

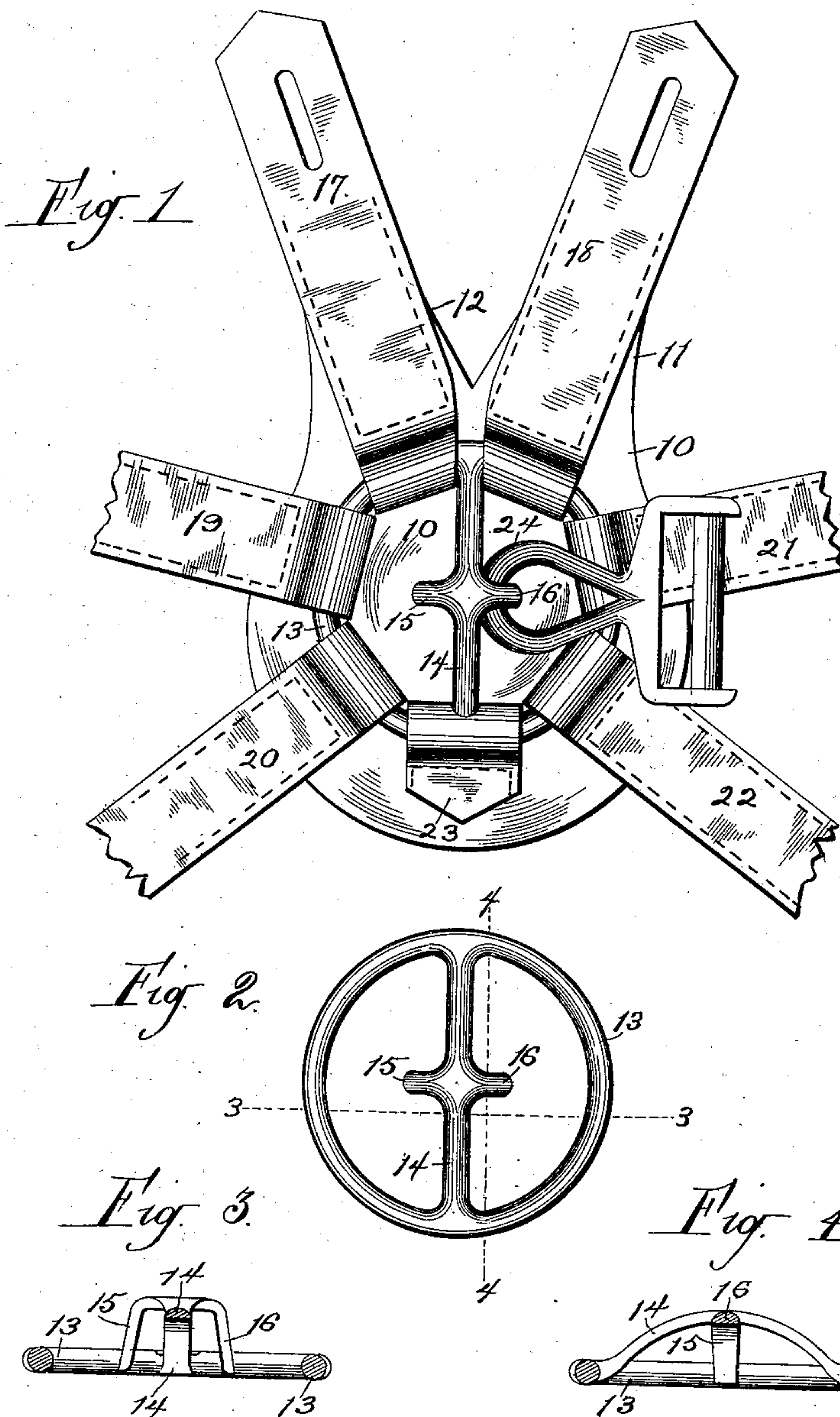
No. 701,858.

Patented June 10, 1902.

W. E. DIPPERT.
TRACE CARRIER.

(Application filed Mar. 20, 1899.)

(No Model.)



Witnesses.
J. F. Groat.
Chas. A. Van Vleck.

Inventor.
William E. Dipperth.
By *[Signature]*
296. *[Signature]* Atty

UNITED STATES PATENT OFFICE.

WILLIAM E. DIPPERT, OF DES MOINES, IOWA.

TRACE-CARRIER.

SPECIFICATION forming part of Letters Patent No. 701,858, dated June 10, 1902.

Application filed March 20, 1899. Serial No. 709,776. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. DIPPERT, a citizen of the United States of America, and a resident of Des Moines, Polk county, Iowa, have invented certain new and useful Improvements in Trace-Carriers, of which the following is a specification.

The object of this invention is to provide improved means for supporting the ends of traces, trace-chains, and the like on the top of a harness when detached from a vehicle.

My invention may be employed on an ordinary harness, but is especially adapted for use on heavy draft-harness, an example of which is known to the trade as the "double back-strap double hip-strap Concord harness," a portion of such a harness being illustrated in the drawings herewith.

My invention consists of a trace-carrier comprising a base-ring, a single arched bar extending across the center of the ring and having its ends integral therewith and provided on opposite sides of its center with a lateral arm, each arm depending downwardly, having its end beveled and terminating below the plane of the upper portion of said base-ring.

My invention consists, further, in the construction, arrangement, and combination of elements hereinafter set forth, pointed out in my claim, and illustrated by the accompanying drawings, in which—

Figure 1 is a plan showing my invention applied and a cockeye mounted therein as required for practical use. Fig. 2 is a plan of the trace-carrier detached from the harness. Fig. 3 is a vertical section on the indicated line 3 3 of Fig. 2. Fig. 4 is a vertical section on the indicated line 4 4 of Fig. 2.

In the construction of the device as shown the numeral 10 designates a wear-leather of approximately circular form and provided with forwardly-projecting tips 11 12. A trace-carrier is provided and constructed of a ring 13, an arched cross-bar 14 fixed at its ends to and extending diametrically of the ring, and laterally and downwardly projecting arms 15 16 on the central portion of the arched cross-bar. The central portion of the arched cross-bar is considerably above the horizontal plane of the ring 13, and the initial or integral ends of the arms 15 16 extend laterally horizon-

tally therefrom a slight distance only and are bent downwardly to form hooks or arms in upright positions terminating freely in a horizontal plane slightly below the horizontal plane of the ring. The longitudinal planes of the depending portions of the arms 15 16 diverge slightly. The trace-carrier is located parallel with and above the wear-leather 10, and back-straps 17 18 and hip-straps 19 20 21 22 are looped about and embrace the ring 13 and are stitched in their doubled portions to securely attach them to the ring, the back-straps also being stitched to the tips 11 12 of the wear-leather. In mounting the trace-carrier the arched cross-bar thereof is located longitudinally of the wear-leather in order that when the harness is mounted on a horse said cross-bar will lie approximately parallel with the backbone of the horse. A crupper end 23 is doubled upon itself and has one end portion split to straddle the rear end of the cross-bar 14, the looped portion of the crupper end embracing the ring 13, the end portions of the crupper end being conjunctively stitched to the rear portion of the wear-leather. By the use of the crupper end, in conjunction with the back-straps 17 18, I am enabled to retain the trace-carrier in the desired position on the wear-leather. When employed on a lighter harness of ordinary form, the trace-carrier would be made of smaller diameter provided with a crupper end connecting its rear portion to the wear-leather, and its forward end would be connected to the wear-leather by a split tip on the rear end of the back-strap, in this instance the wear-leather being formed with a single forwardly-projecting tip to which the split extremity of the back-strap would be stitched.

In practical use the ring of the trace-carrier is raised from the wear-leather by the under portions of the looped ends of the straps, thus providing a space between the extremities of the arms 15 16 and the upper surface of the wear-leather, such space being less than the diameter of the extremities of the cockeyes or links employed therewith. The traces are supported when not attached to a vehicle by inserting the extremities of the cockeyes or trace-chains between the lower ends of the arms 15 16 and the upper surface of the wear-leather, the cockeyes or links

embracing the body portions of the arms and being restrained thereby, it being understood that the wear-leather will yield downwardly slightly to permit the manual insertion and
5 removal of the cockeyes. Furthermore, the entire trace-carrier will yield upwardly slightly during the manual insertion or removal of a cockeye, because of the flexible mounting of the trace-carrier by means of the
10 straps 17, 18 and crupper end 23; but the degree of separation and flexibility of connection between the wear-leather and trace-carrier is not sufficient to permit the accidental removal or displacement or jarring release of
15 the cockeyes or either of them. Without the wear-leather the mounting of the cockeyes and their engagement with the arms 15 16 would be insecure and unstable. By using two hooks or arms 15 16, located on opposite
20 sides of the central portion of the cross-bar, I am enabled to place or remove either cockeye, as desired. By reason of the arched formation of the cross-bar 14 and the location of the arms 15 16 at the central portion thereof
25 I provide for the level and comely positioning of the cockeyes in the trace-carrier and also strengthen the device against breakage

should the horse roll thereon or strike the same against a head-beam or other obstruction.

30

Commercially the trace-carriers, as shown detached in Fig. 2, will be sold to the trade boxed in lots of six or twelve, and I have so constructed them that they will nest in the boxes, as is obvious from an examination
35 thereof.

I claim as my invention—

A trace-carrier comprising a single imperforate base-ring, a single arched bar extending across the center of the ring with its ends
40 integral with the inner portion of said ring, said cross-bar provided on opposite sides at its center with a downwardly-extending straight arm the ends of which terminate beyond the side of the said arched bar and below the
45 plane of the upper portion of the base-ring, substantially as shown and described.

Signed by me at Des Moines, Iowa, this 24th day of February, 1899.

WILLIAM E. DIPPERT.

Witnesses:

J. F. GROAT,
S. C. SWEET.