F. E. LACK. NECK YOKE CENTER.

(Application filed May 31, 1900.)

(No Model.) Fig. 5. Fig.3. Fig. Z. 227 21 17 18 / 12 20 10 10 Finis E. Lack Inventor Witnesses

UNITED STATES PATENT OFFICE.

FINIS EWING LACK, OF PADUCAH, KENTUCKY.

NECK-YOKE CENTER.

SPECIFICATION forming part of Letters Patent No. 667,885, dated February 12, 1901.

Application filed May 31, 1900. Serial No. 18,600. (No model.)

To all whom it may concern:

Be it known that I, FINIS EWING LACK, a citizen of the United States, residing at Paducah, in the county of McCracken and State of 5 Kentucky, have invented a new and useful Neck-Yoke Center, of which the following is a specification.

The present invention relates to neck-yoke centers; and the particular object thereof is 10 to provide new and useful means for securing

the pole-ring to the neck-yoke.

The preferred form of the invention is fully described in the following specification and shown in the accompanying drawings, which Is form a part of the same, and in which—

Figure 1 is a perspective view of a portion of a neck-yoke, showing the improvement applied thereto. Fig. 2 is a longitudinal section of the same on a larger scale. Fig. 3 is 20 a cross-section. Fig. 4 is a detail view of one of the eyebolts. Fig. 5 is a top plan view of the fastener-plate.

Like numerals of reference designate like and corresponding parts in the several figures

25 of the drawings.

The invention, as shown, comprises a polering 10, supporting-eyebolts 11 for securing the ring to the neck-yoke, and a fasteningplate 12, which forms a common locking 30 means for securing the eyebolts in place.

In carrying out the invention the pole-ring is provided with an integral tangential journal-bar 13, which forms the two projecting pivot-arms 14, upon the ends of which at one 35 side are the locking-lugs 15. The pole-ring 10 is pivotally connected with the neck-yoke by means of the eyebolts 11. These eyebolts each comprise a cylindrical shank 16, one end of which is provided with oppositely-arranged 40 notches 17, which thereby form a head 18. The opposite end is enlarged, as at 19, and is provided with a keyhole-opening 20, which is adapted to receive the end of one of the pivotarms 14, the rectangular slot of the keyhole-45 opening and the locking-lug being relatively arranged, so that when the ring is in operative position, as shown in Figs. 1 and 3, said lug and slot are out of alinement.

In connecting the ring 10 to the eyebolts 50 the lugs 15 are alined with the rectangular slots of the keyhole-openings and the eye-

are then rotated upon the arms 14 and are passed through openings in the neck-yoke, being so arranged that the heads 18 and the 55 notches 17 will project beyond the opposite side. In this position it will be seen that the ring is pivotally secured to the neck-yoke and there is no possibility that it will become accidentally displaced.

In order to secure the eyebolts to the neckyoke, the fastening-plate 12 is provided. This comprises a flat plate having its ends provided with the oppositely-disposed keyhole-openings 21, the rectangular slots of said openings 65 being offset from the sides of the circular

openings facing each other. Projecting from the central portion of the plate is the spike 22, which is preferably made integral there-

with. In the construction of the device the plate is originally arched, as shown in dotted lines in Fig. 2, so that the circular openings will aline with the heads of the eyebolts, which are passed through the same in applying the 75 plate. The central portion is then hammered down and the spike will engage in the neckyoke and firmly hold the plate. At the same time the plate will be spread and the cutaway portions of the eyebolts will pass into 80 the rectangular slots, whereby the pins will

be securely locked in place. It will thus be seen that the plate forms a common locking means for both pins. By this means the ring is removably secured to the neck-yoke with- 85 out the necessity of screws or similar fastening devices, which have a tendency to work loose. The fastening-plate forms a broad bearing-surface against the yoke and there is no liability of the pins being pulled through. 90 At the same time the ring is securely locked to the eyebolts and there is no chance of accidental displacement.

It is to be understood that the device is not to be limited to use as a neck-yoke center, as 95 it may be used with equal advantage in a variety of ways.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will 100 be apparent to those skilled in the art without further description, and it will be understood that changes in the size, shape, probolts are passed over the same. The eyebolts | portion, and minor details of construction

may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having now fully described the invention, 5 what I claim as new, and desire to secure by

Letters Patent, is—

1. In a device of the class described, the combination with supporting-eyes, of a ring, projecting pivot-arms carried by the ring 10 and having a loose interlocking engagement with the supporting - eyes, said interlocking engagement comprising means whereby the pivot-arms may be disengaged from the supporting-eyes by a partial turning thereof.

2. In a device of the class described, the combination with eyebolts, of a ring, and a journal-bar carried by the ring and having a loose interlocking engagement with the eye-

bolts, substantially as described.

3. In a device of the class described, the combination with eyebolts provided with keyhole-openings, of a ring, a journal-bar carried by the ring and having lugs upon its outer ends, the ends of said bar passing through 25 the keyhole-openings and relatively arranged with relation to the same, so that the lugs are out of alinement with the slots of the keyhole-openings when the ring is in operative position, substantially as described.

4. In a device of the class described, the combination with supporting-bolts, of a ring pivotally connected with said bolts, and a single securing device having means adapted to be engaged with the yoke, and arranged to

35 secure both bolts by the act of fastening it to

the yoke, substantially as described. 5. In a device of the class described, the

combination with supporting-bolts, of a ring pivotally connected with said bolts, and a single pliable securing device normally bent 40 and adapted, when straightened, to engage both bolts and form a fastening means for the same, substantially as described.

6. In a device of the class described, the combination with supporting-bolts, of a ring 45 pivotally connected with said bolts, and a pliable bowed locking-plate having engaging means at its opposite ends adapted to lock the bolts upon straightening the plate, substantially as described.

7. In a device of the class described, the combination with supporting-bolts having notches near their ends, of a ring pivotally connected with said bolts, and a pliable locking-plate having keyhole-openings in which 55 the notched ends of said supporting-bolts en-

gage, substantially as described.

8. In a device of the class described, the combination with supporting-bolts, each being provided at one end with an eye and at 60 the opposite end with opposite notches forming a head, of a ring having projecting arms pivotally interlocked in the eyes of the supporting-bolts, and a fastening-plate having oppositely-arranged keyhole-openings adapt- 65 ed to engage under the heads of the supporting-bolts, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

the presence of two witnesses.

FINIS EWING LACK.

 $\mathbf{Witnesses}:$

R. Rudy, E. J. PAXTON.