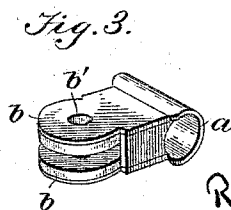
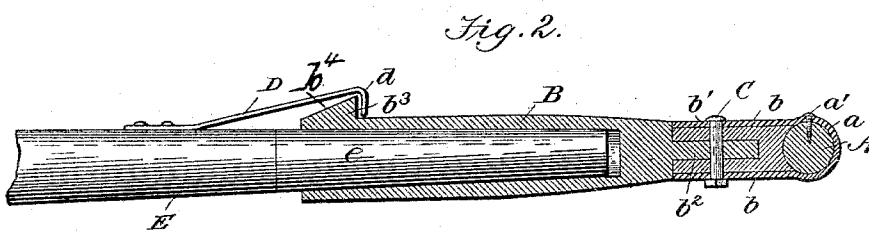
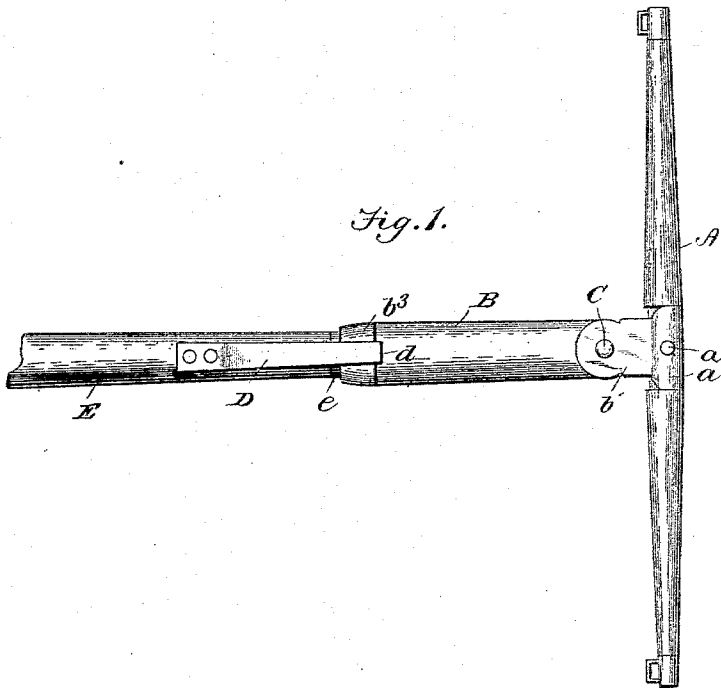


(No Model.)

R. K. SMITH.
NECK YOKE COUPLING.

No. 490,046.

Patented Jan. 17, 1893.



Witnesses
B. Mahoney
Charles A. Handwriting.

Inventor
Reuben K. Smith
By Paine & L. W.
Attorneys

UNITED STATES PATENT OFFICE.

REUBEN K. SMITH, OF GREELEY, COLORADO.

NECK-YOKE COUPLING.

SPECIFICATION forming part of Letters Patent No. 450,046, dated January 17, 1893.

Application filed October 29, 1891. Serial No. 410,287. (No model.)

To all whom it may concern:

Be it known that I, REUBEN K. SMITH, a citizen of the United States, residing at Greeley, in the county of Weld and State of Colorado, have invented certain new and useful Improvements in Neck-Yoke and Tongue Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to a certain new and highly useful improvement in neck-yokes for horses having for its object the production of an adjustable connection between the neck-yoke and the pole or tongue of a vehicle whereby the yoke is free to move to adjust itself, and the end of the pole or tongue is inclosed and prevented from projecting beyond the yoke.

The invention, therefore, consists in the detail construction and arrangement of the parts substantially as hereinafter more fully disclosed and pointed out in the claims.

In the accompanying drawings:—Figure 1 is a plan view showing my improved neck-yoke applied to a vehicle pole or tongue. Fig. 2 is an enlarged sectional view thereof taken longitudinally through the sleeve or thimble. Fig. 3 is a detail view of the plate attached to the neck-yoke.

Referring to the drawings, A designates a neck-yoke such as is in general or common use for attachment to horses' neck harness. Around this yoke at its center is passed a band-plate *a*, which is curved to conform to the surface or contour of the yoke, said plate being held in place by a single screw *a'* inserted through an aperture therein. The ends of this plate *a* are extended rearward to form two parallel ears *b*, which are provided with coincident holes or apertures *b'*.

B is a sleeve or thimble which is made hollow and opened at its widened end, while from its other or forward end projects a lip or tongue *b²* which is designed to fit snug between the parallel ears *b* of band-plate *a*, and the same is held therein by a pivot-bolt C passed through holes or apertures *b'* and a

coincident hole in said lip or tongue. Thus the thimble is free to oscillate or move from side to side with relation to the yoke and the plate secured thereto. Upon the rear end of this sleeve or thimble is an upper flange or shoulder *b³*, with which is designed to engage the forward, hooked end *d*, of a holding spring hook D, rigidly secured upon the pole or tongue E. said flange, being beveled upon its upper surface downward and rearward as at *b⁴*. The forward, reduced end, of this tongue is provided with a rigid sleeve or metallic covering *e* to prevent wear by friction.

In practice, the sleeve or thimble B is placed upon the forward end of the pole or tongue E and is held thereon as against too great forward movement by the spring hook engaging therewith, and in this way said end is inclosed and cannot project out beyond the neck-yoke. The spring hook is made sufficiently long to permit of the yoke having all necessary play or movement, and at the same time the sleeve cannot be pulled off the end of the pole or tongue by the animals hitched to the vehicle. The pivotal connection between this sleeve and the neck-yoke and the loose connection between the former and the pole or tongue permits the yoke to turn or move in any direction, and at the same time said yoke is held at its center with relation to the pole or tongue. It will therefore be seen that, in effecting the engagement between the pole and the sleeve or thimble B of the neck yoke, the spring-hook D rides upon the bevel of the flange *b³* and snaps past the latter, thus automatically connecting said pole and neck-yoke together.

The advantages of my invention are apparent. It will be especially observed that by means thereof the entire pole or tongue is in rear of the neck yoke, the usual projecting portion being inclosed or covered by the sleeve or thimble, and thereby protected and prevented from protruding into other teams as now often occurs. Then again the inconvenience heretofore experienced in having the reins entangled with the projecting end of the pole or tongue is entirely obviated.

My improved attachment is inexpensive, durable and lasting, and can be readily applied to any neck yoke now in use.

While the same results can be secured with-

out the holding spring hook for the sleeve or
thimble, yet said arm is of special advantage
in the event of any of the harness tugs break-
ing or becoming disengaged, said arm pre-
5 venting the pole or tongue from falling to the
ground.

I claim as my invention:—

The herein described neck-yoke, compris-
ing the sleeve or thimble fitted upon the end
10 of the tongue or pole and having, at its inner
or rear end, a beveled flange or shoulder, the

neck-yoke proper, having its clip pivoted to
said sleeve, and the spring-hook fastened to
said pole or tongue and having its free end
automatically engaging said flange, substan- 15
tially as set forth.

In testimony whereof I affix my signature in
presence of two witnesses.

REUBEN K. SMITH.

Witnesses:

F. W. SCOTT,
C. A. WHITE.