

(No Model.)

J. S. BROWN.
NECK YOKE.

No. 570,785.

Patented Nov. 3, 1896.

Fig. 1.

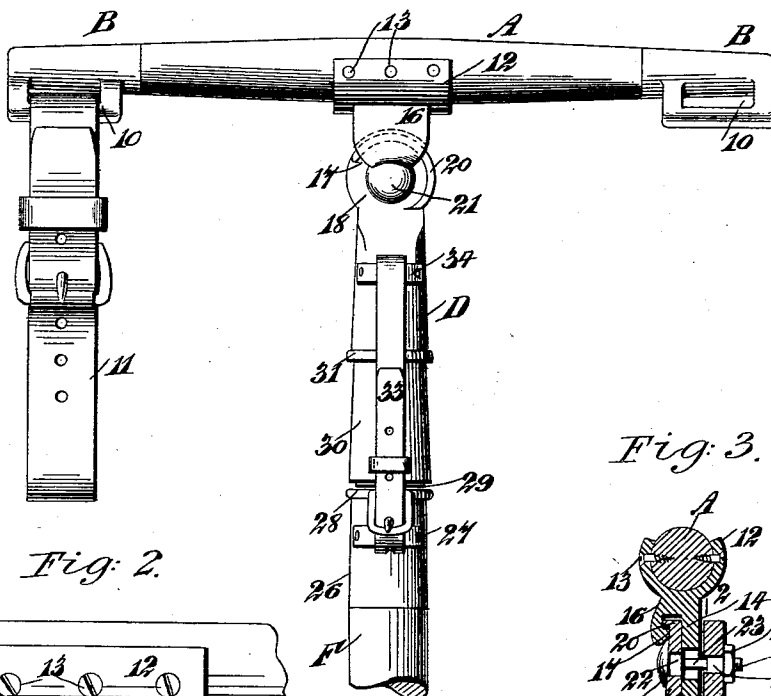


Fig. 2.

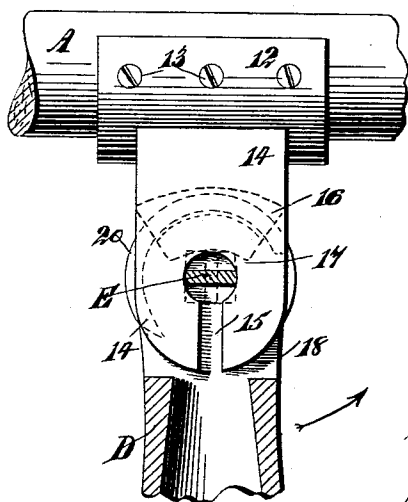


Fig. 3.

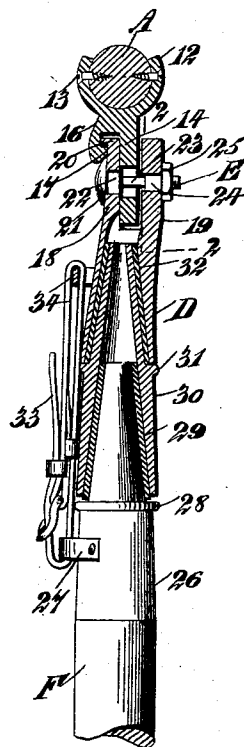
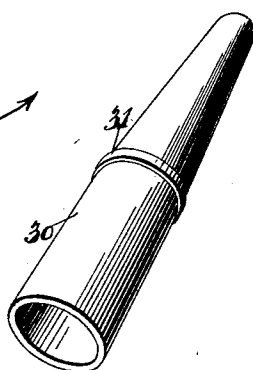


Fig. 4.



WITNESSES:

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NECK-YOKE.

SPECIFICATION forming part of Letters Patent No. 570,785, dated November 3, 1896.

Application filed February 1, 1896. Serial No. 577,684. (No model.)

To all whom it may concern:

Be it known that I, JAMES SHERMAN BROWN, of Eureka, in the county of Humboldt and State of California, have invented a new and Improved Neck-Yoke, of which the following is a full, clear, and exact description.

My invention relates to a neck-yoke; and the object of the invention is to provide a means whereby the reins cannot possibly become entangled with or caught by the neck-yoke, and also to provide a means whereby the neck-yoke may be expeditiously and conveniently connected with the pole, and whereby said yoke will have proper movement upon the pole without danger of becoming disengaged therefrom.

A further object of the invention is to provide a means whereby the pole to which the neck-yoke is to be connected may be rendered longer or shorter, according to the character of the team to be harnessed to the neck-yoke, and, furthermore, to so construct the extension section or sections of the pole that there will be comparatively no wear, and whereby the various sections may be firmly and securely fastened to the pole, but in such manner that they may be readily and conveniently removed, if necessary.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the improved neck-yoke and that portion of the pole with which it is connected. Fig. 2 is a horizontal section taken substantially on the line 2 2 of Fig. 3. Fig. 3 is a vertical longitudinal section through the neck-yoke and pole and the devices that connect the two, and Fig. 4 is a perspective view of one of the ferrules employed for lengthening the pole.

In carrying out the invention the neck-yoke A is provided with a tip B, preferably of metal, at each of its extremities, and at the upper rear portion of each tip an eye or a loop 10 or the equivalent thereof is formed, adapted for the reception of a neck-yoke strap 11 of any approved character. The eyes 10 extend

practically to the extremities of the tips of which they form a part, so as to prevent the driving-lines from catching upon or detrimentally engaging with the extremities of the neck-yoke.

A clip 12, preferably of a segmental form, is attached by screws 13 or equivalent fastening devices to the rear central portion of the neck-yoke A, and the said clip is provided with a lower rearwardly-extending horizontal member 14, which member has a keyhole-slot 15 produced therein, or a slot of similar formation, and a second and shorter upper member 16 is rearwardly projected from the aforesaid clip, and this upper member is preferably given somewhat of a cylindrical form at its rear end, its rear extremity at its central portion being preferably concaved, and at this point the aforesaid upper and shorter member 16 is provided with a segmental flange 17, extending downward in direction of the lower and longer member 14 of the said clip.

A tip-ferrule D, adapted for engagement with the forward end of the pole F, is adapted for pivotal and locking engagement with the members of the clip. The tip-ferrule D is provided with a horizontal slot, whereby at the forward extremity of the said tip-ferrule two preferably disk-like members 18 and 19 are formed, one above the other. The upper member 18 of the tip-ferrule D has a segmental flange 20, formed preferably at the margin thereof, extending from the body of the ferrule at one side and terminating at a predetermined distance from the body of the ferrule at the opposite side of the said member, as shown in Fig. 1.

A bolt E is adapted to be passed through the two members 18 and 19 of the tip-ferrule, and the said bolt is ordinarily provided with a large head 21, fitting snugly to the upper or outer face of the upper tip-ferrule member 18, and the said bolt, adjacent to its head, is provided with a polygonal-surface 22, adapted to be snugly fitted in a correspondingly-shaped recess or opening made in the aforesaid upper member 18 in the tip-ferrule, as illustrated in Fig. 3. That portion of the bolt located in the recess separating the two members of the tip-ferrule is preferably flat, as shown in Figs. 2 and 3, and the aforesaid bolt is enlarged near its lower end, and the

said enlarged portion 24 is made to fit into a correspondingly-shaped opening made in the bottom member 19 of the tip-ferrule. The lower extremity of the bolt E is threaded to receive a suitable lock-nut 25. Under this formation of the bolt, should the lock-nut 25 become loosened, the bolt will not leave the tip-ferrule, and as the bolt is one of the main factors in effecting a connection between the neck-yoke and the tip-ferrule these two parts will not be separated under such conditions.

In effecting a connection between the tip-ferrule D and the clip attached to the neck-yoke A the ferrule is carried to a position parallel with the neck-yoke, extending in direction of the left-hand side of the said neck-yoke, or the neck-yoke is brought to a parallel position with the ferrule, the aforesaid neck-yoke having its ends facing forwardly and rearwardly of the vehicle. When these two parts are in this relation to each other, the upper shorter member 16 of the clip will be opposite the space intervening the left-hand end of the flange 20 of the tip-ferrule and the body thereof, enabling the longer member of the clip to be passed between the members of the tip-ferrule, the flattened portion 23 of the lock-bolt E entering the slot 15 in the aforesaid lower member 14 of the clip. After the bolt has been made to enter the round portion of the said slot 15 the yoke may be carried at a right angle to the pole, and the flange 17 on the upper or locking member 16 of the clip will engage with the inner face of the flange 20 on the upper member of the tip-ferrule, effectually preventing the tip-ferrule and yoke from becoming separated when a forward tension is applied to the yoke, or even when the yoke is at a less angle to the tip-ferrule than a right angle.

It is often required that the pole F shall be lengthened or shortened according to the character of team that is to be driven, and to that end a ferrule 26 is screwed or otherwise secured upon the forward end of the pole F, and the ferrule 26 is provided with a tapering forward end and a flange 28 where the taper joins the cylindrical body of the ferrule, as shown in Fig. 3.

Any desired number of intermediate ferrules 30, each having a flange 31 between its ends and a tapering forward end, are adapted to be fitted over one another and over the pole-ferrule 26, it being understood that the body portion of the intermediate ferrules is provided with a conical interior chamber to receive the conical extremity of the ferrule over which it is to be placed, and the forward end of the pole F is also preferably made conical, as is likewise the inner chamber of the base portion of the pole-ferrule.

In order that there shall not be undue wear between the ferrules that have been placed one upon the other, a washer 29 is preferably placed between the inner or base portion of

the ferrule entered over that attached to the pole and the conical exterior portion of the latter ferrule, and when two such ferrules will render the pole sufficiently long a similar washer 32, of leather or other material, is placed around the conical exterior surface of the forward extension-ferrule 30, and the base of the tip-ferrule D is forced over this washer, as shown in Fig. 3. The flange 31 on the several ferrules limits the movement of one on the other.

The pole-ferrule 26 is provided with a loop 27 upon its upper face, and a loop 34 is likewise formed upon the upper face of the tip-ferrule, and the pole-ferrule and tip-ferrule, and consequently all of the intermediate ferrules, are also bound by means of a strap 33 or its equivalent passed through the loops 27 and 34, the ends of the strap being suitably secured.

I desire it to be understood that while the form of bolt E shown in the drawings is the preferred form the shape of the bolt may be changed if in practice it is found desirable.

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

1. The combination, with a neck-yoke and a clip comprising a slotted and a locking member, of a tip-ferrule slotted at its extremity and provided with a bolt adapted to enter the slot in the slotted member of the clip, the upper portion of the tip-ferrule being adapted for engagement with the locking member of the clip, as and for the purpose specified.

2. The combination, with a neck-yoke and a clip provided with a long and short member, one located over the other, the longer member having a keyhole-slot produced therein and the shorter member being provided with a downwardly-extending rib, of a tip-ferrule having its outer extremity horizontally slotted, forming an upper and a lower member, the upper member having a flange adapted for locking engagement with the rib on the shorter member of the clip, and a bolt passed through both members of the tip-ferrule and arranged to enter the slot in the longer member of the clip, as and for the purpose specified.

3. The combination, with a neck-yoke, and a clip provided with a long member and a short member horizontally disposed, one being above the other, the shorter member having a downwardly-extending segmental rib, the longer member being provided with a slot of substantially keyhole shape, of a tip-ferrule terminating in two members at its outer extremity, the upper member having a segmental flange upon its upper face for engagement with the rib on the clip, and a bolt passed through both members of the tip-ferrule, the said bolt being flattened between the members of the tip-ferrule and adapted to enter the slot in the longer member of the clip, as and for the purpose specified.

4. The combination of a vehicle-pole, a tip-

ferrule held on the vehicle-pole, the tip-ferrule having a slotted portion and a curved flange, a flattened bolt passed through the slot of the tip-ferrule, a neck-yoke, and a clip secured to the neck-yoke and having a slotted portion, the slot of which terminates in an enlarged orifice, the tip also having a curved flange capable of locking with the flange on the tip-ferrule, substantially as described.

5. The combination of a vehicle-pole, a tip-ferrule held on the vehicle-pole, the tip-ferrule having a curved rib, a bolt carried by the tip-ferrule, a neck-yoke, and a clip held on the pole and having two projections, one of which is capable of pivotal connection with the bolt and the remaining projection engaging the rib on the tip-ferrule, substantially as described.

6. A vehicle-pole having a series of remov-

able tip-ferrules, each of which comprises a hollow tapering portion, the outer side of which is provided with an annular rib and an outer tapering portion, the outer tapering portion being adapted to enter the hollow tapering portion of the contiguous ferrule, and means for holding the ferrules on the pole, substantially as described.

7. The combination of a vehicle-pole, a tip-ferrule removably held on the pole, a neck-yoke, and a clip secured to the neck-yoke, the clip being capable of pivotal and removable connection with the tip-ferrule, substantially as described.

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Witnesses:

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