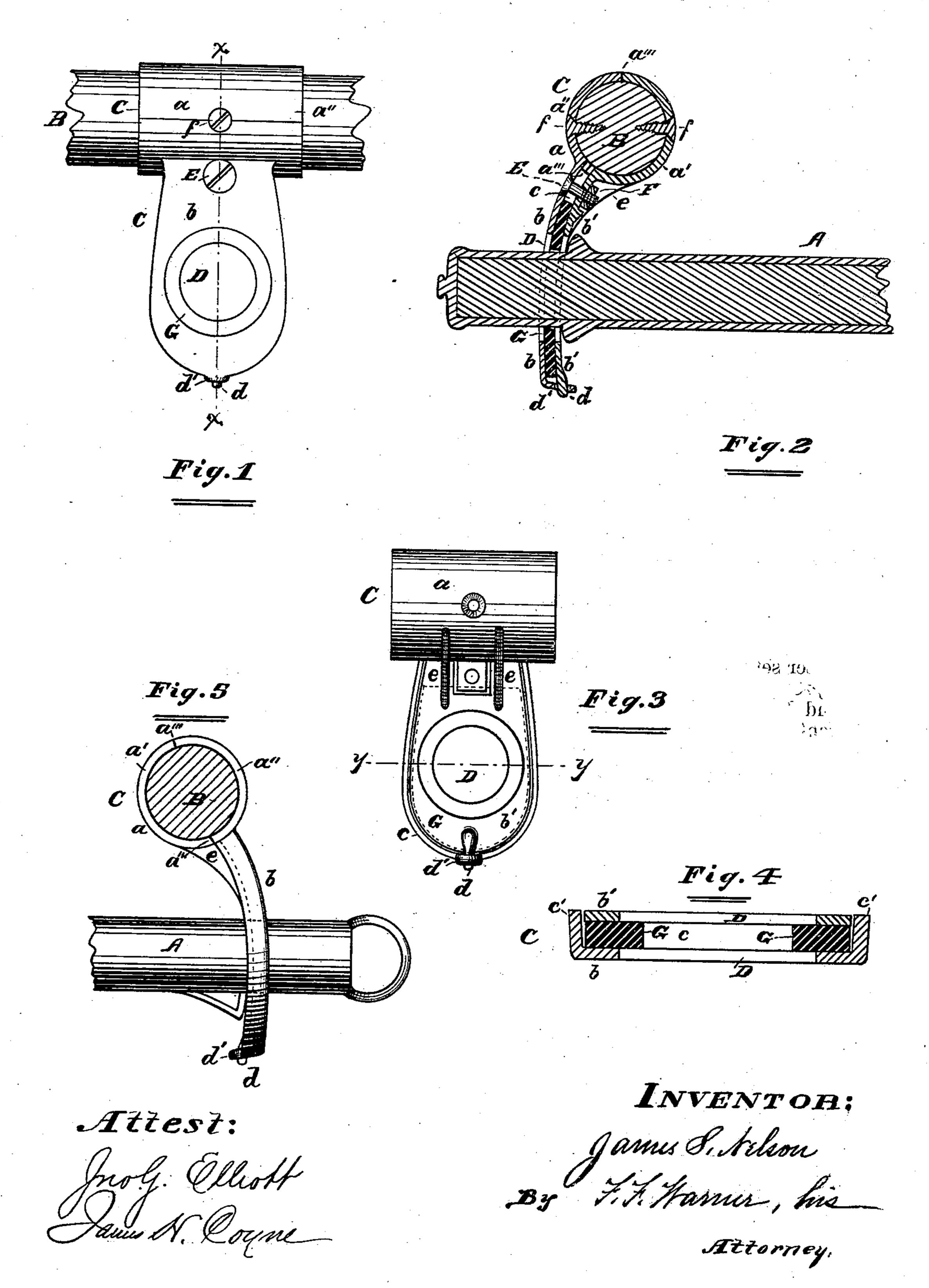
## J. S. NELSON. Neck-Yoke Center.

No. 226,670.

Patented April 20, 1880.



## United States Patent Office.

JAMES S. NELSON, OF HILLSBOROUGH, ILLINOIS, ASSIGNOR TO WILLIAM H. HAYS AND HENRY M. SMITHDEAL, OF SAME PLACE; SAID SMITHDEAL ASSIGNOR TO JAMES B. DOBYNE, OF SAME PLACE.

## NECK-YOKE CENTER.

SPECIFICATION forming part of Letters Patent No. 226,670, dated April 20, 1880.

Application filed August 21, 1879.

To all whom it may concern:

Be it known that I, James S. Nelson, of Hillsborough, in the county of Montgomery and State of Illinois, have invented certain new and useful Improvements in Neck-Yoke Centers, of which the following, in connection with the accompanying drawings, is a specification.

Figure 1 is a front view of a neck-yoke center embodying my invention; Fig. 2, a section in the plane of the line xx; Fig. 3, a rear view, and Fig. 4 a section in the plane of the line yy; and Fig. 5, an edge view of the center of the center of the center of the section in the plane of the center of the center of the section in the plane of the center of the c

ter applied to a carriage-pole.

Like letters of reference indicate like parts. My object is to improve the construction of metallic neck-yokes; and to that end my invention consists of the several novel features hereinaft. It forth as new.

A represents a wagon-tongue or carriagepole, and B the neck-yoke. C is the neckyoke center. The center C consists of the hollow or tubular part or ferrule, a, made in two parts, a' a'', adapted to clamp the central 25 portion of the yoke B, the meeting edges of the said parts extending longitudinally along the yoke, as indicated at a''' a''', Fig. 2. Extending from the lower meeting edges of the parts a' a'', and forming a part of the center 30 C, are the tongues b b', one depending from each of the said edges. The tongues b b' are parallel to each other, as shown, and are, by preference, bowed or bent forward, as indicated in Fig. 2, so as to hang a little forward 35 from the yoke, and to present a vertical or nearly vertical part to the tongue or pole A.

Between the tongues b b' is the space or recess c, and I deem it preferable to make a rearwardly extending flange, c', along the edge of the forward part or tongue b, so as to inclose the space c. A small tongue or dowel, d, projects from the lower end of the tongue b', and d' is an eye arranged on the lower end

of the tongue b to receive the dowel d.

e e are webs to brace or strengthen the pendent parts of the center C, and E is a bolt, and F a nut, the bolt and nut being employed to clamp together the two main parts of the cen-

ter C, the bolt passing through the tongues at a point near the yoke, as indicated; but any 50 suitable clamping device may be employed for the same purpose.

D D are central openings in the tongues b and b', and these openings I make considerably greater in diameter than the diameter of 55 that part of the pole or tongue in connection with which the center C is to be used.

G is a disk of leather, rubber, or similar material, clamped between the tongues b and b', and having a central opening therein to receive the pole or tongue A, and to serve as a cushion to keep the pole from contact with the tongues b b', which, as well as all the other parts of the center C excepting the said cushion, are made of metal.

The dowel d, eye d', and webs e e are not absolutely essential; but I deem them prefer-

able.

The center C is applied for use substantially as indicated in Fig. 2, and f are screws, 70 which may be employed, if deemed necessary, to connect the center C more rigidly to the yoke B in case the clamping bolt and nut do not render the connection sufficiently rigid.

It will be perceived that the center C consists of two metallic parts, which may be easily cast and clamped to the yoke, and that it is adapted to carry or hold the annular cushion G in such a manner that the latter may be applied and removed with facility. The censor ter C may also be used with a yoke employed either in connection with a carriage pole or a wagon-tongue.

Having thus described my invention, what I claim as new, and desire to secure by Let- 85

ters Patent, is—

1. The combination of the split ferrule a, made in two parts, a' and a'', the open tongue b', depending from the lower edge of one of the said parts, and having thereon the inclosing- 90 flange c' and the eye d', the open tongue b, extending from the lower edge of the other part of the said ferrule, and having thereon the dowel d and lying within the flange c', the annular cushion G, and a clamp, substantially 95 as and for the purposes specified.

2. The combination of the horizontally-split ferrule or neck-yoke clamp a, made in two parts, a' a'', each having an open tongue, b b', depending therefrom, one of the said tongues having thereon the dowel d and the other having therein the eye d', the annular cushion G, and a clamp for clamping the said parts

together, substantially as and for the purposes specified.

JAMES S. NELSON.

Witnesses:

THOS. GERRISH, GEO. SPENCE.