

No. 689,392.

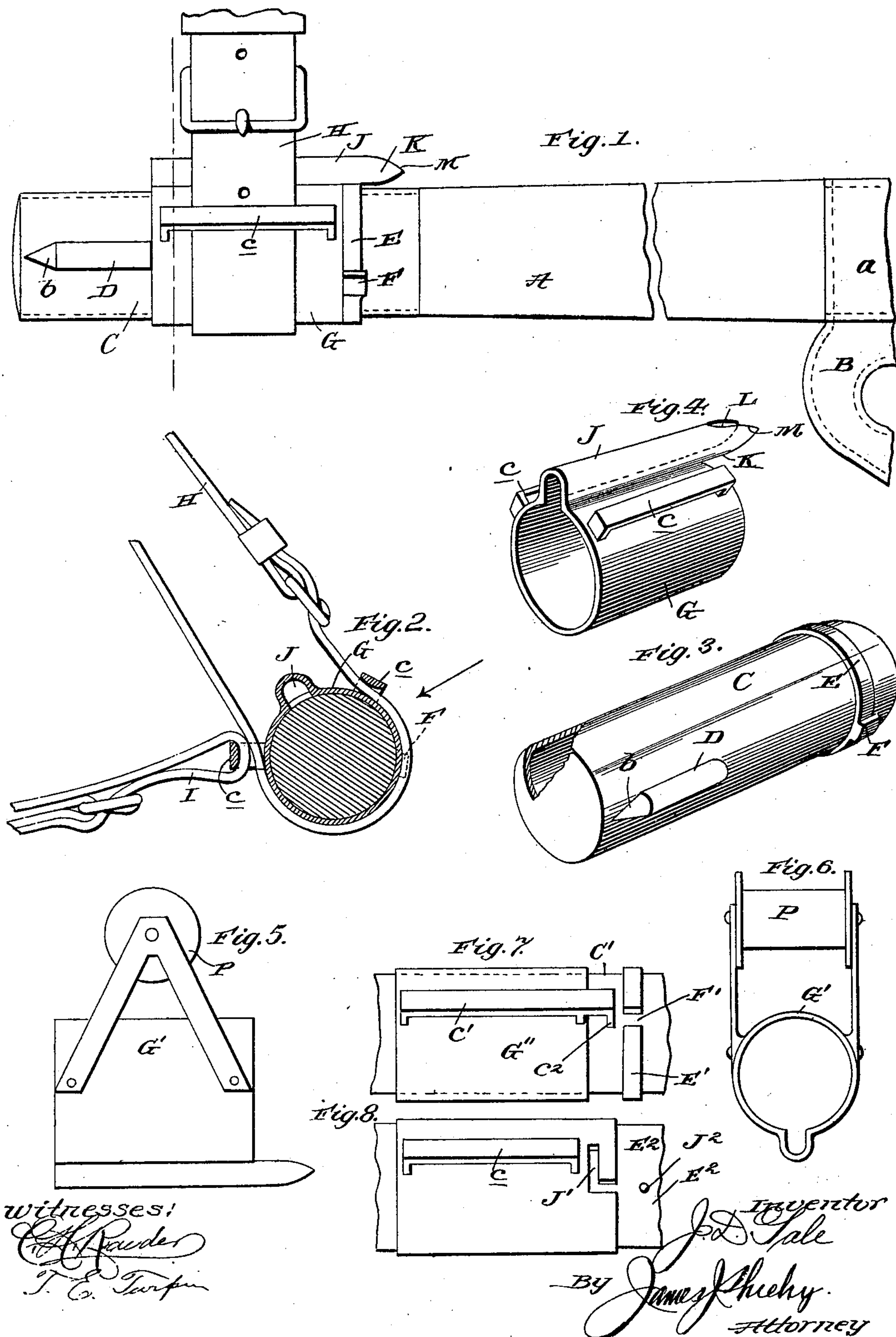
Patented Dec. 24, 1901.

J. D. GALE.

NECK YOKE.

(Application filed May 2, 1901.)

(No Model.)



UNITED STATES PATENT OFFICE.

JOHN DEAN GALE, OF GRENFELL, CANADA.

NECK-YOKE.

SPECIFICATION forming part of Letters Patent No. 689,392, dated December 24, 1901.

Application filed May 2, 1901. Serial No. 58,491. (No model.)

To all whom it may concern:

Be it known that I, JOHN DEAN GALE, a subject of the King of Great Britain, residing at Grenfell, in the North-West Territory, Canada, have invented new and useful Improvements in Neck-Yokes, of which the following is a specification.

My invention relates to improvements in that class of neck-yokes which are equipped with means for facilitating the connection of collar-straps and martingales thereto and securely holding the same against casual disconnection; and it consists in a certain peculiar construction the novelty, utility, and advantages of which will be fully understood from the following description and claims, when taken in connection with the accompanying drawings, in which—

Figure 1 is a broken elevation illustrating one-half of a neck-yoke equipped with my improvements and a collar-strap and martingale connected thereto. Fig. 2 is a transverse section taken in the plane indicated by the broken line 2 2 of Fig. 1. Fig. 3 is a broken perspective view of the metallic ferrule on the yoke, which constitutes part of my improvements. Fig. 4 is a perspective view of the removable sleeve, which also forms part of my improvements and is designed for the connection of the collar-strap and martingale. Fig. 5 is a side elevation of a modified form of a removable sleeve, and Fig. 6 is an end elevation of the same, and Figs. 7 and 8 are views of another modification.

Referring by letter to the said drawings, and more particularly to Figs. 1 to 4 thereof, A is a neck-yoke, of wood or other suitable material, which is arranged at its middle in the loop *a* of a pole-receiving strap B after the usual manner, and C is a ferrule which is preferably cast of malleable iron and is tightly secured on the end of the neck-yoke or neck-yoke proper, as shown in Fig. 1. The said ferrule is provided with a longitudinally-disposed exterior projection D, and at about the proportional distance illustrated from the inner end of the projection with a peripheral rim E, having a radial enlargement F. The projection D is square at its inner end, but is tapered to a point at its outer end, as indicated by *b*, and has the said point arranged flush with the outer end of the ferrule, as illus-

trated. The peripheral rim E is designed to serve as an abutment for the removable sleeve G, and its radial projection F, which is arranged in a plane parallel and adjacent to that of the projection D, is designed to serve as a stop for the said sleeve G and facilitate removal of the same from the ferrule, as will be presently pointed out.

As best shown in Figs. 2 and 4, the sleeve G, which is also preferably cast of malleable iron, is provided with forward and rear loops *c*, disposed as shown. These loops are designed to receive a collar-strap H after the manner best shown in Fig. 2, and the rear loop *c* is also designed for the connection of the martingale I of a harness. The sleeve G is also provided with a longitudinally-disposed offset groove J, which is disposed midway between the loops *c*, is of a size in cross-section to receive the ferrule projection D, and has its wall extended beyond the inner end of the sleeve, as indicated by K, and the inner end of said wall bifurcated, as indicated by L, and provided with beveled end portions M, as best shown in Fig. 4. The arrangement of the groove J, winding between the loops *c*, prevents friction between said loop and the collar-strap, while the connection of the martingale to the rear loop, disposed as shown, causes the martingale to pull straight back and prevents such pull from turning the sleeve.

In practice a collar-strap and a martingale are connected to the sleeve G and the sleeve is placed with its offset groove in alinement with the ferrule projection D and is shoved endwise on the ferrule until its outer end clears the inner end of the projection D and its inner end brings up against the rim E of the ferrule. The pointed outer end of the projection D and the bifurcated inner end of the wall of the offset groove J enable the former to readily enter the latter, while the beveled lower edges of the inner end portions M of the wall of the said offset groove enable them to ride over the rim E and assume the position shown in Fig. 1. After the sleeve G is placed on the ferrule, between the projection D and rim E thereof, the neck-yoke is turned so as to carry the projection D out of alinement with the offset groove of the sleeve, when said sleeve will be securely held

against casual removal from the ferrule. Moreover, there is no liability of the yoke casually turning and bringing the projection D into alinement with the offset groove J, for the friction between the neck-yoke and the loop *a* of the pole-receiving strap B will effectually prevent this. When, however, it is desired to remove the sleeve G from the yoke to disconnect the collar-strap and martingale therefrom, the operator has but to turn the sleeve on the ferrule until the end portion K of the wall of the offset groove brings up with a click against the ferrule projection F, when the operator is apprised that the offset groove J is in alinement with the projection D and may then slide the sleeve off the ferrule.

The sleeve G' shown in Figs. 5 and 6 is similar to that shown in Figs. 1, 2, and 4, with the exception that it is provided in lieu of loops with a spool P. Said sleeve G' is designed for heavy work, its spool P being adapted for the engagement of a harness-strap attached to hame-rings, while a space is afforded below said spool to permit of a martingale being looped around it.

In Fig. 7 I have shown a modification in which the rim E' of the ferrule C' is provided with a groove F' and the sleeve G' is provided with a hook projection *c*² on one of its loops *c*', said hook projection being designed to be passed through the groove of the rim and turned with the sleeve into engagement with said rim.

In the construction shown in Fig. 8 the sleeve E² is provided with a bayonet-slot J', designed to be turned into engagement with a stud J² on the ferrule E² to secure the sleeve on the latter.

By virtue of my improvements it will be observed that a collar-strap and martingale may be very expeditiously connected to and disconnected from a neck-yoke, and this without liability of such straps being disconnected from the neck-yoke while in use. It will also be observed that the martingale is held against play on the neck-yoke, and thereby prevented from chafing the horse, and, further, that when plated with nickel or the like my improvements enhance rather than detract from the finished appearance of a harness.

I have entered into a detail description of the present and preferred embodiment of my invention in order to impart a full, clear, and exact understanding of the same. I do not desire, however, to be understood as confining myself to such specific construction, as such changes or modifications may be made in practice as fairly fall within the scope of my claims.

Having described my invention, what I

claim, and desire to secure by Letters Patent, is—

1. In a neck-yoke, the combination of the neck-yoke proper, a ferrule secured on the end thereof, and having an exterior projection, and also having a peripheral abutment arranged at a suitable distance from the inner end of the projection and provided with a radial enlargement arranged in a plane parallel and adjacent to that of the projection, and a removable sleeve adapted for the connection of a collar-strap or the like, and a martingale; the said sleeve having an offset groove to receive the ferrule projection, and also having the wall of said groove extended beyond its inner end so as to extend over the abutment of the ferrule and bring up against the radial enlargement thereof when it is desired to align the offset groove with the ferrule projection precedent to removing the sleeve from the ferrule.

2. In a neck-yoke, the combination of the neck-yoke proper, a ferrule secured on the end thereof and having a longitudinally-disposed exterior projection square at its inner end and tapered to a point at its outer end, and also having the peripheral rim arranged at a suitable distance from the inner end of the projection and provided with a radial enlargement disposed in a plane parallel and adjacent to that of the projection, and the removable sleeve adapted for the connection of a collar-strap or the like and a martingale; the said sleeve having the offset groove to receive the ferrule projection, and also having the wall of said groove extended beyond its inner end and provided with a bifurcated inner end and beveled end portions, substantially as specified.

3. In a neck-yoke, the combination of the neck-yoke proper, a ferrule secured on the end thereof and having the longitudinally-disposed exterior projection square at its inner end and tapered to a point at its outer end, and also having the peripheral rim provided with a radial enlargement disposed in a plane parallel and adjacent to that of the projection, and the removable sleeve having loops, and also having the offset groove to receive the ferrule projection, and also having the wall of said groove extended beyond its inner end and provided with a bifurcated inner end and beveled end portions, substantially as specified.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN DEAN GALE.

Witnesses:

B. P. RICHARDSON,
JOHN COOKE.