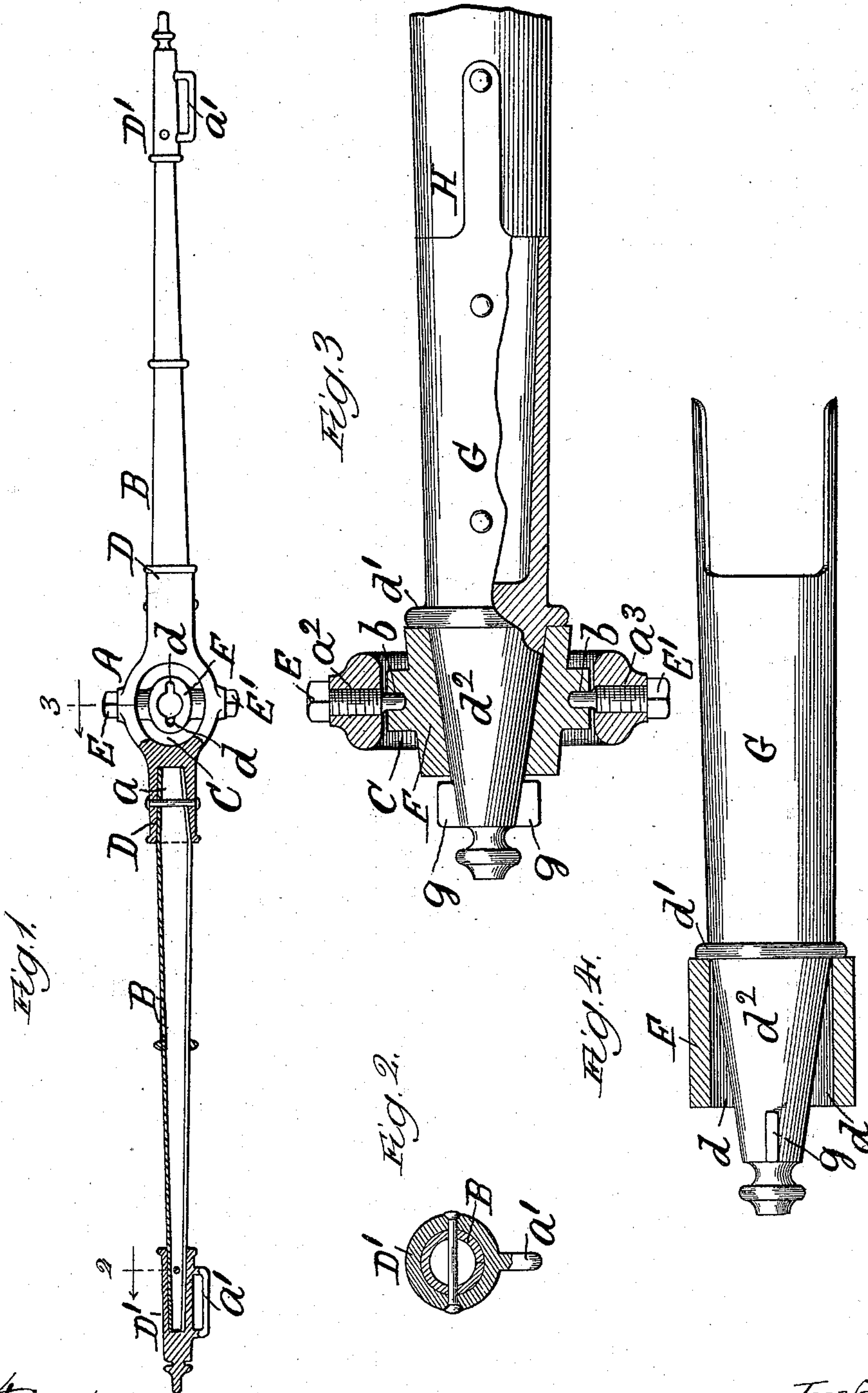


(No Model.)

G. PEDERSEN.  
NECK YOKE.

No. 547,182.

Patented Oct. 1, 1895.



Witnesses:  
Chas. E. Gaylord,  
Lute B. Allen.

Inventor:  
George Pedersen.  
By L. B. Coupland & Co  
Attys.



# UNITED STATES PATENT OFFICE.

GEORGE PEDERSEN, OF HOBART, INDIANA.

## NECK-YOKE.

SPECIFICATION forming part of Letters Patent No. 547,182, dated October 1, 1895.

Application filed November 24, 1893. Serial No. 491,903. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE PEDERSEN, a citizen of the United States, residing at Hobart, in the county of Lake and State of Indiana, have invented certain new and useful Improvements in Neck-Yokes, of which the following is a full, clear, and exact description, that will enable others to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to improvements in metal neck-yokes, and has for its object to provide a device of this kind combining lightness, strength, and durability, as will be hereinafter set forth in detail.

The nature of the invention consists in constructing the yoke part proper of sheet metal, which is pressed or rolled into the desired hollow form. The steel structure possesses advantages over that of the ordinary yoke made of wood in that the structure is lighter than a wooden one of the same strength, can be manufactured more cheaply, and is generally of a more serviceable character.

In the drawings, Figure 1 is a part elevation and part longitudinal section of a device embodying my improved features; Fig. 2, a transverse section on line 2, Fig. 1, looking in the direction indicated by the arrow; Fig. 3, a transverse section on line 3, Fig. 1, a broken-away part of a vertical pole being shown, which is omitted in Fig. 1; and Fig. 4 is a plan view of the pole-cap, the yoke-sleeve being shown in section.

The structure proper comprises a central body part A and a bar part consisting of two yoke members B B. The body part is provided, centrally, with an opening C and terminates in the socket ends D D. In joining the parts together the inner ends of the yoke members are inserted in the respective socket ends of the body part, as shown at *a*, Fig. 1. The joining parts are firmly united by being shrunk together, and in addition may be riveted. The yoke or bar members are in the form of a tube, gradually tapering outwardly to the terminal ends. These tubular or hollow members are made from a single piece of sheet metal, steel being preferably used, and are pressed or rolled into the desired form by means of suitable mechanism. The respect-

ive outer ends are provided with tubular caps D', which slip over said ends and are rigidly secured in place. These cap ends are provided with loops *a'* for the reception of the attaching harness-straps. The body part A is provided in the upper side with an aperture *a*<sup>2</sup> and in the under opposite side with a similar aperture *a*<sup>3</sup> for the insertion of the screw-threaded pivot-bolts E E'. The terminal pivot ends of these bolts are smooth and not threaded, and are inserted loosely in recesses *b b*, located at opposite sides of a sleeve F, loosely seated in opening C in the body part A. This sleeve is provided interiorly with grooves *d d* on opposite sides in a horizontal plane. A socket-cap G is fitted over the end of the vehicle-pole H and rigidly secured thereto. This socket part is provided with an annular shoulder *d'* and gradually tapers from this point to the end, as shown at *d*<sup>2</sup>, Fig. 3. The shoulder *d'* forms an abutting stop for sleeve F. The interior of the sleeve F is of a correspondingly decreasing diameter from the inner end outwardly, so as to conform to the bearing-surface of the socket part and provide for an easy movement when joined together or in engaging or disengaging the yoke. When in use, the sleeve F, together with the pole, will have a free swinging movement on its pivot-bolts independently of the yoke.

The socket-cap G is provided on its upper and lower sides with locking-lugs *g g*, extending straight up and down.

In placing the yoke in position on the pole it is held in a vertical position, so as to bring the locking-lugs and the grooves in the pivoted sleeves in the same plane, when it is easily slipped on, turned to its horizontal working position, and loosely locked in place by lugs *g*, which are then at right angles with reference to the grooves in sleeve F, thus rendering it impossible for the yoke to become accidentally disengaged.

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

1. A metal neck yoke consisting of the body part having a central transverse opening and having longitudinal sockets at the ends, the tapering wrought metal tubes securely held in said sockets, said tubes having end caps se-

cured thereto, and provided with loops for the attachment of harness straps, all substantially as described.

2. The metal neckyoke having the central  
5 body part and the sheet metal tubular arms secured in sockets in said body and provided with caps, said body having a transverse central passage, and the sleeve supported in said passage by pivot bolts projecting from the  
10 body portion into recesses in said sleeve, all combined substantially as described.

3. The metal neck yoke having the central

body portion with passage therein, the sheet metal tubular bars secured in sockets in said body, the sleeve supported in the opening in  
15 said body by pivot bolts projecting from the body into recesses in the sleeve, and the tapering socket cap on the pole having a shoulder against which the sleeve finds a bearing, all combined substantially as described.

GEORGE PEDERSEN.

Witnesses:

WM. H. REFENBURG,  
NORMA WETTENGEL.