No. 859,760. PATENTED JULY 9, 1907.

E. F. GOBEN.

NECK YOKE.

APPLICATION FILED APR. 13, 1906.

Fig. 1.

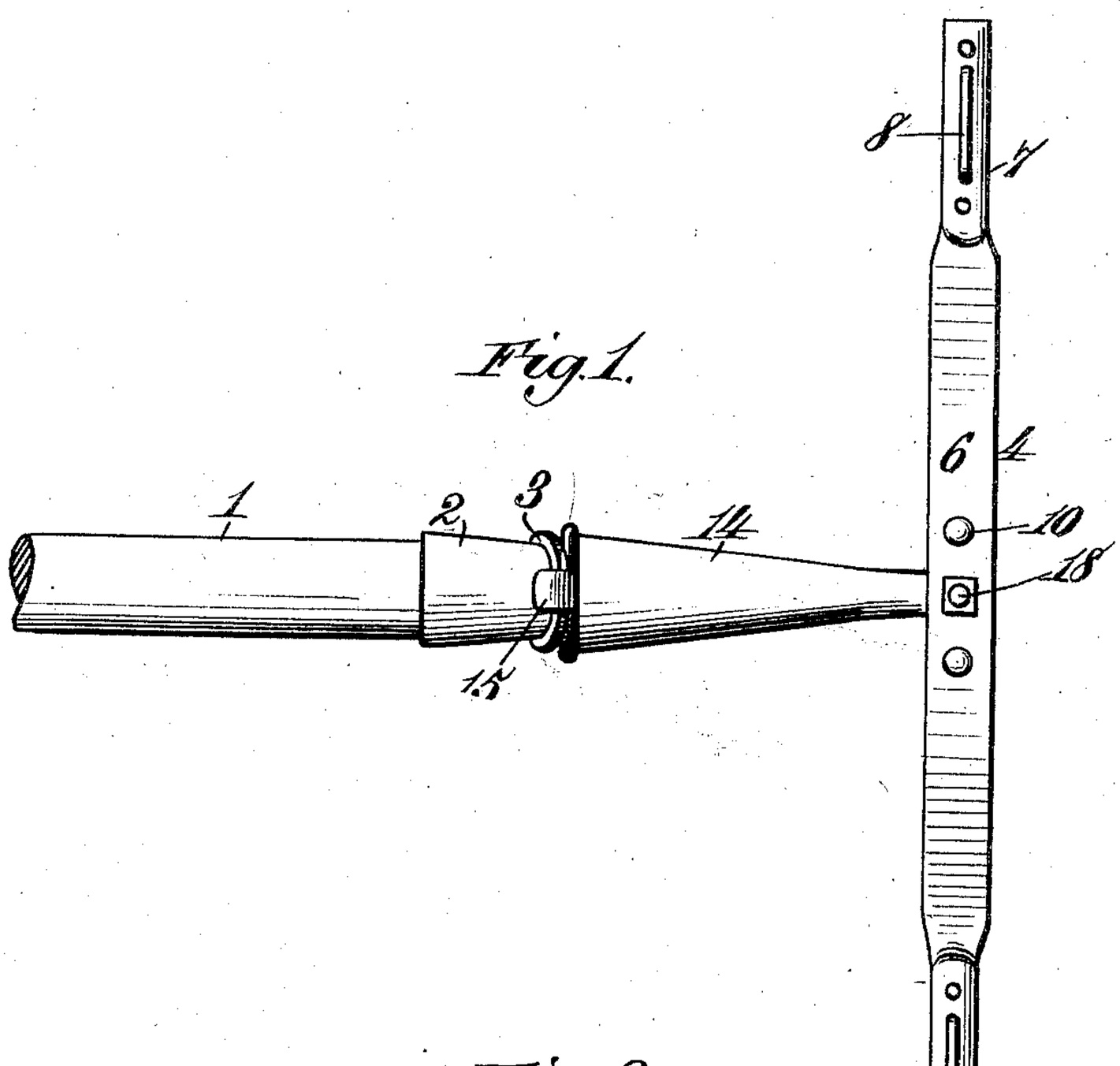


Fig. 2.

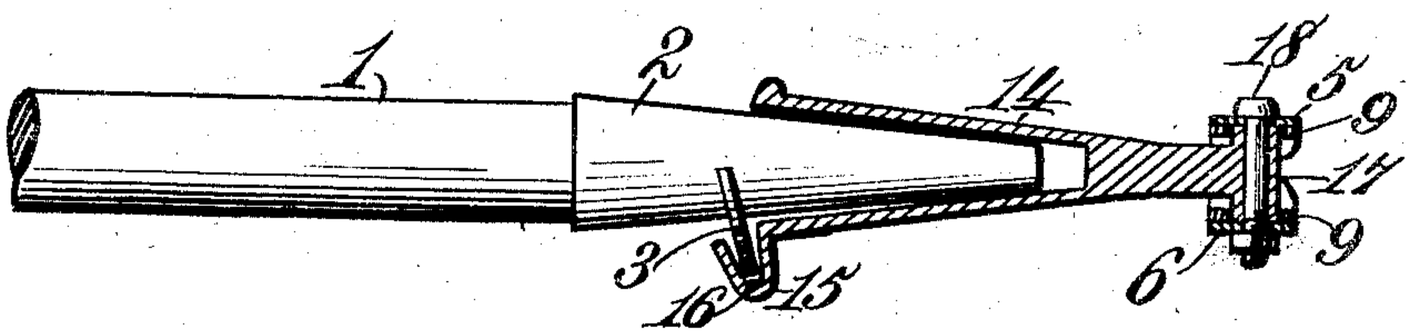
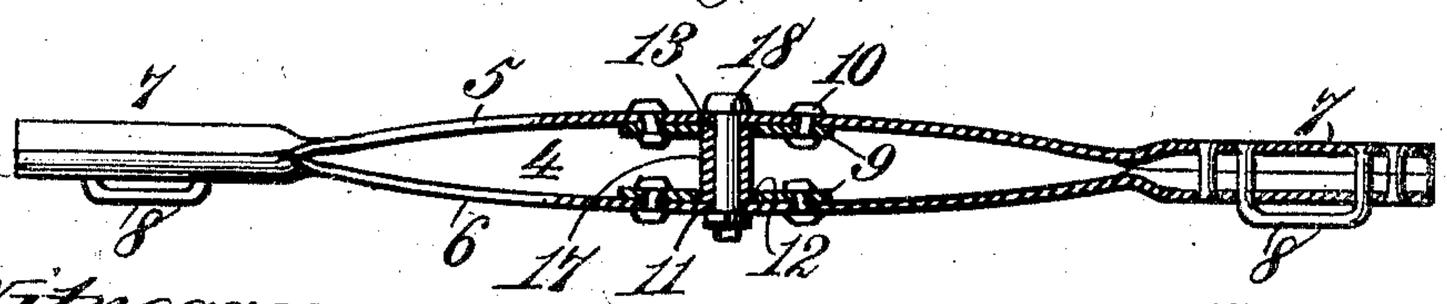


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

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NECK-YOKE.

No. 859,760. Specification of Letters Patent. Patented July 9, 1907.

Application filed April 13, 1906. Serial No. 311,547.

To all whom it may concern:

Be it known that I, EDWARD F. GOBEN, a citizen of the United States, residing at Lehigh, in District 23, Indian Territory, have invented new and useful Improvements in Neck-Yokes, of which the following is a specification.

This invention relates to neck-yokes.

The objects of the invention are to provide a neck-yoke which may be readily applied to the tongue without necessitating any material change in the construction of the tongue, or the application of any additional parts thereto; to provide a neck-yoke of a novel construction which will permit of a turning movement in an up-and-down or back-and-forth direction; to provide a novel means of connecting the yoke proper to the socket piece which engages the end of the tongue, which connection shall be noiseless in operation and which shall provide for holding the parts connected should the bolt employed for this purpose break or fall out of place.

In addition to the specific objects of the invention above named, I aim to produce a neck-yoke which shall be simple in construction, extremely durable, and which may be economically manufactured.

The invention is illustrated in the accompanying drawing, in which:

Figure 1 is a plan view of my improved neck-yoke and a portion of the tongue or pole to which it is applied; Fig. 2 is a longitudinal sectional view of the neck-yoke proper, the tongue being shown in elevation; and Fig. 3 is a view in sectional elevation looking toward the end of the tongue.

Referring now to the drawing, 1 indicates the tongue, on the outer end of which is applied a thimble 2, which is provided intermediate its ends with a circular projection 3 which projects outward from the under side of the thimble 2.

4 indicates the yoke proper which is composed of two spring metal bars 5, 6, united at their ends and curved upon themselves to form, when so united, cylindrical end pieces 7, each of which is provided on its under side with a loop 8 for connection with the harness as usual. Each of the spring metal bars 5 and 6 is provided on its inner side and centrally thereof with a reinforce strip of metal 9 which is riveted to the spring metal bar, as indicated at 10. Each of the bars 5 and 6 is provided with a central aperture 11, which apertures are in alinement, and each of the reinforce strips 9 is also provided with an aperture 12 which is larger than the aperture 11 and surrounds the same. This construction provides a recess 13 in each reinforce strip 9 for a purpose to be presently described.

14 indicates the yoke socket, which is adapted to receive loosely the thimble 2 on the end of the tongue. Said socket is provided on its under side with a catch 15, which consists of a strip of metal welded or otherwise secured to the under side of the socket and bent upon itself to afford a recess 16 which is adapted to receive the projection 3 on the end of the tongue. The outer end of said yoke is provided with a T, 17, which is longitudinally apertured to receive a bolt 18. In connecting the yoke and socket together the ends of the T are fitted into the respective recesses 13, being of a size to snugly engage the same, and then the bolt 18 is passed through the apertures 11 in the bars 5 and 6 and through the bore of the T, and secured in place by a nut. This connection is a most secure and reliable one, for it will be seen that should the bolt 18 break, the engagement of the ends of the T in the recesses 13 would prevent the bars on the yoke from pulling off of the T. The bars 5 and 6, as stated, are spring metal bars and must be pressed apart to enable the T to be inserted in the respective recesses 13 of the reinforce plates 9. Said bars therefore bear firmly against the ends of the T and not only prevent said T from pulling out of the recesses 13, should the nut 18 break, as above mentioned, but by means of the pressure they exert upon the ends of the T prevent all rattling at its connection. This is an important part of the invention and much stress is laid thereon.

In applying the yoke to the tongue the socket 14 is inserted on the thimble 2 in substantially a reverse position and is then rotated upon said thimble, which action will cause the catch 15 to engage over the projection 3 on the thimble, as clearly indicated in Fig. 2 of the drawing. This is a simple connection and readily permits an up-and-down movement of the ends of the yoke, the socket rotating on the thimble as will be understood. The pivot connection of the T 17 with the spring bars of the yoke permits a back-and-forth movement of the ends of said yoke.

While I have described the parts of my neck-yoke as being made of metal, it is to be understood that I do not limit myself to the employment of metal, as the spring bars could be made of stout wood if desired, and the bearing parts reinforced with metal. Such construction, or any similar construction, would be within the purview of my invention.

I claim:

1. A neck yoke comprising substantially flat spring metal bars having cylindrical extremities secured together and provided with loops for receiving a strap, said bars having centrally thereof apertured reinforce plates, and a socket member interposed between the bars and in engagement with the apertures of the said plates and held therein by the spring pressure of the bars.

2. A neck yoke comprising a socket member, and two spring bars secured at their outer ends and provided with means interposed between the bars for engagement under the spring pressure of the same, one end of said socket member intermediate the bars.

3. A neck yoke comprising a socket having at one end a

T and two substantially flat bars secured together at their outer ends for receiving intermediate the same and centrally thereof under spring pressure opposite ends of said T.

4. A neck yoke comprising spring metal bars secured together at their outer ends, and provided intermediate their ends and on their inner sides with apertured reinforce plates, and a socket member having a T, the opposite ends of which are engaged in the respective apertures of said reinforce plates and held in said engagement intermediate the bars by the spring pressure of the same.

5. A neck-yoke comprising a socket member having a T provided with a longitudinal aperture, and spring metal bars secured together at their outer ends and centrally apertured, and a bolt passing through the apertures of said bars and through said T, said bars being adapted to exert a spring pressure upon the opposite ends of said T to provide an anti-rattling connection.

6. A neck-yoke comprising centrally apertured spring metal bars secured together at their outer ends and provided on their inner sides and centrally thereof with reinforce plates having apertures larger than and surrounding the apertures of said bars, a socket member having a T adapted to engage at its ends in the respective apertures of said reinforce plates and to be held in such engagement by the spring pressure of said bars, said T being longitudinally bored, and a bolt passing through the apertures of said bars and the bore of said T.

7. A neck-yoke comprising a socket member having a T-terminal, two substantially flat bars secured together at their outer ends for receiving at a point intermediate said ends the T-terminal of the said socket member, and a pivot for connecting the T-terminal of the bars.

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

EDWARD F. GOBEN.

Witnesses:
A. D. BROWN,
C. P. TAYLOR.