J. ZIEGLER.

NECK YOKE CENTER.

APPLICATION FILED MAY 19, 1911.

1,009,878. Patented Nov. 28, 1911.

Fig. 1.

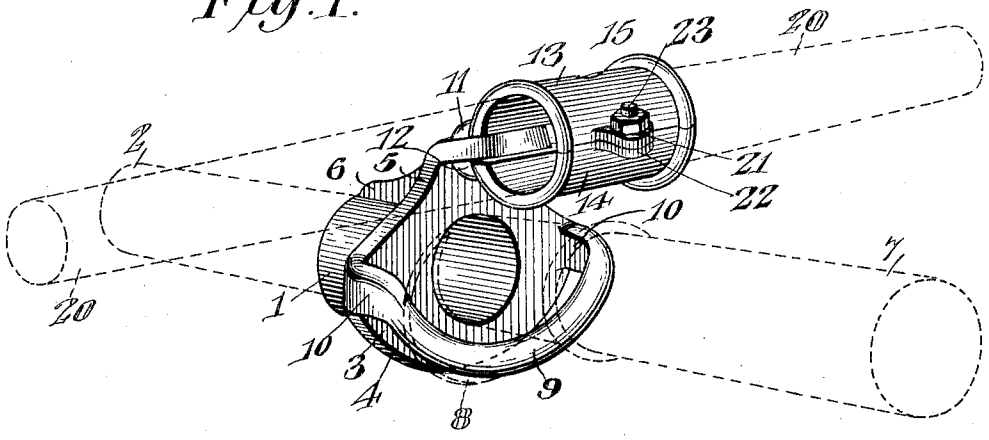


Fig. 2.

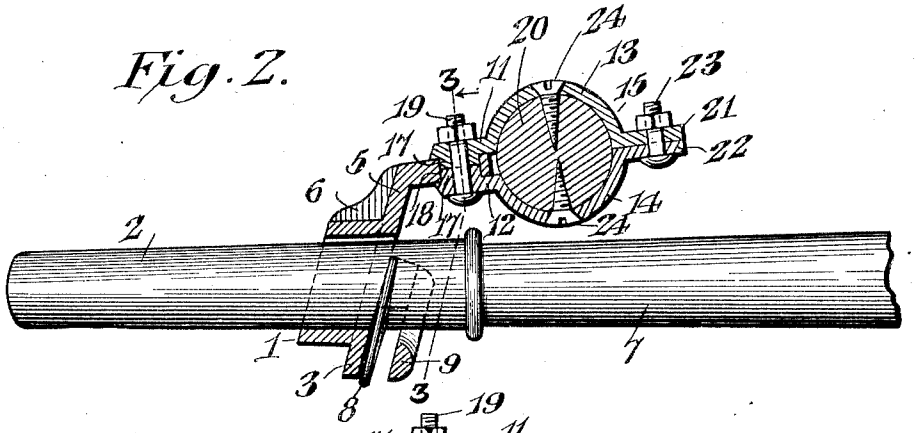
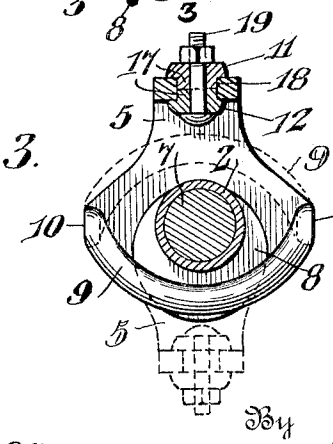


Fig. 3.



Jacob Ziegler
Inventor

Witnesses
Jas. K. McCathran
H. E. Riley.

By E. G. Siggers
Attorney

UNITED STATES PATENT OFFICE.

JACOB ZIEGLER, OF COFFEYVILLE, KANSAS.

NECK-YOKE CENTER.

1,009,878. Specification of Letters Patent. **Patented Nov. 28, 1911.**

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To all whom it may concern:

Be it known that I, JACOB ZIEGLER, a citizen of the United States, residing at Coffeyville, in the county of Montgomery and State of Kansas, have invented a new and useful Neck-Yoke Center, of which the following is a specification.

This invention relates to neck yoke centers of that class which embody a catch or similar means to engage with a rigid stop flange provided on the pole tip, and the object of the invention is to improve the construction by providing a catch which will accurately fit the flange and reduce to a minimum the lost motion of the center on the pole tip, and thereby avoid the heavy pounding of the flange by the center which is produced by the motion of the horses.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claim hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claim, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a perspective view of a neck yoke center, constructed in accordance with this invention, the pole and the neck yoke being illustrated in dotted lines. Fig. 2 is a central longitudinal view of the neck yoke center, the pole being shown in elevation. Fig. 3 is a transverse sectional view on the line 3—3 of Fig. 2.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

In the accompanying drawing in which is illustrated the preferred embodiment of the invention, 1 designates a pole receiving ring, adapted to be arranged on the pole tip 2 and constructed of suitable metal, and provided at its rear end with an enlarged transverse peripheral flange 3, adapted to materially increase the strength of the pole receiving ring and having a curved lower edge 4, and tapered at its upper portion and merging into an approximately L-shaped arm 5, formed integral with the top of the pole receiving ring and reinforced by a centrally arranged front web 6, which extends from the arm 5 along the top portion of the pole receiving ring. The pole tip 2, which is fitted on a pole 7, is of the usual construction and is provided at its underside with a depending stop flange 8, arranged at a slight inclination and fitting against the rear flanged end of the pole receiving ring 1. The flange 3 of the pole receiving ring is set at a slight inclination to fit the stop flange 8, and the opening of the pole receiving ring is of slightly greater diameter than the exterior diameter of the pole tip to permit the neck yoke center to have a limited up and down play on the pole tip.

The pole receiving ring is securely retained on the pole tip by a curved bar 9 of approximately semi-circular shape, extending around the lower portion of the pole tip in spaced relation and substantially parallel with the flange 3 and the stop flange 8, when the former is in contact with the latter, and provided with forwardly extending approximately horizontal terminals 10, located at opposite sides of the center of the pole receiving ring and formed integral with the peripheral flange thereof at the ends of the lower curved edge 4 of the same. The curved bar forms a guiding loop and is located in rear of the stop flange 8, and it is normally spaced from the same and the pole to permit a limited backward and forward play of the neck yoke center. The curvature of the bar 9 is coincident with the curved lower edge 8 of the flange. The space above the curved bar 9 is open, and when the neck yoke center is inverted, the stop flange is readily brought opposite the space between the flange 3 and the curved bar, and by partially rotating the neck yoke center on the pole, the neck yoke center is brought to an upright position, and the stop flange is arranged in the space between the curved bar and the flange 4. The neck yoke center is detached from the pole by rotating it one half of a revolution to arrange the open space above the curved bar opposite the stop flange 8. The neck yoke center may then be readily removed from the pole.

The diameter of the flange 3 exceeds the diameter of the pole-receiving ring at all points, and being perfectly flat, it affords a firm bearing for the stop flange 8 at all times and particularly so when the horses are holding back. When the ring 1 is given a partial rotation around the pole tip, the

flange 3 and bar 9 play loosely on opposite sides of the stop flange, but the movement is not so great in extent as to cause the parts to become disengaged.

The L-shaped arm 5 consists of an upright portion and a rearwardly extending portion, preferably arranged at a slight inclination and extending rearwardly from the upright portion and provided with flat upper and lower faces to which are pivoted forwardly extending lugs 11 and 12 of upper and lower sections 13 and 14 of a neck yoke receiving sleeve 15. The forwardly projecting lugs are provided with alined openings, and they have annular bosses or flanges 17, surrounding the openings at the inner faces of the lugs 11 and 12 and fitting within an opening 18 of the rearwardly extending portion of the arm 5. An upright pivot bolt 19 extends through the openings and pivots the sleeve 15 to the rearwardly extending portion of the arm 5, and it permits the neck yoke 20 to play back and forth in case the horses do not travel even. The annular bosses or flanges 17 surround the pivot bolt and relieve the latter of wear incident to the pivotal movement of the neck yoke. The sections 13 and 14 of the sleeves are provided with rearwardly extending ears or lugs 21 and 22, having registering perforations for the reception of a bolt 23, which clamps the sections 13 and 14 on the neck yoke 20. The sections 13 and 14 are also preferably secured to the neck yoke by screws 24, or other suitable fastening devices, piercing the upper and lower sections 13 and 14 and embedded in the neck yoke.

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

A neck yoke center comprising a pole-receiving ring provided at its rear with a flange which projects laterally from the ring around the periphery thereof, said flange presenting a flat, rear face which is set at an inclination, and having a curved lower edge and a tapered upper portion merging into an approximately L-shaped arm, means for pivotally connecting a neck yoke to said arm, a bar integral with the flange, said bar being spaced from the lower edge of the flange and having a curvature coincident with said edge and arranged substantially parallel therewith, the ends of said bar being extended forwardly and merging into the flange at the ends of the curved portion thereof, said bar forming a guiding loop for the stop flange of the pole in the usual oscillations of the pole-receiving ring around the pole tip and serving to restrict the longitudinal movement of the said ring on the pole tip.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JACOB ZIEGLER.

Witnesses:
C. A. WALKER,
LULU POWELL.

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