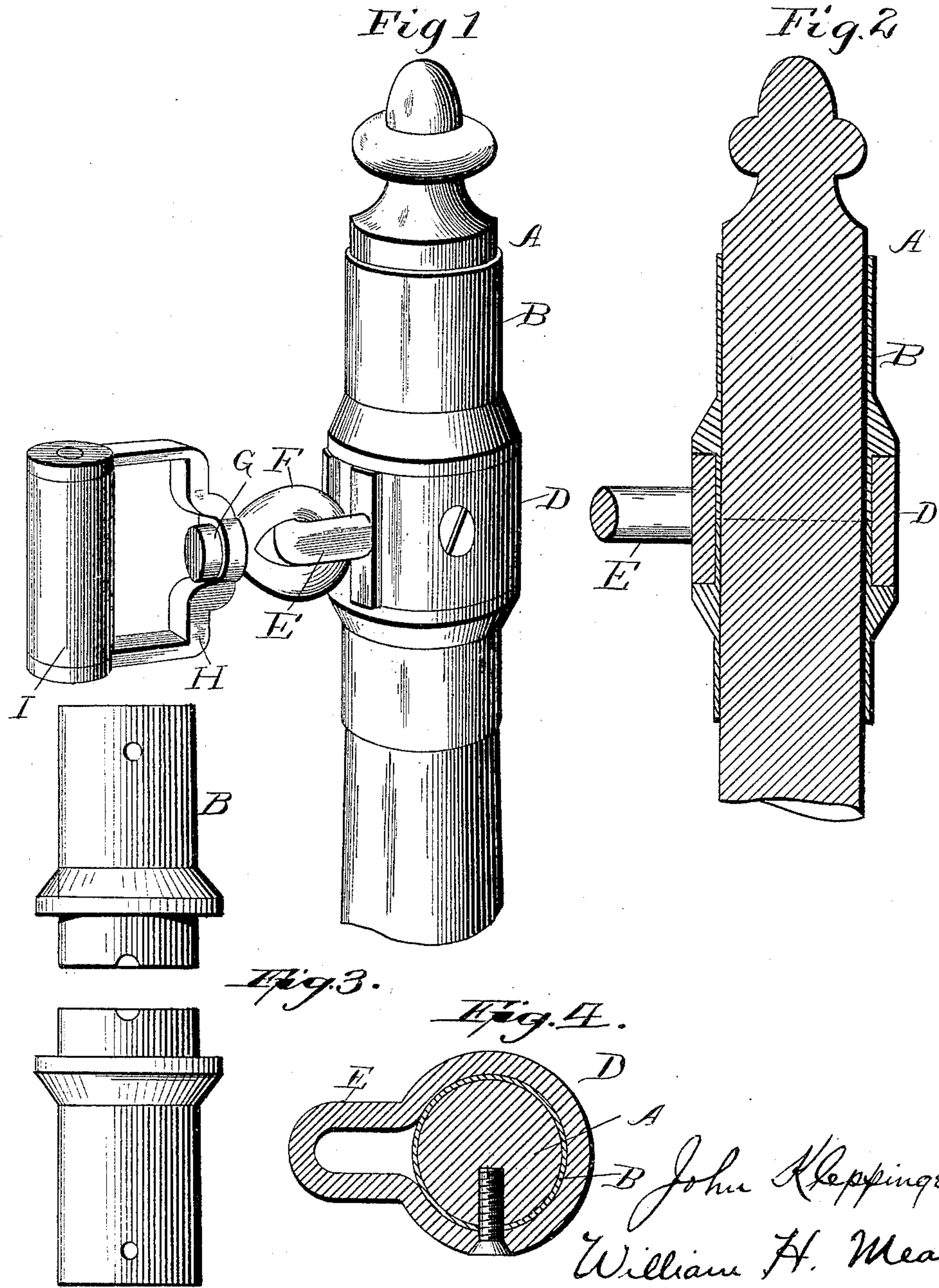


(No Model.)

J. KLEPPINGER & W. H. MEAD.  
NECK YOKE.

No. 446,742.

Patented Feb. 17, 1891.



Witnesses  
C. C. Burdine.  
R. W. Bishop.

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By their Attorney.  
W. T. Fitzgerald



# UNITED STATES PATENT OFFICE.

JOHN KLEPPINGER AND WILLIAM H. MEAD, OF ROCKVILLE, MISSOURI.

## NECK-YOKE.

SPECIFICATION forming part of Letters Patent No. 446,742, dated February 17, 1891.

Application filed January 7, 1890. Serial No. 336,184. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN KLEPPINGER and WILLIAM H. MEAD, citizens of the United States, residing at Rockville, in the county of Bates and State of Missouri, have invented certain new and useful Improvements in Neck-Yokes; and we 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.

Our invention relates to improvements in neck-yokes; and it consists in certain novel features hereinafter described and claimed. In the accompanying drawings, Figure 1 is a perspective view of the end of the neck-yoke, showing our improvements applied thereto. Fig. 2 is a longitudinal section of the neck-yoke. Fig. 3 illustrates in detail the two members of the divided sleeve B, and Fig. 4 is a transverse section of the neck-yoke.

The neck-yoke A is of the usual construction, and upon the same near the end thereof is secured a sleeve B, having the annular shoulders C, as shown. This sleeve is constructed in two sections (shown most clearly in Fig. 2) for convenience in applying it to the neck-yoke bar, and around the sleeve between the annular ribs or shoulders we arrange a ring D, having an eye E, which is engaged by the loop F, which has an extended end G, swiveled in the ring or loop H, through which the neck-strap leading to the hame is passed, the said ring H carrying a friction-roller I to reduce the wear on the strap.

In practice the inner member of the sleeve B is fitted upon and secured to the neck-yoke, after which the ring D is slipped up over the end of the said member and against the annular shoulder or rib of the same, and the outer member is then secured upon the neck-

yoke bar with its inner end passing within the ring and its annular shoulder or rib fitting against the edge of the ring. It will be readily understood, of course, that the loop and ring F and G are fitted together and to the ring B before the said ring B is secured upon the neck-yoke bar.

Our improved device, it will be readily understood, is very simple in its construction and permits the neck-yoke to move freely in all directions, while at the same time the wear on the strap is reduced to a minimum. The rings F G form practically a universal joint, so that the device will readily accommodate itself to the position of the horse's head or the movement of the tongue of the vehicle, and as the contracting parts are all of metal the device is rendered very strong and durable.

Our device is very cheap, and its advantages are thought to be obvious.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

The combination, with a neck-yoke bar, of the sleeve B, divided transversely to form the inner and outer members, having each an annular ring or shoulder C, the ring D, fitting around the meeting ends of the sleeve-sections between the parallel annular shoulders C and having the eye E, the loop F, hung in said eye and having the extended end G, and the ring-frame H, swiveled on the loop end G and having the roller I journaled in its outer end, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN KLEPPINGER.  
WILLIAM H. MEAD.

Witnesses:

S. P. MIDKIFF,  
J. N. BOREING.