

UNITED STATES PATENT OFFICE.

SAMUEL J. McDONALD, OF GALLATIN, MISSOURI.

NECK-YOKE CENTER.

SPECIFICATION forming part of Letters Patent No. 781,012, dated January 31, 1905.

Application filed July 7, 1904. Serial No. 215,660.

To all whom it may concern:

Be it known that I, SAMUEL J. McDONALD, a citizen of the United States, residing at Gallatin, in the county of Daviess and State of Missouri, have invented certain new and useful Improvements in Neck-Yoke Centers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has relation to that class of neck-yoke centers embodied in my patent dated November 18, 1902, No. 714,013, and is designed as an improvement thereon, whereby the same is materially enhanced in effectiveness and rendered more practical; and it consists in a neck-yoke center constructed substantially as shown in the drawings and hereinafter described and claimed.

Figure 1 of the drawings is a perspective view of a neck-yoke center embodying my improvement; Fig. 2, a side elevation, partly in section; Fig. 3, a perspective view of the lower section of the latch.

In the accompanying drawings, A represents the pole-tip of a vehicle, provided with the usual inclined abutment-flange *a*, and B the neck-yoke bar connecting therewith, said bar having the clip-band C connected thereto, which band is also connected to a double-extension locking-latch through the medium of a screw-bolt *b* and nut *c*, engaging the screw-threaded end of the bolt. The bolt *b* extends through flanges *d*, projecting from the ends of the clip-band C, and also through an eye *e* upon the section D of the double-extension locking-latch, said section being pivoted to a coupling-ring E upon the end of the pole-tip.

The means preferably employed for forming a pivotal connection between the clip-band C and the coupling-ring E resides in the pivot-bolt *f*, extending through the flanges *g* of the coupling-ring and through an eye *h* of the locking-latch section D.

The latch-section D comprises a projecting cam *i* and a depending pusher-finger *j*, and the section F of the latch comprises a curved bearing-face *k* upon its upper side and a transverse groove *l* upon its under side, as shown

more clearly in Fig. 3 of the drawings. The groove *l* upon the under side of the latch-section F fits over a transverse pin *m*, which extends through the flanges *g* of the coupling-ring E, whereby said latch-section is held in place upon the pole-tip. The section D of the latch tilts back and forth, and bearing with more or less frictional contact with the latch-section F through the action of the cam *i* will securely lock the coupling-ring E to the pole-tip. When the latch-section D is tilted back, the depending push-finger *j* will bear against the rear end of the latch-section F and draw the coupling-ring E against the under side of the pole-tip and securely hold it in position and provide a perfect antirattler and enables one and the same coupling-ring to fit various-size pole-tips.

The locking device herein described is both simple and effective and prevents the neck-yoke and its connections from striking the pole-tip when the team is hitched, and if the trace, doubletree, or swingletree should break the latch will come into action as a locking medium.

It is evident that many changes or modification may be resorted to in the several details of construction, and any suitable latch device which will act on the coupling-ring of the pole-tip to lock or release it may be substituted for the device shown without in any manner departing from the spirit of the invention.

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

1. A neck-yoke center, comprising a clip-band for attachment to the neck-yoke bar and a coupling-ring upon the pole-tip, a locking-latch connecting with the clip-band and with the coupling-ring, said latch consisting of two separable sections adapted to operate in connection with each other, the upper section having integral cam extension and integral depending push-finger and the lower section being loosely removably supported within the ring and having a groove upon its under face to receive a pin in the ring, substantially as and for the purpose specified.

2. A neck-yoke center, comprising a suit-

able clip-band upon the neck-yoke bar, a coupling-ring upon the pole-tip and having a transverse bearing pin or bar, a latch device consisting of two separable sections, the upper
5 one of the sections pivoted to the clip-band and coupling-ring, integral cam extension and integral depending push-finger upon the upper section, a curved upper bearing-surface and a transverse groove to fit loosely over and
10 to engage the transverse bearing pin or bar, said

push-finger being disposed to directly engage the end of said bearing-surface, substantially as and for the purpose set forth.

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

SAMUEL J. McDONALD.

Witnesses:

JOHN CHAMBERLAIN,
MARTIN V. BISHOP.