

(Model.)

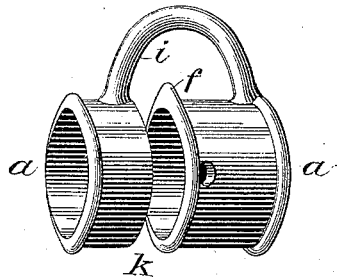
P. S. CRAWFORD.

WHIFFLETREE AND NECK YOKE FERRULE.

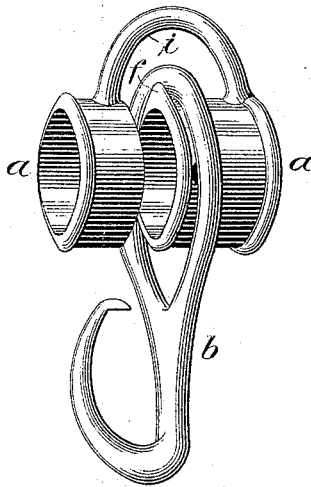
No. 305,745.

Patented Sept. 30, 1884.

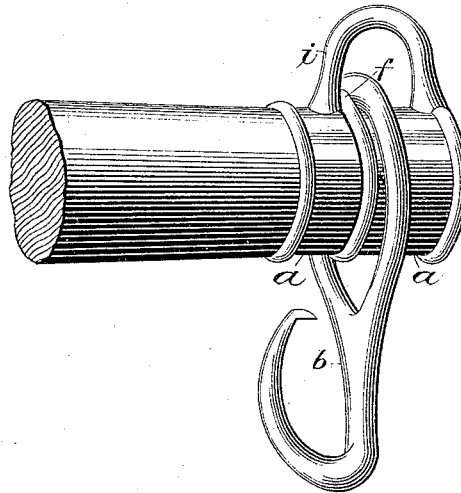
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:

*E. H. Baker*  
*H. K. Hall*

*Inventor:*

*Peter S. Crawford*

# UNITED STATES PATENT OFFICE.

PETER S. CRAWFORD, OF ROCKFORD, ILLINOIS.

## WHIFFLETREE AND NECK-YOKE FERRULE.

SPECIFICATION forming part of Letters Patent No. 305,745, dated September 30, 1884.

Application filed May 14, 1883. (Model.)

*To all whom it may concern:*

Be it known that I, PETER S. CRAWFORD, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Whiffletree and Neck-Yoke Ferrules; 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 the letters or figures of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a whiffletree and neck-yoke ferrule having an eye formed on one side by a lug with an opening into the eye, so a ring or a trace-hook ring can be slipped through the opening into the eye and inclosed therein without being obliged to cut and weld either of them. To accomplish this, I connect two ferrules together by a lug, said lug forming the eye of the ferrules. One end of said lug is rigidly attached to the outer circumference and inner end of one ferrule. The other end of the lug is rigidly attached to the outer circumference and near the outer end of the other ferrule, thereby making the inner end of one ferrule fill the entire width between the inner sides of the lug after said lug has been bent inward until the inner ends of the ferrules come together. On the outer circumference and inner end of the longer ferrule is a spur or bead, which fits against the inner side of the lug opposite and prevents the ring from wearing in or being forced into the joint between the ends of the

ferrules after said ring has been inclosed in the eye thereof, as shown in Figure 3.

Fig. 1 represents the ferrules *a a* connected together by lug *i*, having opening *k*, and provided with bead *f*, as seen when the inner ends of the ferrules are far enough apart to admit a ring through opening *k* into the eye formed by the lug *i*.

Fig. 2 represents the ferrules *a a* connected together by lug *i* and provided with bead *f* and opening *k*, as seen after the ring *b* has been slipped through the opening *k* into the eye formed by the lug *i*.

Fig. 3 represents the ferrules *a a* connected together by lug *i* and provided with spur or bead *f*, as seen after the trace-hook ring *b* has been put through the opening *k* into the eye formed on the side of the ferrules *a a* by lug *i*, and said lug *i* bent inward until the ends of the ferrules come together, closing up opening *k*, and thereby making one continuous ferrule having a ring or trace-hook ring inclosed in the eye thereof and adjusted around the ferrule *a*.

Having thus described my invention, what I claim, and desire to secure by Letters Patent as an article of manufacture, is—

1. The ferrules *a a*, connected together by lug *i* and having opening *k*.

2. The lug *i*, provided with spur or bead *f*, and having ring or trace-hook ring *b* adjusted around ferrule *a*, as and for the purpose specified.

PETER S. CRAWFORD.

Witnesses:

R. F. CRAWFORD,  
JOSIE MARCELLUS.