H. D. GIBBS.

Neck-Yoke Clasps.

No. 155,437. Patented Sept. 29, 1874.

Fig. 4

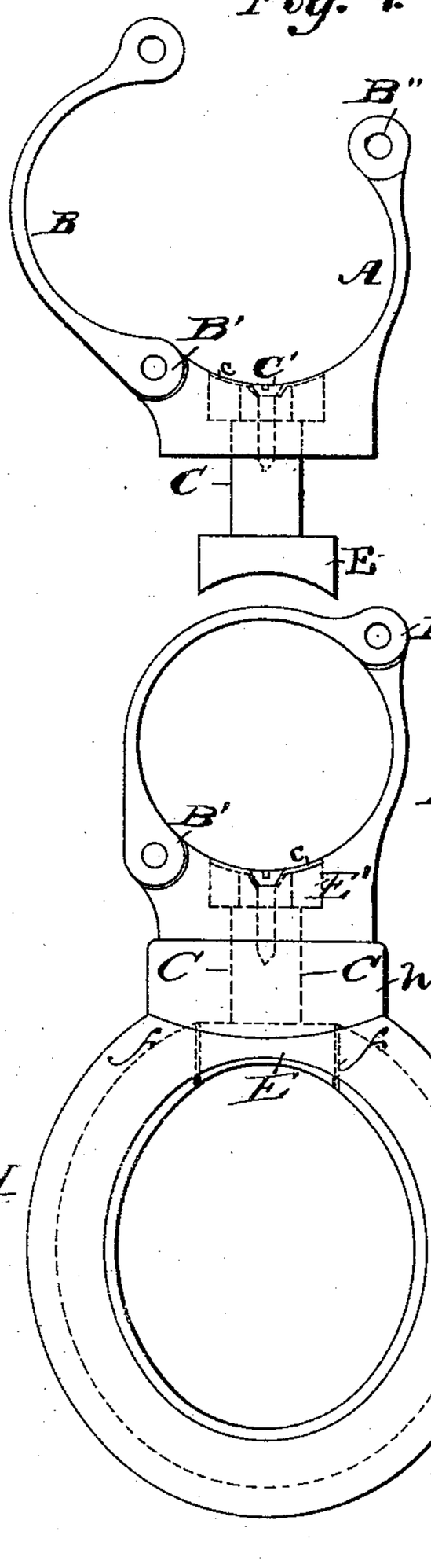


Fig. 1.

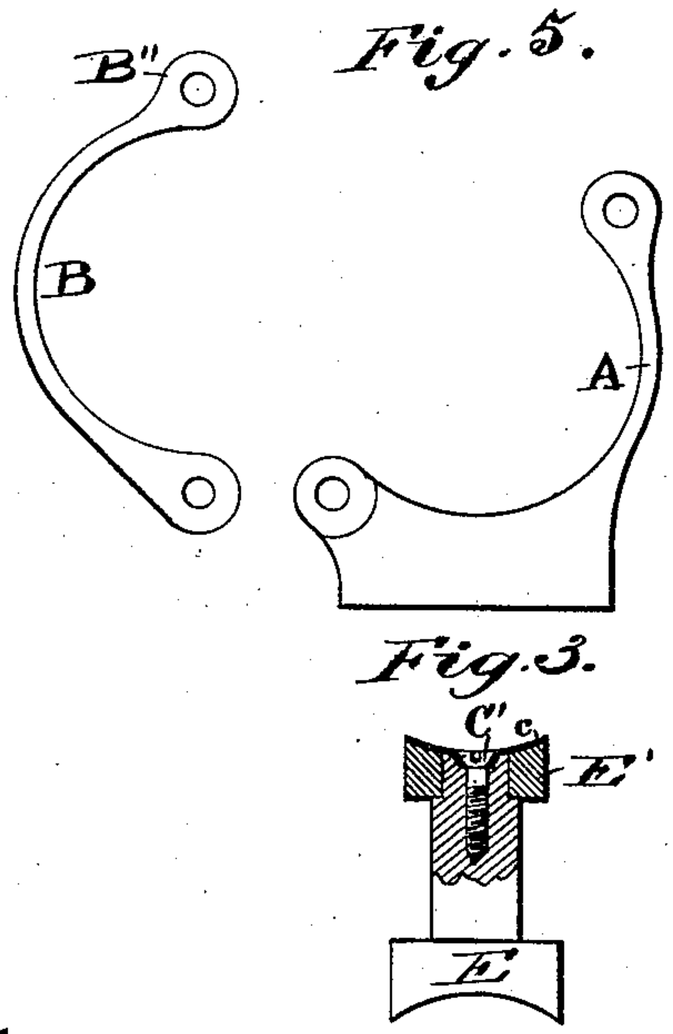
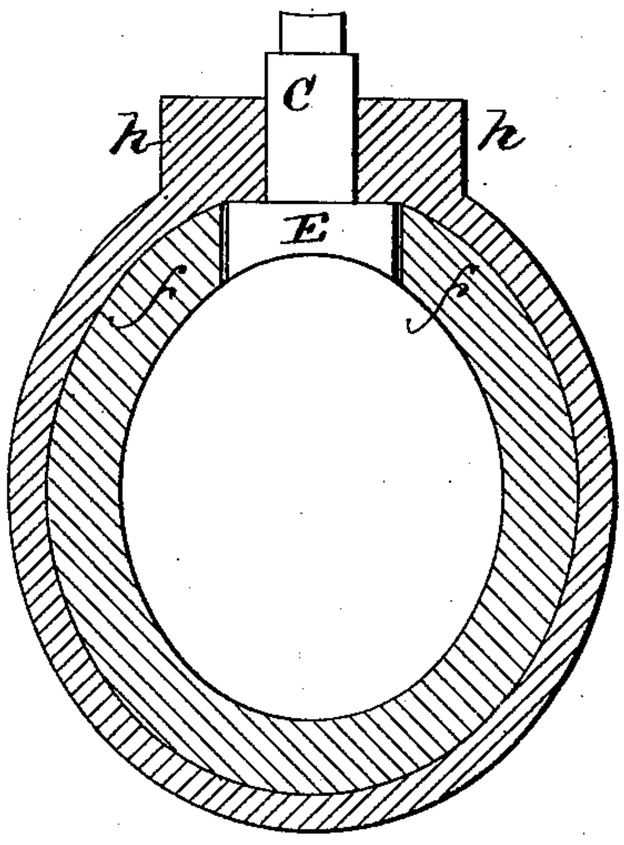


Fig. 3.

Fig. 5.

Fig. 2.



Witnesses.

Alan J. Fox.

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UNITED STATES PATENT OFFICE.

HORACE DEWITT GIBBS, OF BATAVIA, NEW YORK.

IMPROVEMENT IN NECK-YOKE CLASPS.

Specification forming part of Letters Patent No. **155,437**, dated September 29, 1874; application filed June 18, 1874.

To all whom it may concern:

Be it known that I, HORACE D. GIBBS, of Batavia, in the county of Genesee and State of New York, have invented a new and useful Improvement in Neck-Yoke Clasps, of which the following is a specification:

My invention relates to improvements in devices for connecting the neck-yoke with the draft-poles of vehicles and machines or implements which require the use of a tongue or draft-pole and neck-yoke.

The invention consists in a new and improved combined ring and clasp, the ring being oval-shaped, convex on its outer and concave on its inner side or periphery, and its concavity packed with leather, rubber, or other suitable material; the clasp being united to the ring by means of a swivel bolt-and nut of peculiar construction, the whole being constructed so that, when in use, there is no sudden strain upon the pole or ring when one horse suddenly stops or starts ahead, or moves quicker than the other, and obviates the cutting away or undue wear and consequent weakening of the pole at the point of contact with the ring, all as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is an elevation of my improved combined neck-yoke ring and clasp. Fig. 2 is a vertical sectional view of the ring with the swivel-bolt in position. Fig. 3 is a detached view of the swivel-bolt, partially in section. Fig. 4 is an elevation of the clasp and bolt detached from the ring, and Fig. 5 is a view of the portions of the clasp detached.

Referring to the parts by letters, A B represent the clasp, the portion B being hinged or pivoted, at B′, to the portion A, and when closed both portions are united by passing a pin or bolt through the hinge-connection or eyed lugs B″. C is the pivot-bolt, formed, as shown in the drawings, with an oblong head, E, having rectangular sides, except the under one, which is arc-shaped, as shown. The upper end of the bolt C is passed through a circular slot formed in the portion A of the clasp, the upper portion of the slot being enlarged to form an annular countersink for the ring or washer E′, which is inserted therein, and fits the end of the bolt C. C′ is a screw or rivet, and *c* a washer, which unite the bolt C and washer E′, and thereby complete the swivel-connection between the ring C and clasp A B. H represents the ring, made of metal, oval in shape, convex on its outer and concave on its inner surface or periphery, and having a head, *h*. *f* is an inner ring or packing of leather, rubber, or other suitable material, convex on its outer surface. It is inserted within the concavity of the ring H, and held in position by its form and the head E of bolt C. These rings H and *f* are both oval in form, and when united are oval in their cross-section, and thereby allow of more side play on the pole; then, if round in form and cross-section, and the inner ring being elastic, it prevents wear or the cutting of the pole by friction, while, through the swiveled connection of the rings with the clasp, a perfectly free lateral play is given to the yoke, so as to permit of one horse suddenly stepping or starting or moving ahead of the other without injury.

Having thus described my invention, what I claim is—

The elliptical concavo-convex metallic ring H and elastic ring or packing *f*, united and connected to the clasp A B by means of the pivot-bolt C, having oblong head E, countersunk ring E′, and screw or rivet *c*, all combined substantially as and for the purpose specified.

HORACE D. GIBBS.

Witnesses:

ALVIN J. FOX,

MARSHFIELD BURT.