

G. YOUNG.

NECK YOKE.

APPLICATION FILED SEPT. 5, 1912.

1,063,759.

Patented June 3, 1913.

Fig. 1.

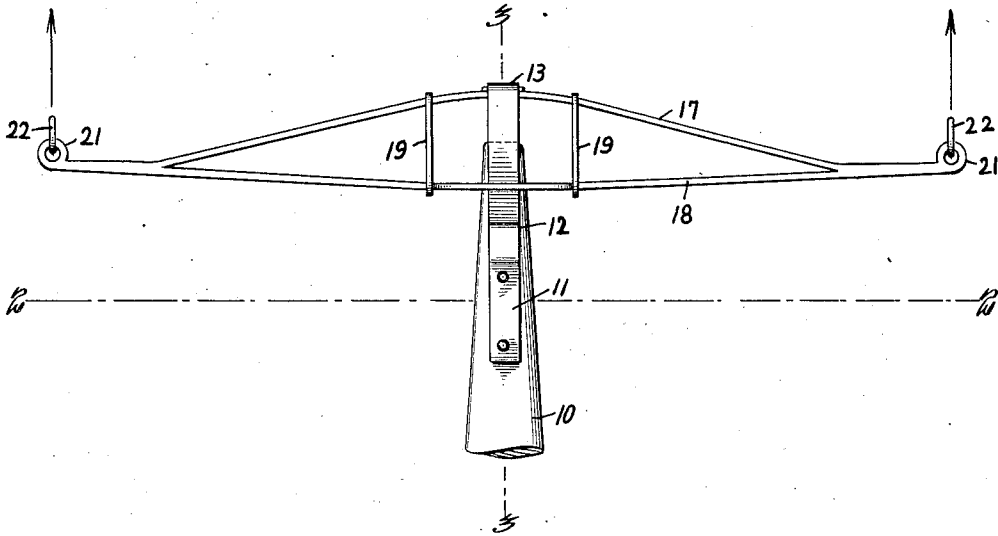


Fig. 2.

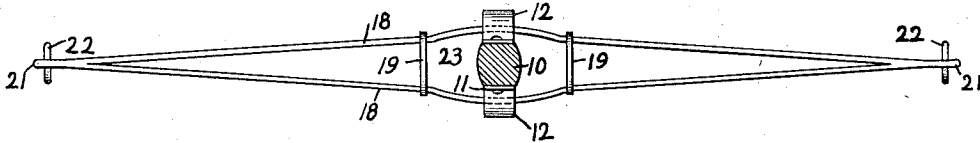


Fig. 3.

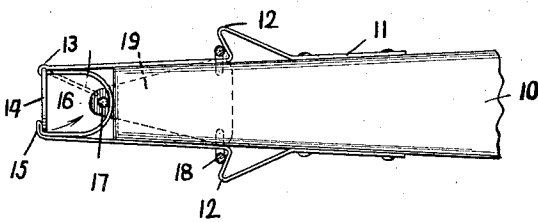
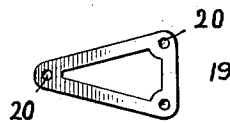


Fig. 4.



WITNESSES
E. J. Callaghan
B. Joffe

INVENTOR
Gust Young,
BY *Wm. Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

GUST YOUNG, OF MORA, MINNESOTA.

NECK-YOKE.

1,063,759.

Specification of Letters Patent.

Patented June 3, 1913.

Application filed September 5, 1912. Serial No. 718,661.

To all whom it may concern:

Be it known that I, GUST YOUNG, a citizen of the United States, and a resident of Mora, in the county of Kanabec and State of Minnesota, have invented a new and Improved Neck-Yoke, of which the following is a full, clear, and exact description.

This invention relates to neck yokes, and has reference more particularly to a device of the class comprising a plurality of longitudinal members joined together at their extremities and provided with a substantially central transverse reinforcement.

An object of the invention is to provide an inexpensive neck yoke simple, light and durable in construction, having three points of bearing on a wagon tongue and affording a free oscillatory motion in all directions, thereby adjusting itself to any position of the horses.

A further object of the invention is to keep the neck yoke central on the wagon tongue and thus maintain an even strain on both horses.

A still further object of the invention is to provide a neck yoke associated with the tongue cap which will not slip on the tongue, and in backing the horse or in supporting a back load the strain will be transmitted centrally to the wagon tongue.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which like characters of reference indicate corresponding parts in all the figures, and in which—

Figure 1 is a plan view of an embodiment of my invention; Fig. 2 is a transverse section on the line 2—2 of Fig. 1; Fig. 3 is a longitudinal section on the line 3—3 of Fig. 1; and Fig. 4 is a side view of the reinforcing plates.

Before proceeding to a more detailed description of my invention it is to be understood that the longitudinal bars forming the neck yoke may be solid or tubular, and of any shape in their cross section. Their extremities may be welded, brazed, or in any similar way joined. The transverse reinforcing plates may be formed of sheet metal, forged or cast, and the loop formed by the two rear longitudinal bars and transverse reinforcing plates may be of any shape to suit the form of the tongue or any other requirement of space or construction.

Referring more particularly to the draw-

ings, 10 is a wagon tongue carrying a tongue cap 11 rigidly attached to the upper and lower surface of the wagon tongue and at its forward end. The cap is preferably formed of sheet metal and has a pair of shoulders 12 positioned above and below the tongue against which the rear longitudinal bars of the neck yoke are adapted to bear. On the upper forward end of the cap an eye 13 is formed, and journaling in the said eye is a tongue or latch 14 which normally bears against the inner side of a lip 15 formed with the lower forward end of the cap. A continuous piece of metal connecting the eye 13 with the lip 15 forms a re-entrant portion or loop 16 into which the forward longitudinal bar of the neck yoke is admitted. Normally this loop is closed by the tongue or latch 14, and, in consequence, inclosing the above stated bar.

The forward bar 17 of the neck yoke is bent in such a way as to form, with the two rear bars 18 disposed above and below the wagon tongue 10 and the centrally disposed reinforcing plates or members 19, a beam of uniform strength, having its supports on the shoulders 12 of the tongue cap 11. The reinforcing plates or members 19 are provided at each corner with orifices 20 through which the three bars project and by which they are bound transversely at each side of and near the wagon tongue. Thus the device in cross section represents a triangle. The extremities of the bars 17 and 18 are integrally joined, and eye pieces 21 formed, said eye pieces receiving rings 22 intended to support the hames strap. The two rear bars 18 inclosed between the reinforcing plates 19 are curved, and in connection with said plates 19 form a loop 23 the purpose of which is to prevent a great side movement of the neck yoke on the tongue cap, whereby an even strain on both horses is obtained.

When the neck yoke is to be removed from the wagon tongue the latch 14 of the cap 11 is forced into the loop 16 of the tongue cap, as shown in dotted lines in Fig. 3, whereby the bar 17, and, in consequence, the neck yoke may be removed. The shoulders 12 against which the rear bars 18 are bearing, distribute the strain produced by the backing of the horses or by back load centrally to the wagon tongue, as can be easily seen from the drawings. The device, as seen in Fig. 3, has always three points in bearing with the cap, and, consequently,

allowing free oscillatory motion to the device on a tongue cap. It can be easily seen that the device, with the tongue cap, forms smooth and closed surfaces, and eventually obviating trouble from tangling of the reins with the device or tongue. It is understood that my device may be attached to any vehicle driven by horses.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A device of the class described, comprising a plurality of longitudinal members centrally spaced and integrally joined at their extremities, said members forming a triangle in cross section, and substantially triangular transverse reinforcing members arranged in the middle of the device engaging said longitudinal members, and forming a loop with two of said longitudinal members.

2. A device of the class described, comprising three longitudinal members centrally spaced and integrally joined at their extremities, said members forming a triangle in cross section, and substantially triangular transverse reinforcing plates having means at each corner adapted to engage said longitudinal members and maintain said longitudinal members in a predetermined position, and a loop formed by two of said longitudinal members and the said reinforcing plates.

3. A device of the class described, comprising three longitudinal bars centrally spaced and joined integrally at their ends, two of said bars spaced apart substantially vertical and the third of said bars being nor-

mal to the two said bars and in front of them, two transverse centrally disposed plates near the middle of said bars engaging and reinforcing the same, and a loop formed by the said two substantially vertical bars and the said transverse plates to engage the tongue of a wagon, whereby only a limited side motion of the neck yoke is permitted.

4. The combination of a tongue cap having a reëntrant formed portion and shoulders, and a neck yoke consisting of a plurality of longitudinal members centrally spaced and joined near their ends, said members being arranged to engage respectively said shoulders and reëntrant portion.

5. The combination of a tongue cap having a reëntrant formed portion provided with means to normally close said reëntrant portion, and two shoulders positioned above and below the tongue, and a neck yoke consisting of three longitudinal bars centrally spaced and joined at their ends, one of said longitudinal bars engaging said reëntrant portion and the other two engaging the upper and lower shoulder of said cap and bearing against same, and two transversely triangular plates centrally disposed near each side of said cap and in engagement with said bars, thereby reinforcing the said bars.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GUST YOUNG.

Witnesses:

P. S. OLSEN,

J. A. LINDSTEN.