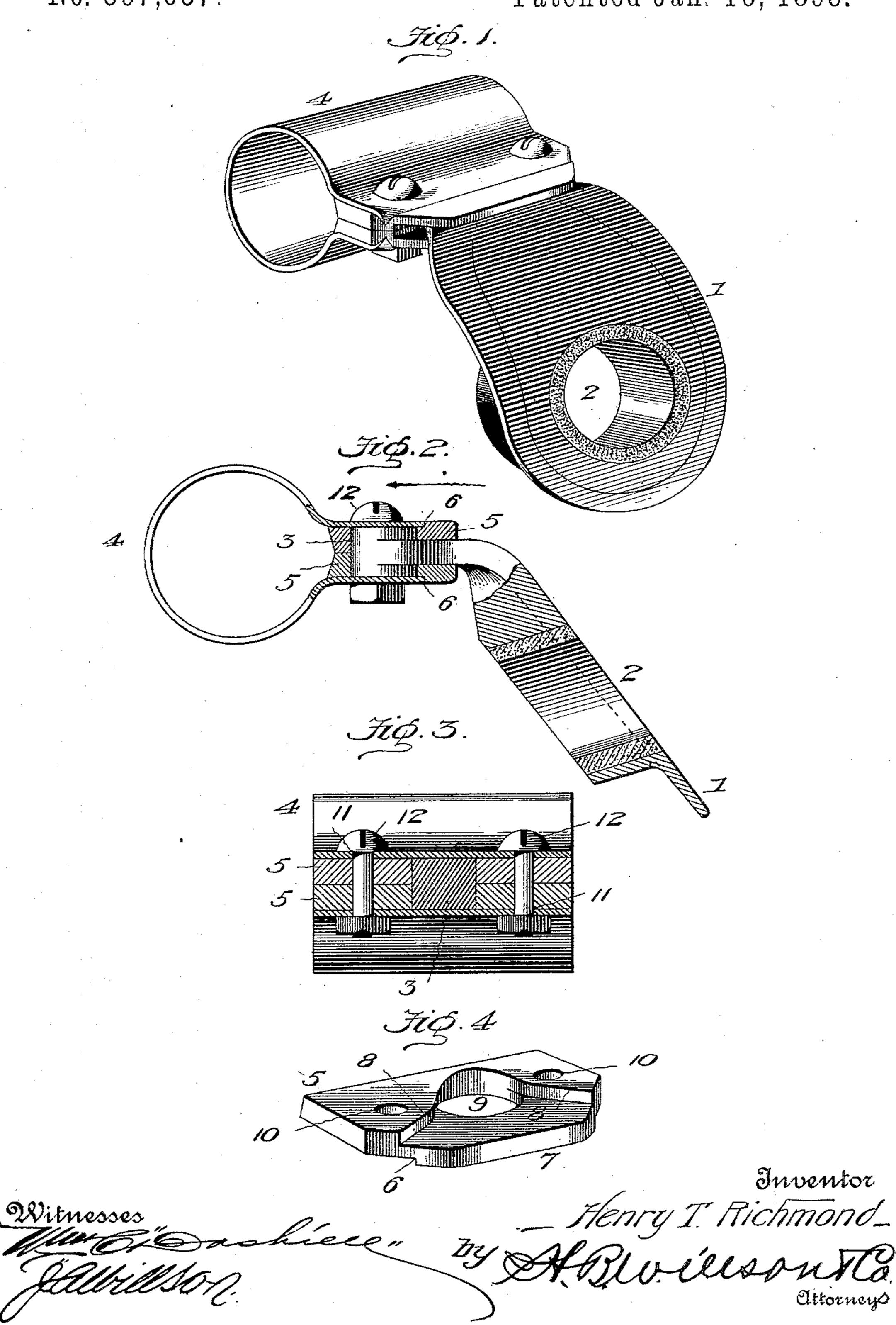
(No Model.)

## H. T. RICHMOND. NECK YOKE CENTER.

No. 597,657.

Patented Jan. 18, 1898.



## United States Patent Office.

HENRY T. RICHMOND, OF GLENWOOD, IOWA.

## NECK-YOKE CENTER.

SPECIFICATION forming part of Letters Patent No. 597,657, dated January 18, 1898.

Application filed October 30, 1897. Serial No. 656,954. (No model.)

To all whom it may concern:

Be it known that I, Henry T. RICHMOND, a citizen of the United States, residing at Glenwood, in the county of Mills and State of Iowa, 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.

My invention has relation to neck-yoke centers. The object of the invention is to simplify the construction and provide a strong and durable neck-yoke center, in the construction of the joint or knuckle of which mainly

resides my invention.

With this object in view the invention consists of certain features of construction and combination of parts which will be herein-

20 after fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my improved neck-yoke center. Fig. 2 is a longitudinal sectional view. Fig. 3 is a similar view taken at right angles to Fig. 2, and Fig. 4 is a detail perspective view of one of the knuckle-plates.

In said drawings, 1 denotes the pole-plate, having an eye 2 to receive the pole and having its upper end bent inwardly and formed with a strong lug 3, which projects above and below the upper and lower sides of the

inner ends of the pole-plate.

4 denotes the yoke-strap, which is adapted to embrace the yoke, and 5 denotes the lug35 plates, of which there are two. Each plate is provided with a recess 6 and a forward extension 7, the recess fitting the jaws of the yoke-strap and the extension projecting beyond the ends of the jaws and the shoulders of said extensions fitting the edges of the jaws. The opposing sides of the lug-plates are recessed, as shown, said recess having inclined edges 8. Each of the plates is provided with a lug-opening 9 and with bolt45 openings 10, that register with similar openings 11 in the jaws of the yoke-strap.

12 denotes bolts for clamping the parts to-

gether.

It will be noticed that by this construction
50 I am enabled to use a much wider yoke-strap,
and also that all strain upon the bolts is entirely overcome, being received by the lug of
the pole-plate, which has a swinging movement between the lug-plates in the opposing

recesses thereof. Furthermore, by project- 55 ing the ends of the lug-plates over the poleplate the latter is stiffened and protected from any undue strain.

It will be noticed that the pole-plate is made of one single piece, which may be cast 60 or otherwise formed, and owing to its wide front, which is adapted to be enameled, it has the appearance of a leather center.

To prevent the marring or rubbing of the pole, the end of the pole-plate may be lined 65 with a ring of leather or other flexible material.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood.

Leather or other flexible material is entirely dispensed with, except where it is desired to line the eye of the pole-plate, and a much stronger and more durable center is pro-75 duced.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is-

1. A neck-yoke center, comprising in combination a yoke-strap, a pole-plate having an upwardly and inwardly projecting extension formed with a lug, lug-plates clamped between the jaws of the yoke-strap, and provided with apertures to receive the lug of 85 the pole-plate, and with opposing recesses, the walls of which diverge to permit of the swinging of the pole-plate between the lug-plates, substantially as set forth.

2. A neck-yoke center, comprising in combination a yoke-strap, a pole-plate having an upwardly and inwardly projecting extension formed with a lug, lug-plates clamped between the jaws of the yoke-strap, and provided with apertures to receive the lug of the 95 pole-plate, and with opposing recesses, the walls of which diverge to permit of the swinging of the pole-plate between the lug-plates, said lug-plates being provided with forward extensions which project beyond the jaws of 100 the yoke-strap, substantially as set forth.

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

## HENRY T. RICHMOND.

Witnesses:

T. Q. RECORDS, P. P. KELLEY.