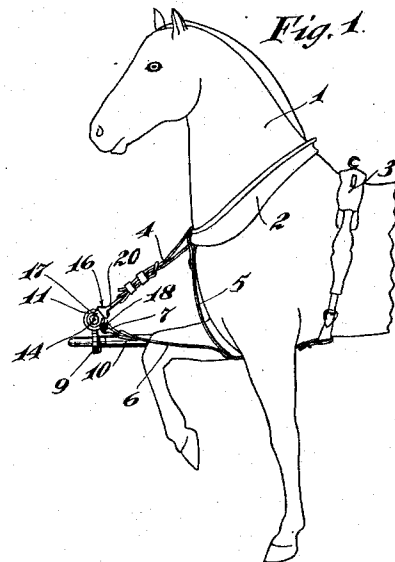
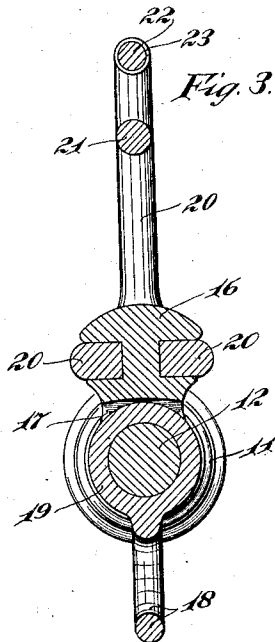
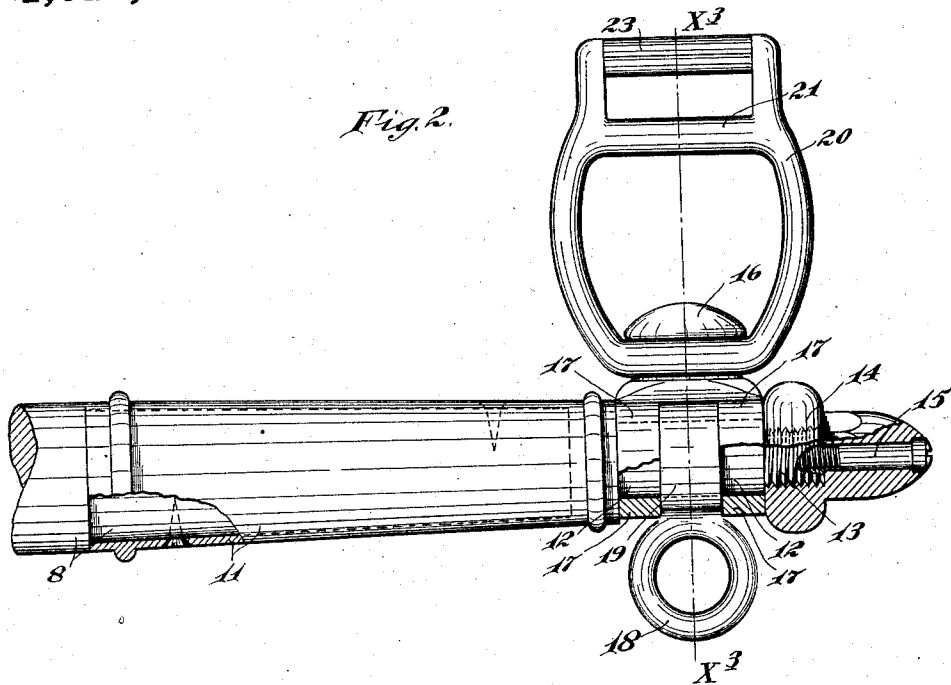


S. H. RENVILLE.
NECK YOKE END COUPLING.
APPLICATION FILED OCT. 28, 1910.

Patented Jan. 16, 1912.

1,015,247.



Witnesses:
W. H. Souza,
A. H. Opsahl.

Inventor:
Sampson H. Renville.
By his Attorneys:
William M. Merchant

UNITED STATES PATENT OFFICE.

SAMPSON H. RENVILLE, OF PEEVER, SOUTH DAKOTA.

NECK-YOKE END COUPLING.

1,015,247.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, SAMPSON H. RENVILLE, a citizen of the United States, residing at Peever, in the county of Roberts and State of South Dakota, have invented certain new and useful Improvements in Neck-Yoke End Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention has for its object to provide an improved neck yoke end coupling, and to this end, it consists of the novel devices and combinations of devices herein-after described and defined in the claims.

In the accompanying drawings which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings, Figure 1 is a view in side elevation showing a team of horses, a wagon pole and a neck yoke connected thereto, said neck yoke having my improved couplings as ends, some parts being broken away; Fig. 2 is a view in elevation with some parts broken away and some parts sectioned, showing on a large scale one end of the neck yoke and one of my improved end couplings applied thereto; and Fig. 3 is a section taken on the line $x^3 x^3$ of Fig. 2.

In Fig. 1, the numeral 1 indicates a team of horses equipped with the customary light harness, the parts of which may be briefly designated as the collar 2, the saddle 3, the neck yoke strap 4 and the breast band 5.

In carrying out my invention, the breast band or strap 5 is provided with a supplemental strap 6 preferably provided, at its free end, with a snap hook 7, the purpose of which will presently appear. A neck yoke 8 is provided with a suitable neck yoke center 9, adapting it to be coupled to the end of a pole 10, as shown only in Fig. 1. Long, tubular, metallic yoke caps 11 are telescoped onto the ends of the neck yoke 8 and rigidly secured thereto preferably by screws. The outer end of each cap 11 is reduced to form a trunnion 12, and the outer end of said trunnion is again reduced and threaded to form a gudgeon 13 on which a cap nut 14 is screwed. The cap nut 14 is preferably secured to the gudgeon 13 by a screw 15 passed through an axial perforation in the said cap nut and screwed into the gudgeon

13 and having threads that are in a reverse direction to those of the said gudgeon.

The numeral 16 indicates a headed swiveled member or trunnion having laterally spaced bearing rings 17 that are journaled on the trunnion 12 of the cap 11; and the numeral 18 indicates a coupling eye having a bearing ring 19 interposed between the bearing rings 17 and also journaled on the said trunnion 12. Swiveled to the trunnion 16, is a metallic strap loop 20 having two parallel strap-engaging cross bars 21 and 22, the latter of which, as shown, is covered by a rotatable thin metal roller 23.

When the neck yoke is properly connected up, as shown in Fig. 1, the hook 7, at the free end of the supplemental breast strap 6, is snapped into the depending coupling eye 18, and the said strap will then prevent the pole from being thrown upward far enough to throw the neck yoke against the horses' heads or necks. In a light harness, such as is shown in Fig. 1, the neck yoke straps 4 directly connect the lower central portions of the collar to the ends of the neck yoke, and in this instance, the loops 20 are turned into planes longitudinally of the neck yoke, and the lower portions of said straps 4 are passed around the roller-equipped upper bars 22.

In a heavy harness, the neck yoke straps, as is well known, are customarily attached at both ends and at points on opposite sides of the center of the collar. This latter noted type of neck yoke strap is, furthermore, much heavier and wider than the straps 4 shown in the drawings. Hence, for this latter application, the strap loops 20 are turned into planes that intersect the neck yoke at a right angle, and the heavy neck yoke straps are passed through the said loops and are engaged with the cross bars 21 thereof.

It will thus be seen that my improved neck yoke end couplings are adjustable to different kinds of harness and, furthermore, they will adapt themselves to all natural movements of the neck yoke and, further, are very strong, durable and ornamental in appearance.

What I claim is:

1. The combination with a neck yoke, of a coupling eye and a headed coupling member having interlocking bearing rings pivotally mounted on each end of said neck yoke,

and a strap loop swiveled to said headed coupling member, substantially as described.

2. The combination with a neck yoke provided at its ends with metallic caps formed
5 with reduced trunnions and projecting threaded gudgeons and nuts applied to said gudgeons, of a headed coupling member pivoted on each trunnion, and a metallic strap loop swiveled to said trunnion, sub-
10 stantially as described.

3. The combination with a neck yoke, provided at its ends with metallic caps formed with reduced trunnions and projecting threaded gudgeons and nuts applied to said

gudgeons, of a headed coupling member 15 having laterally spaced bearing rings pivoted on each of said trunnions, a coupling eye having a bearing ring pivotally mounted on each of said trunnions between the bearing rings of said headed coupling members, 20 and a strap loop swiveled to said headed coupling member, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

SAMPSON H. RENVILLE.

Witnesses:

A. F. ERTSGAARD,
R. L. D. FRANCE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."