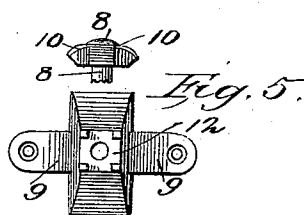
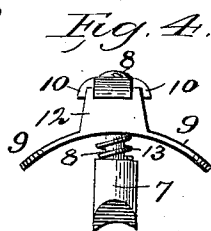
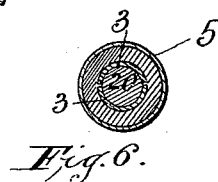
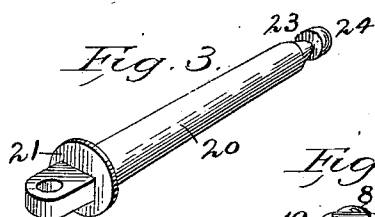
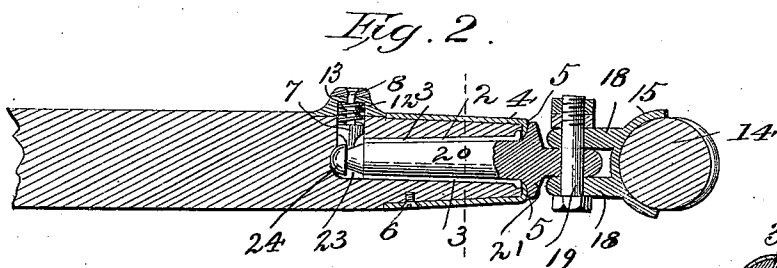
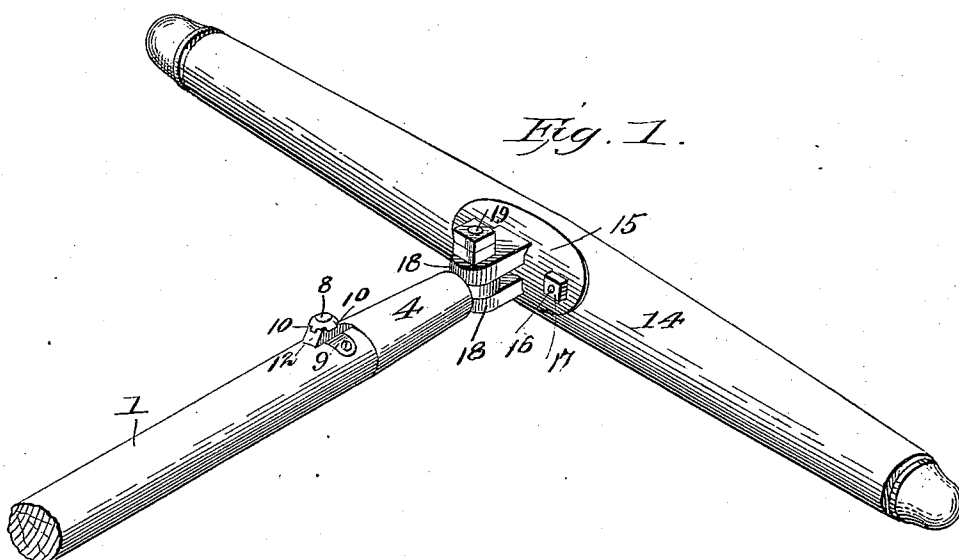


(No Model.)

H. P. KIDNEY.  
NECK YOKE.

No. 553,784.

Patented Jan. 28, 1896.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

HENRY P. KIDNEY, OF HARRIMAN, TENNESSEE, ASSIGNOR OF ONE-HALF TO  
L. TYLER DAVIS, OF SAME PLACE.

## NECK-YOKE.

SPECIFICATION forming part of Letters Patent No. 553,784, dated January 28, 1896.

Application filed February 14, 1895. Serial No. 538,390. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY P. KIDNEY, a citizen of the United States, and a resident of Harriman, in the county of Roane and State of Tennessee, have invented certain new and useful Improvements in Neck-Yoke Attachments; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to neck-yokes, and its object is to provide an improved coupling whereby a neck-yoke may be securely connected with a vehicle-tongue in a very efficient manner without liability of its becoming accidentally detached, yet which can be readily disconnected when desired.

The invention consists in the novel construction and combination of parts herein-after fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a neck-yoke and vehicle tongue and pole constructed in accordance with my invention. Fig. 2 is a longitudinal sectional view of the tongue-socket. Fig. 3 is a detail perspective view of the yoke-coupling. Figs. 4 and 5 are detail views of the spring-actuated bolt. Fig. 6 is a transverse section on the line *xx*, Fig. 2.

In the said drawings the reference-numeral 1 designates the tongue of a wagon or other vehicle of any suitable construction having a cylindrical recess in the end, within which is located a socket 2, consisting of two semicylindrical plates 3. Fitting on the end of the tongue is a sleeve 4, having at its outer end an inwardly-projecting annular flange 5, which engages with the outer ends of said plates and holds them in place in the recess in the tongue. This sleeve is made tapering and is secured to the tongue by a screw 6. Located just behind the inner end of said socket is a bolt 7, having its inner end beveled and concaved, as seen in Fig. 4. This bolt is located in an aperture in the tongue communicating with the recess therein, and has its outer end cut away, forming a stem 8, which passes through an aperture in a plate 9, secured to the tongue. The end of this

stem is formed with four lugs 10 at right angles to each other, which are adapted to engage in corresponding recesses formed in an extension 12 of the plate 9. A coiled spring 13 encircles the stem 8 and is interposed between the plate 9 and the shoulder formed by cutting the bolt to form the stem. The tendency of the spring is to force the bolt inward, when the lugs 10 will engage with the recess 13 and prevent the bolt from turning.

The numeral 14 designates the neck-yoke, provided at its center with a curved plate 15, secured thereto by bolts 16 and nuts 17. This plate is formed with two apertured lugs 18, to which is pivoted, by a pin 19, a pin 20, having an annular collar 21 near its pivoted end and its free end formed with an annular groove 23 and a rounded head 24.

The operation is as follows: The pin 20 is inserted in the socket and pushed inward until the rounded head passes the spring-bolt, when the end of the latter will spring into the groove in the pin and thus securely hold it in place, yet permit of its readily turning in the socket. The pin can be disengaged by withdrawing the pin from the groove.

Having thus fully described my invention, what I claim is—

In a neck-yoke coupling, the combination with the tongue, the semicylindrical plates located therein, and the sleeve secured to said tongue having an inwardly-extending annular flange engaging with the ends of said plates, of the neck-yoke, the plate secured thereto, the pivoted pin having a collar near its pivoted end and formed with a rounded head and annular groove at its opposite end, the plate secured to the tongue having an extension formed with a series of recesses at right angles to each other, the bolt having its inner end beveled and concaved and its outer end formed with a series of lugs adapted to engage with said recesses, and the coiled spring, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

HENRY P. KIDNEY.

Witnesses:

GIDEON HILL,  
E. A. ALLEN.