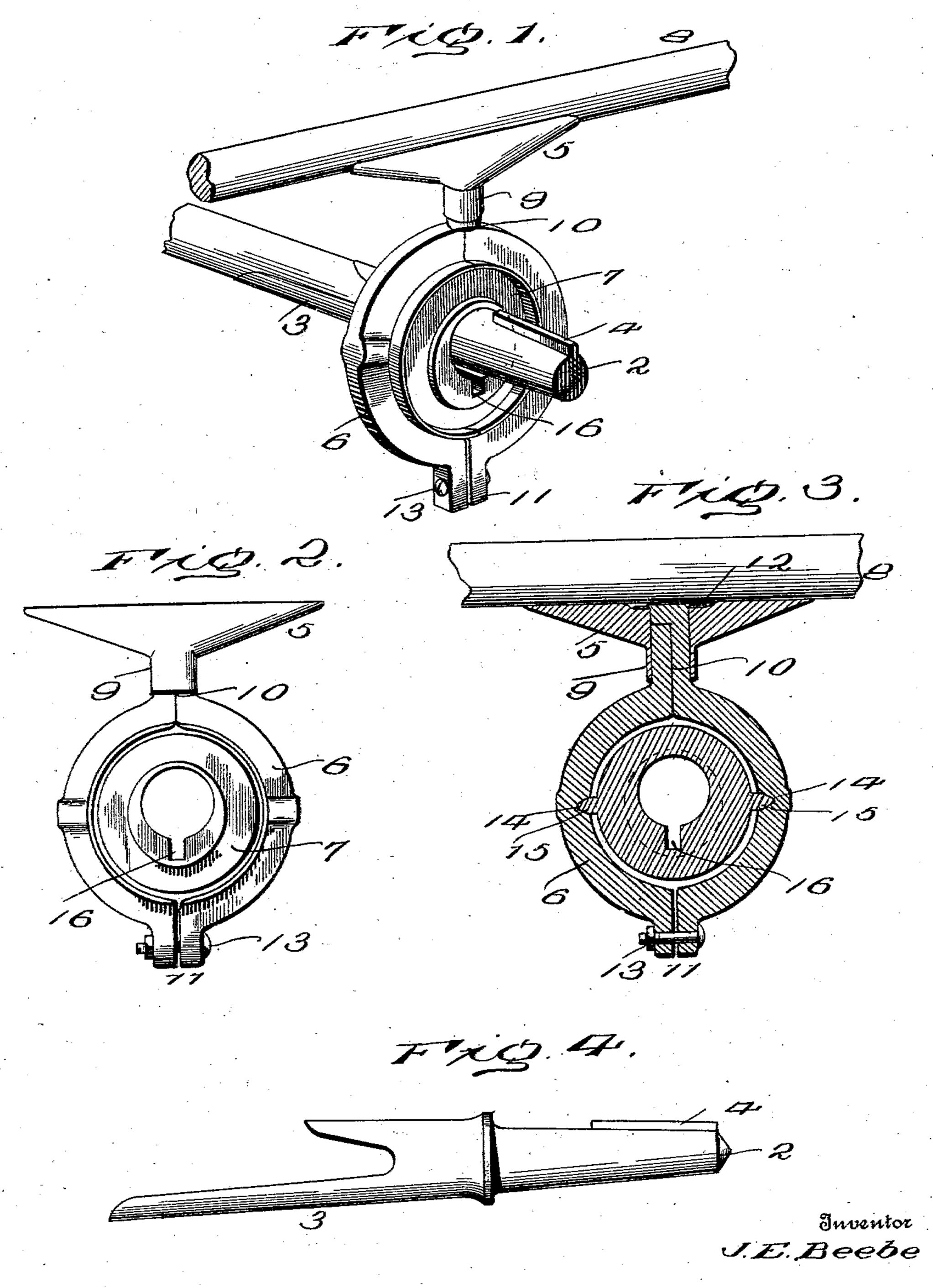
J. E. BEEBE. NECK YOKE CENTER. APPLICATION FILED AUG. 14, 1903.

NO MODEL.



Mitnesses. M. M. Holmston. J. H. Johnston.

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United States Patent Office.

JOSEPH E. BEEBE, OF HARLAN, IOWA.

NECK-YOKE CENTER.

SPECIFICATION forming part of Letters Patent No. 757,594, dated April 19, 1904.

Application filed August 14, 1903. Serial No. 169,517. (No model.)

To all whom it may concern:

Be it known that I, Joseph E. Beebe, a citizen of the United States, residing at Harlan, in the county of Shelby and State of Iowa, have invented certain new and useful Improvements in Neck-Yoke Centers, of which the fol-

lowing is a specification.

This invention relates to neck-yoke centers, the purpose being to improve the general construction of this class of devices, whereby their efficiency and usefulness are enhanced, to mount the center so as to adapt itself to the various directions of strain, and to fashion the parts and combine them in a way to admit of wear and lost motion being readily taken up.

Other objects and advantages will be apparent and suggest themselves to those skilled in the art as the details of the invention are comprehended, and to this end reference is to be had to the drawings hereto attached and to

the following description.

Figure 1 is a perspective view of a neckyoke center embodying the invention, showing it applied. Fig. 2 is a front view of the neck-yoke center, on a larger scale, showing it applied to the pole-tip. Fig. 3 is a vertical section of the neck-yoke center, showing a portion of the neck-yoke attached thereto. Fig. 3 is a detail side view of the pole-tip.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same

reference characters.

The pole or tongue 1 may be of any design or construction, according to the pattern and style of vehicle for which it is intended. The pole-tip 2 is provided at a distance from its extremity with the shoulder 3 and has a longitudinal rib 4 spaced at its inner end from the shoulder, the yoke-center when in position occupying the space formed between the shoulder 3 and inner end of the longitudinal rib 4. The pole-tip is fitted upon the outer end of the pole and is secured thereto in any substantial manner.

The neck-yoke center comprises the clip 5, suspending-ring 6, and the pole-tip ring 7. The clip 5 is bolted to the neck-yoke 8 or otherwise attached thereto in any convenient

way and is provided with a socket 9, which receives the attaching end of the suspendingring, which latter is connected to the neckyoke by a swivel-joint, so as to admit of the parts turning freely. The suspending-ring is 55 composed of similar parts or sections of semicircular formation, each section having outer extensions 10 and 11. The upper extensions 10 are half-round and when the parts of the ring are fitted together form a substantially 60 round end, which is fitted into the socket 9, so as to turn therein, one of the extensions being projected to form a stem, to which a washer 12 is secured, said washer being countersunk into the upper side of the clip 65 5 to admit of the neck-yoke obtaining a snug fit upon the clip. The lower extensions 11 are transversely apertured and receive a bolt 13, by means of which the lower ends of the sections or parts are connected and adapt- 70 ed to be drawn together, so as to compensate for wear between the pivot connections between the rings 6 and 7. Sockets 14 are formed in the inner sides of the suspending-ring at diametrically opposite points and receive the 75 pivot-bearings 15 of the pole-tip ring 7. The sockets 14 and pivot-bearings 15 are approximately of conical form, and any wear between them is adapted to be taken up by tightening the bolt 13 in the manner stated. The pole-80 tip ring 7 is mounted within the suspendingring, so as to turn freely about a horizontal axis, and is provided at opposite points with the pivot-bearings 15 and upon its inner side with a groove 16 to receive the longitudinal 85 rib 4 when sliding the yoke-center on or off of the pole-tip. When it is required to place the yoke-center upon the pole-tip or to remove it therefrom, it is necessary that the neck-yoke be given a half-turn in order to 90 bring the groove 16 in register with the rib 4, and after the yoke-center has been slipped upon the pole-tip up to the shoulder 3 the neckyoke is given a half-turn to throw the groove 16 out of register with the rib 4, so that the 95 said parts 16 and 4 occupy positions diametrically opposed to each other, as indicated most clearly in Fig. 1, thereby preventing the casual displacement of the yoke-center from the pole-tip.

Having thus described the invention, what

is claimed as new is—

1. In combination, a pole-tip having a shoulder and a rib spaced therefrom, a neck-yoke center comprising a suspending-ring, a pole-tip ring pivotally mounted within the suspending-ring and having a groove to receive the rib of the pole-tip, substantially as set forth.

2. In a neck-yoke center, the combination of a suspending-ring, a pole-tip ring pivotally mounted within the suspending-ring, and means for contracting the suspending-ring to compensate for wear between the pivot-mountings of the pole-tip ring, substantially as set forth.

3. In combination, a clip, a suspending-ring

composed of similar parts having outer extensions at the extremities of said parts, means for connecting corresponding extensions to the clip by a swivel-joint, means for connecting the remaining extensions so as to contract the suspending-ring, and a pole-tip ring having oppositely-disposed bearings mounted in sockets of the parts of the suspending-ring, substantially as described.

In testimony whereof I affix my signature in

presence of two witnesses.

JOSEPH E. BEEBE. [L. s.]

Witnesses:

IRA B. OVERHOLT, W. L. PAUP.