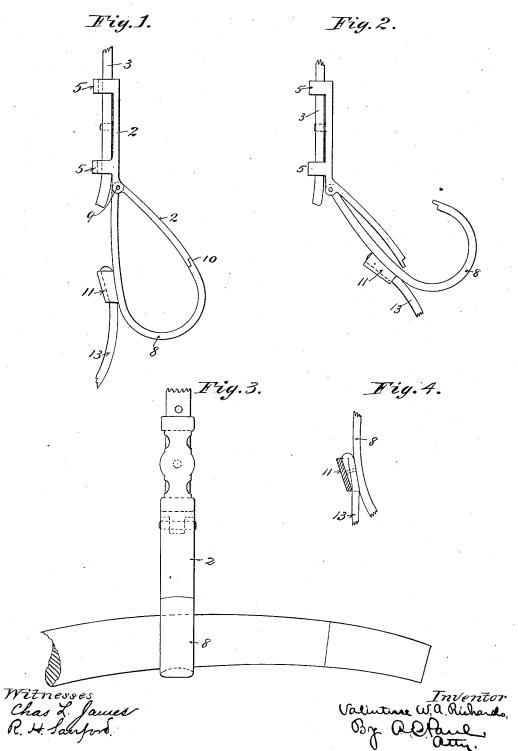
## V. W. A. RICHARDS.

SHAFT CARRIER.

No. 345,922.

Patented July 20, 1886.



## UNITED STATES PATENT OFFICE.

VALENTINE W. A. RICHARDS, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF ONE-HALF TO JOSEPH BALTES, OF SAME PLACE.

## SHAFT-CARRIER.

SPECIFICATION forming part of Letters Patent No. 345,922, dated July 20, 1886.

Application filed February 2, 1886. Serial No. 190,620. (No model.)

To all whom it may concern:

Beit known that I, VALENTINE W. A. RICH-ARDS, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain Improvements in Shaft-Carriers; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to improvements in shaft or thill carriers for harnesses; and it con-10 sists in providing or attaching to the harness a receptacle or holder for the end of the vehicle-shaft, which is arranged to receive the said shaft as it is brought down from a position over the back of the animal or above the

15 carrier.

My invention also consists in the combination and arrangement hereinafter described, and particularly pointed out in the claims.

In the drawings which form part of this speci-20 fication, Figure 1 is a front elevation of my improvement, showing the carrier in the position assumed when in use. Fig. 2 is a front elevation showing the carrier in a position to receive the shaft. Fig. 3 is a side elevation,

25 and Fig. 4 is a detail.

2 represents the upper section of the carrier, and is composed of metal and attached by means of the back-straps 3 to the harnesssaddle. The lower part of section 2 is at an 30 angle to the upper part, as shown. Two projecting loops receive the strap, and the pin 7 holds it in any required position. 8 is the lower section of the carrier, and is made in the form of a hook, as shown in Fig. 1, and attached to the upper section, 2, by means of the hinge-joint 9. The lip 10 is formed upon its outer end, and engages with a corresponding lip upon the upper section, to act as a

11 represents a loop formed upon the back of the section 8, to receive the ends of the girt-straps 13. This loop is formed tapering toward the bottom, as shown in Fig. 4. The end of the girt-strap is turned over and fast-45 ened, making a wedge-shaped end, which fits into the loop 11. This holds the straps 13 firmly in the direction of the strain, but allows it to be readily removed from the carriers, if desired. It will be seen that before

the ends of the girt-straps are fastened together 50 the lower section, 8, of the carrier may be placed in the position shown in Fig. 2, ready to receive the shaft, and the weight of the shaft as it comes in contact with the section will carry it downward until the lip strikes 55 the upper section, 2, and by fastening the two ends of the girt 13 together it is held firmly in this position, or the weight of the shaft above is sufficient to hold the carrier closed.

This carrier makes an attachment of great 60 utility for any harness, as with it the thills or shafts can be raised high enough for the animal to come under them, and then dropped into the carriers without the necessity of entering the ends of the shafts into the carriers. 65

The carrier is very simple in construction, and hence is inexpensive, and it is also very

durable.

I form the carrier of metal, and it may be covered with leather, rubber, or other suit- 70 able material.

The carrier will receive a shaft of any form, either straight or crooked, and as it closes automatically there is no possibility of the shaft getting out until the horse is unharnessed, 75 when the carrier will slip off the end of the shaft in the usual way.

I claim as my invention—

1. The shaft-carrier comprising the upper section, 2, having its lower part at an angle 80 to the upper part, and the lower hook-shaped section, 8, hinged to the upper section, substantially as described, and for the purpose set forth.

2. The combination, in a shaft-carrier, of the 85 section 2, having its lower part at an angle to the upper part, as described, means for securing said section to the back-strap, and the hookshaped section 8, hinged to said section 2, and having the tapering loop 11, adapted to re- 9c ceive the end of the girt-strap, all substantially as described.

In testimony whereof I have hereunto set my hand this 29th day of January, 1886.

VALENTINE W. A. RICHARDS.

In presence of--A. C. PAUL, R. H. SANFORD.