A. KRAUSER. SHAFT LOOP.

(Applications filed Sept. 7, 1900.)

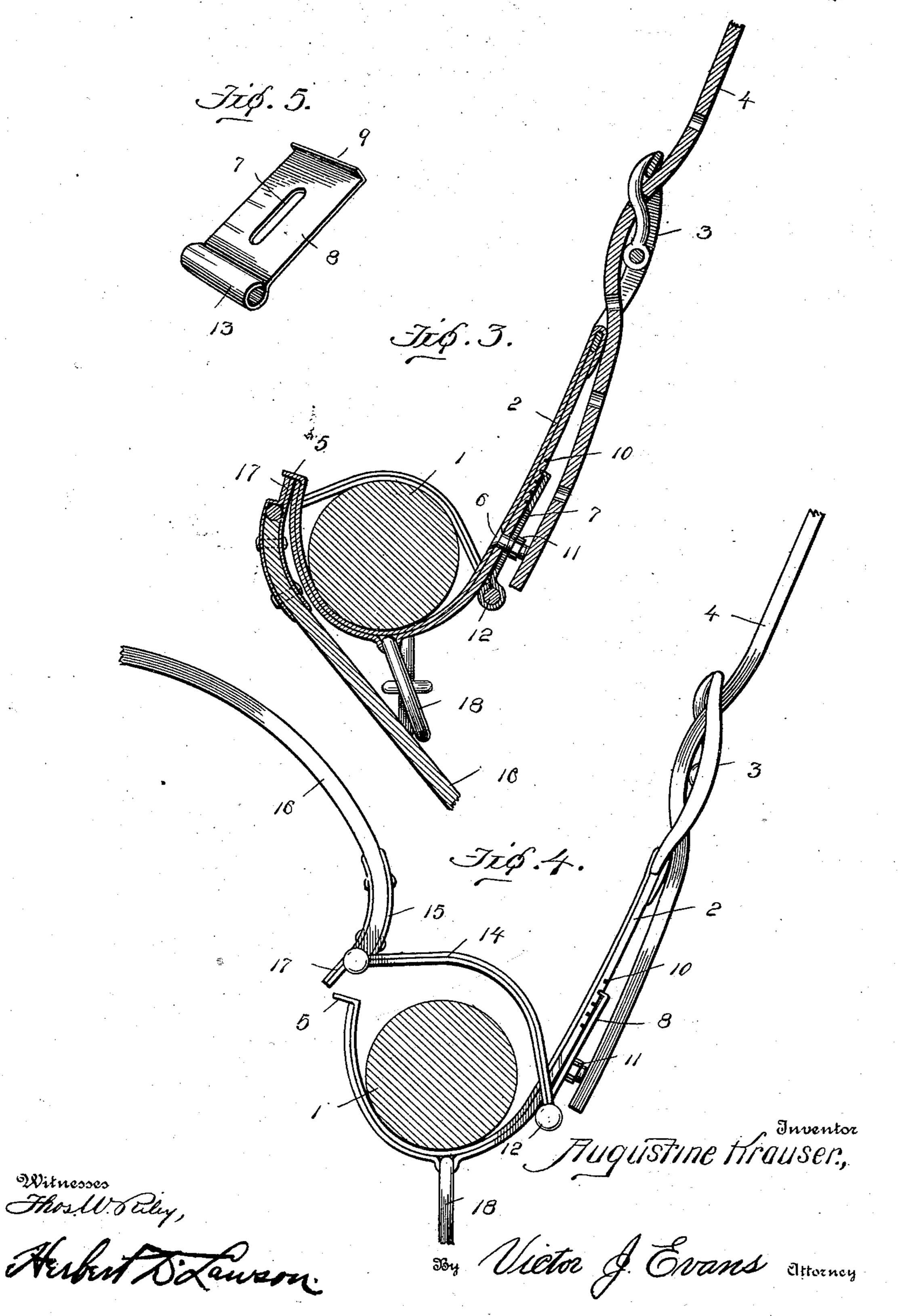
2 Sheets-Sheet 1. (No Model.) 20 Inventor Flugustine Hrauser. Witnesses Thos. W. Tilly, By Wictor J. Evans attorney

A. KRAUSER. SHAFT LOOP.

Application-filed Sept. 7, 1900.1

(No Model.)

2 Sheets—Sheet 2.



United States Patent Office.

AUGUSTINE KRAUSER, OF PORTSMOUTH, OHIO.

SHAFT-LOOP.

SPECIFICATION forming part of Letters Patent No. 664,416; dated December 25, 1900.

Application filed September 7, 1900. Serial No. 29,330. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTINE KRAUSER, a citizen of the United States, residing at Portsmouth, in the county of Scioto and State of Ohio, have invented new and useful Improvements in Shaft-Loops, of which the following is a specification.

This invention relates to new and useful improvements in harness, and more especially to the loops for holding the shafts in position.

The primary object of the device is to provide a loop which is attached to the harness at all times and which may be readily attached to or detached from the shafts.

A further object is to so construct the loop that it will firmly clamp the shaft at any point thereon, thereby permitting horses of different lengths to be secured within the shafts at

With these and other objects in view the invention consists in providing a curved springmetal plate adapted to extend under the shafts and having spring-arms adjustably secured thereto and adapted to extend over said shafts.

These arms are pivoted at opposite sides of a casing fitted upon one end of the belly-band, and a tongue extends from said casing and is adapted to engage the outwardly-bent end of the curved plate, and thereby hold the arms clamped upon the shafts. A ring adapted to

30 clamped upon the shafts. A ring adapted to be engaged by the holdback-strap is secured to this curved plate, as is also the back-strap of the harness.

The invention also consists in the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a side elevation showing the device applied to a shaft. Fig. 2 is a section on line 2 2, Fig. 1. Fig. 3 is a transverse section. Fig. 4 is a front view of the device in unlocked position, and Fig. 5 is a detailed view of the adjusting-plate of the clamping-arms.

Referring to said figures by numerals of reference, 1 is a shaft adapted to rest upon the hooked end of a curved spring-metal plate 2 of any desired length. A buckle 3 is provided at one end of this plate and is adapted to engage the back-band 4 of a harness, while the opposite end of said plate is provided with

an outward extension 5. A bolt 6 extends through the plate 2 at the inner side of the shaft 1 and engages a slot 7 formed within a 55 plate 8. This plate is provided with an inwardly-turned end 9, adapted to engage any one of a series of grooves 10 formed within plate 2. Said plate 8 is held in engagement with the groove by means of a nut 11 upon 60 bolt 6. A rod 12 is arranged within a loop 13, formed within the remaining end of plate 8, and pivoted thereon at opposite sides of said plate are spring-arms 14. The opposite ends of these arms are pivoted at opposite sides of 65 a casing 15, inclosing the end of a belly-band 16, and a tongue 17 extends forward from said casing, as shown. A ring 18 is pivoted to the plate 2 at the bottom thereof and is adapted to be engaged by the catch 19 of a holdback 20. 70

When it is desired to secure the loop to a shaft, the arms 14 are swung downward thereon and the tongue 17 brought to a point below the extension 5. The belly-band is then swung downward, causing the tongue to swing 75 up into the position shown in Fig. 3, thereby firmly clamping the shaft.

By adjusting plate 8 upon plate 2 the loop may be fitted to any shaft.

It is obvious that a loop similar to that 80 above described is employed upon each shaft.

In the foregoing description I have shown the preferred form of my invention, but I do not limit myself thereto, as I am aware that modifications may be made therein without 85 departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make all such changes as fairly fall within the scope of my invention.

Having thus fully described my invention, 90 what I claim as new, and desire to secure by

Letters Patent, is—

1. The combination with

1. The combination with a curved plate; of spring-arms hinged at opposite sides thereof; a belly-band; a casing on the end thereof piv- 95 oted between the arms; a tongue to the casing; and an outward extension to the plate adapted to be engaged by said tongue.

2. The combination with a curved plate; of adjustable spring-arms hinged at opposite 100 sides thereof; a belly-band; a casing on the end thereof between the arms; a tongue to the casing; and an outward extension to the plate adapted to be engaged by said tongue.

3. The combination with a curved plate having transversely-extending grooves therein; of a slotted plate adapted to engage any one of said grooves; means for locking said plate in engagement with a groove; spring-arms hinged to the slotted plate at opposite sides thereof; a belly-band; a casing on the end thereof pivoted between the arms; a tongue to the casing; and an outward extension to the curved plate adapted to be engaged by said tongue.

said tongue.

4. The combination with a curved plate having grooves therein; of a ring pivoted to

said plate at the bottom thereof; a buckle at the upper end of the plate; a slotted plate

adapted to engage a groove; a bolt extending from the curved plate through the slotted plate and adapted to hold the same in engagement with a groove; spring-arms hinged to the slotted plate at opposite sides thereof; a 20 belly-band; a casing on the end thereof pivoted between the arms; a tongue to the casing; and an outward extension to the plate adapted to be engaged by said tongue.

In testimony whereof I affix my signature 25

in presence of two witnesses.

AUGUSTINE KRAUSER.

Witnesses:

NAN SPENCER, HENRY SCOTT, Jr.