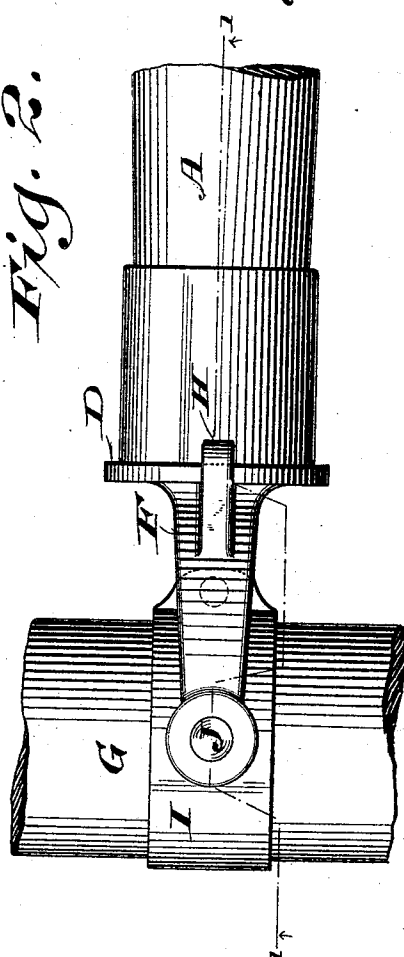
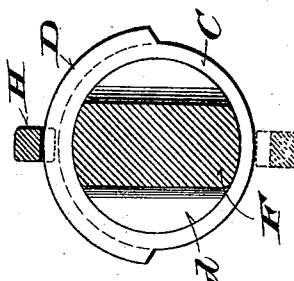
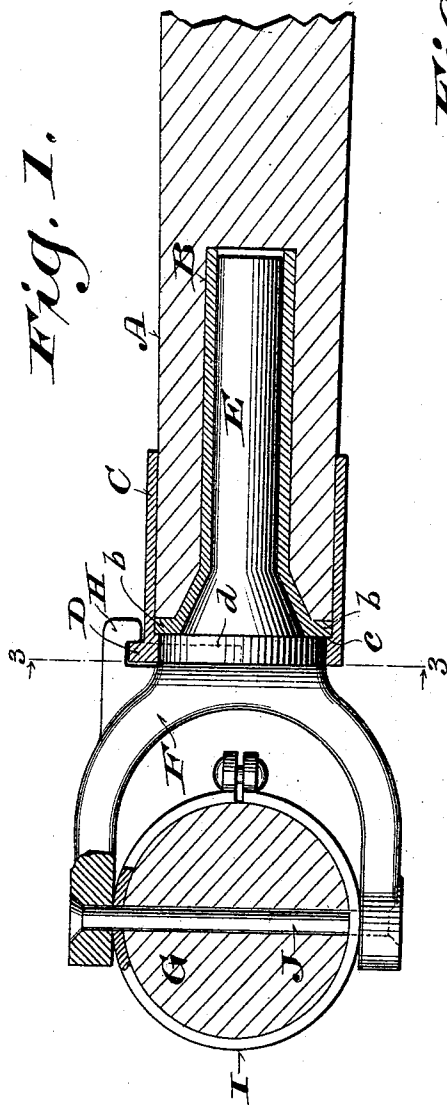


(No Model.)

H. L. KINGSLEY.
POLE AND NECK YOKE CONNECTION.

No. 538,682.

Patented May 7, 1895.



Witnesses:
Geo. W. Lounny,
N. E. Oliphant

Inventory;
• Horace L. Kingsley
By H. G. Underwood
Ottumwa.

UNITED STATES PATENT OFFICE.

HORACE L. KINGSLEY, OF RACINE, WISCONSIN.

POLE AND NECK-YOKE CONNECTION.

SPECIFICATION forming part of Letters Patent No. 538,682, dated May 7, 1895.

Application filed September 15, 1894. Serial No. 523,071. (No model.)

To all whom it may concern:

Be it known that I, HORACE L. KINGSLEY, a citizen of the United States, and a resident of Racine, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Pole and Neck-Yoke Connections; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide a simple, economical and durable pole and neck-yoke connection that may be in lock or otherwise at will; and it consists in certain peculiarities of construction and combination of parts hereinafter set forth with reference to the accompanying drawings and subsequently claimed.

In the drawings, Figure 1 represents a sectional view taken on line 1 1 of the succeeding figure to illustrate the various structural elements of my invention; Fig. 2, a plan view of a pole and neck-yoke in lock, and Fig. 3 a sectional view on line 3 3 of the first figure.

Referring by letter to the drawings, A represents the forward portion of a vehicle-pole bored longitudinally for the reception of a metallic sleeve B, that is preferably flared at its outer end and provided with an annular flange *b*, the latter being snug against the outer extremity of the pole. While I have described an improved and preferable construction of the sleeve it would be no departure from my present invention to employ a sleeve similar to the one shown and described in my Patent No. 523,148, dated July 17, 1894, the outer end of the latter sleeve being counter-sunk instead of flared.

Like in my former patent, I employ a ferrule C on the outer extremity of the pole A, but instead of having an annular shoulder *c* in the ferrule to serve as a seat for the sleeve-flange *b*, I prefer to have it overlap said flange and thus serve as a means for holding the sleeve in place, this improved construction being clearly illustrated in Fig. 1.

The present ferrule is provided with an outwardly extended flange D of any desirable extent so long as there is sufficient break to permit of a hook hereinafter specified being engaged with said flange.

The sleeve B above specified is for the en-

gagement of a shank E extending rearward from a device F to which a neck-yoke G is connected, this device being herein shown in the form of a fork having an annular shoulder *d* engaging that portion of the ferrule projecting beyond the sleeve B above specified. The shank and sleeve are of corresponding contour, and the former has free pivotal play in the latter. By having the outer end of the pole-sleeve B flaring and the corresponding portion of the shank E of like contour, I obtain an increased bearing surface and cheapen cost of production. Projecting rearward from the yoke-attaching device is a hook H of any suitable contour and said device being turned in the proper direction, after engagement of its shank with the aforesaid sleeve, the hook will engage with the ferrule-flange D to lock said yoke-attaching device in place.

As a matter of preference the flange D does not extend more than one-half the circumference of the ferrule C and consequently the shank E of the yoke attaching device may be in lock with the pole or otherwise according to the position of the hook H with respect to said flange, as in practice, the engagement of said shank with the sleeve B is effected and the neck-yoke turned up or down one-quarter of a circle to bring it horizontal or in working position. Some prefer the neck-yoke in lock with the pole, while others prefer the reverse and hence I have provided for either result at will.

The neck-yoke herein shown has a central band or clip I, and a pin J run through said yoke and clip or band thereon has its ends engaged with counter-sunk apertures in the branches of the fork F, said ends of the pin being upset. While this is one means of effecting a union between the neck-yoke and its attaching device, said device and the means for effecting a pivotal connection between the same and said neck-yoke may be other than what is herein shown without departure from what I seek to cover as my invention.

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

1. The combination of a vehicle-pole having its forward portion bored longitudinally,

a sleeve fitting the bore, a neck yoke attaching device having a shank detachably engaging the sleeve, a flanged ferrule on the pole, and a hook on said attaching device for engagement with the ferrule-flange at will, substantially as set forth.

2. The combination of a vehicle-pole having its forward portion bored longitudinally, a sleeve fitting the bore and provided at its outer end with a flange facing the adjacent extremity of the pole, a ferrule on the pole provided with an interior shoulder overlapping the sleeve-flange, and a neck-yoke attaching device having a shank engageable with said sleeve, substantially as set forth.

3. The combination of a vehicle-pole having its forward portion bored longitudinally, a sleeve fitting the bore and provided at its outer end with a flange facing the adjacent extremity of the pole, a ferrule on the pole provided with an interior shoulder overlapping the sleeve-flange, a neck-yoke attaching device having a shoulder engaging a portion of the ferrule projected beyond the outer end of said pole, and a shank that extends rearward from said neck-yoke attaching device into the aforesaid sleeve, substantially as set forth.

4. The combination of a vehicle pole having its forward portion bored longitudinally, a sleeve fitting the bore and provided at its outer end with a flange facing the adjacent extremity of the pole, a flanged ferrule on the pole provided with an interior shoulder overlapping the sleeve-flange, a neck-yoke attaching device having a shoulder engaging a portion of the ferrule projected beyond the outer end of said pole, a shank that extends rearward from the neck-yoke attaching device into the aforesaid sleeve, and a hook on said neck-yoke attaching device engageable with the ferrule flange at will, substantially as set forth.

5. The combination of a vehicle-pole having its forward portion bored longitudinally, a sleeve fitting the bore and having a flared

outer end provided with a flange that faces the adjacent end of the pole, and a neck-yoke attaching device having a shoulder that abuts the sleeve-flange as well as a shank that corresponds in contour with said sleeve and detachably engages the same.

6. The combination of a vehicle-pole having its forward portion bored longitudinally, a sleeve fitting the bore and having a flared outer end provided with a flange that faces the adjacent end of the pole, a ferrule on said pole having an interior shoulder that overlaps the sleeve-flange and a neck-yoke attaching device having a shoulder that abuts said sleeve-flange within the ferrule as well as a shank that corresponds in contour with said sleeve and detachably engages the same, substantially as set forth.

7. The combination of a vehicle-pole having its forward portion bored longitudinally, a sleeve fitting the bore and having a flared outer end provided with a flange that faces the adjacent end of the pole, a flanged ferrule on the pole provided with an interior shoulder that overlaps the sleeve-flange, a neck-yoke attaching device having a shoulder that abuts said sleeve-flange within the ferrule as well as a shank that corresponds in contour with said sleeve and detachably engages the same, and a hook on the neck-yoke attaching device engageable with the ferrule-flange at will, substantially as set forth.

8. As a merchantable commodity, a neck-yoke coupling comprising a suitable pole-sleeve, a yoke-connection having its shank provided with a rearwardly extending hook, and a flanged pole-ferrule, said parts being for assembly substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at the city of Racine, in the county of Racine and State of Wisconsin, in the presence of two witnesses.

HORACE L. KINGSLEY.

Witnesses:

ERASTUS C. PECK,
ALBERT L. ANDERSON.