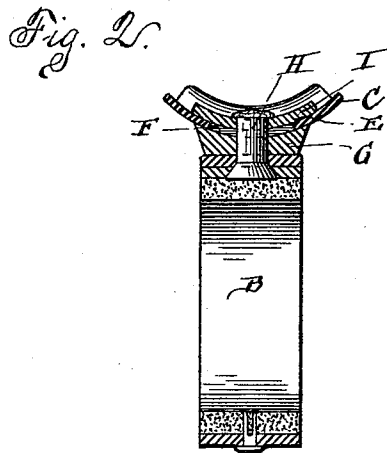
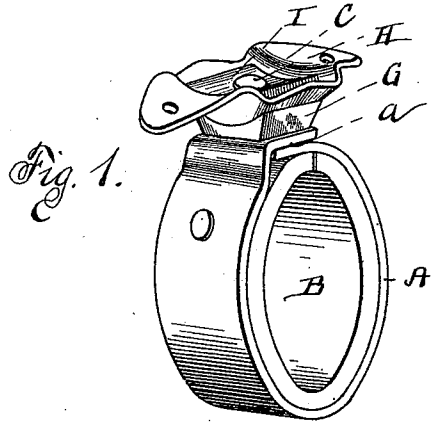


(No Model.)

E. M. VAN VALKENBURG.
NECK YOKE CENTER.

No. 516,138.

Patented Mar. 6, 1894.



WITNESSES

Geo. M. Anderson
Phil. C. Massi.

INVENTOR

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UNITED STATES PATENT OFFICE.

ELLIS M. VAN VALKENBURG, OF RACINE, WISCONSIN, ASSIGNOR TO S. C. JOHNSON, OF SAME PLACE.

NECK-YOKE CENTER.

SPECIFICATION forming part of Letters Patent No. 516,138, dated March 6, 1894.

Application filed October 17, 1893. Serial No. 488,413. (No model.)

To all whom it may concern:

Be it known that I, ELLIS M. VAN VALKENBURG, a citizen of the United States, and a resident of Racine, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Neck-Yoke Centers; and I do 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a perspective view of the invention and Fig. 2 is a vertical central section.

This invention has relation to certain new and useful improvements in neck yoke centers, and is designed to provide a simple and practical device of this character possessing several novel features of construction and combination, all as hereinafter described and pointed out in the appended claims.

Referring to the accompanying drawings illustrating the invention, the letter A designates the ring, which consists preferably of a thin plate of metal, usually steel, bent into circular form and having its ends lap-jointed as shown at *a*. Secured within said ring is a lining B, of leather, rubber, or other material suited for the purpose.

C designates the attachment plate which is designed to be secured to the under side of the yoke-bar, and which is shown as of somewhat elongated oval form. At its central portion said plate is depressed transversely, as shown at E, concave on its upper and convex on its lower face. Extending transversely of said depression is an elongated slot F.

G is a bearing plate concaved on its upper surface to fit the convexity on the lower face of the depression E, its lower face bearing on the upper lap of the ring A.

His the swivel bolt or pin which is inserted up through the lap-joint of the ring, the bearing plate G, the slot F, and through an upper movable concavo-convex plate I, seated in the depression E. The upper end of said bolt or pin is secured by riveting, or other suitable means. This construction gives the center a free rotary movement, and also permits the ring to slide back and forth to adjust itself to the inclination of the pole or tongue.

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

1. A neck-yoke center, comprising a ring, an attachment plate having a transverse depressed portion, an elongated slot through said depressed portion, a bearing plate fitted to the under side of said depressed portion and working on the ring, and a loose or swivel bolt secured in the ring and passing upwardly through said bearing plate and slot and secured, substantially as specified.

2. The herein described neck-yoke center, comprising a ring formed from a thin strip of metal and having its ends lap-jointed, a lining in said ring, an attachment plate depressed at its central portion, and having an elongated slot, said depressed portion having a convex lower face, a bearing plate fitting said lower surface and bearing on the ring, an upper bearing plate fitted in the depressed portion of said attachment plate and capable of an endwise movement, and a loose or swivel bolt connecting said parts, substantially as specified.

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

ELLIS M. VAN VALKENBURG.

Witnesses:

C. R. CARPENTER,
JOHN H. HAPP.