

(No Model.)

C. MEESE.

DEVICE FOR LOCKING COLLARS AND RINGS TO SHAFTS.

No. 331,522.

Patented Dec. 1, 1885.

Fig. 1.

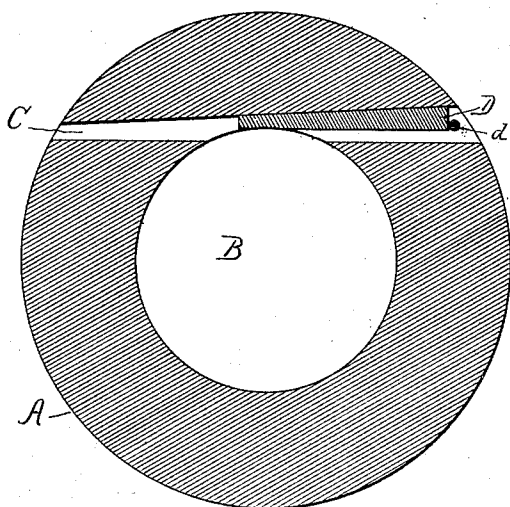


Fig. 2.

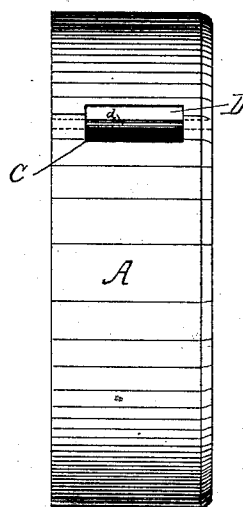


Fig. 3.

WITNESS:

Geo. A. Dickson

J. W. Emerson

INVENTOR:

Constant Meese

By his Att'y.,

J. R. Osborn

UNITED STATES PATENT OFFICE.

CONSTANT MEESE, OF OAKLAND, CALIFORNIA.

DEVICE FOR LOCKING COLLARS AND RINGS TO SHAFTS.

SPECIFICATION forming part of Letters Patent No. 331,522, dated December 1, 1885.

Application filed August 24, 1883. Serial No. 104,683. (No model.)

To all whom it may concern:

Be it known that I, CONSTANT MEESE, a citizen of the United States, residing in the city of Oakland, county of Alameda, and State of California, have made and invented certain new and useful Improvements in Devices for Locking Collars on Shafts; and I do hereby declare that the following is a full, clear, and exact description of my invention, the accompanying drawings being referred to as a part of this specification.

The object of my invention is to produce a simple and effective fastening device for securing collars, rings, and similar parts upon shafts, rods, and other similar parts of machinery.

The following description fully explains the manner in which I proceed to construct, produce, apply, and use my said improvement, the said drawings being referred to by figures and letters as follows:

Figure 1 is a transverse vertical section of a collar and fastening device. Fig. 2 is an elevation of the collar, taken from the side of the shaft. Fig. 3 is a cross-section of the wedge.

These views show the device as applied to a shaft-collar.

A represents the body of the collar, and B the bore or central aperture for the shaft. C is a slot or passage made in the body and through the rim practically at right angles, with the bore intersecting and cutting through into this aperture. It constitutes a chamber to receive and hold a key, D. It is rectangular in form at any point of cross-section, but is tapering in a longitudinal direction to make one end of the opening smaller than the other, so that when the key D is inserted into this space from the larger end it is confined by fixing a pin, as *d*, across the opening. By such means the key D is kept in place within the slot C, and is always ready for service, as it cannot drop out or be forced out, while it is free to move longitudinally when suitable pressure is applied in the direction of its length from either end of the slot. The back of this key is smooth and flat, but its face is cut into teeth or serrations by a number of longitudinal grooves or notches. This face rests against the shaft when the collar is slipped on into

place, and by the application of blows to the head of the key it is crowded forward into the space between the back of the slot and that part of the shaft-surface then projecting into the slots, the teeth or serrations, presenting so many sharp edges, being forced into the surface of the shaft as the wedge is driven down. The sides of the slot are parallel, and the key or wedge is of uniform width to slide therein, but in the other direction, or sidewise, it is slightly tapering. It is also made of greater length than the opening *c*, where the slot C cuts into the center aperture, B, of the collar, to prevent it from dropping out of its slot when the collar is off. The smaller end of the slot should be of suitable size to permit a punch or suitable tool to be introduced and pressed down against the end of the key from that side. Provision is thus made for moving the key in both directions within its chamber.

This device is easily and cheaply formed and applied. It is always in place, ready for service, and when in use it gives a smooth surface without projections on the outside of the collar. These two points of advantage render it an important improvement over screws and projecting keys or wedges.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A collar for shafts, having the tapering slot C formed transversely through it in such position as to pierce the central bore, B, and provided with the wedge D, insertible in said slot, so as to impinge directly upon the shaft when the collar is set in place thereon.

2. A collar for shafts, having a tapering slot, C, and wedge D, for insertion into said slot, and a transverse pin, *d*, placed across the mouth of the slot to prevent the escape of the wedge, as set forth.

3. A collar for shafts, having the tapering slot C, and the wedge D, for insertion therein, said wedge being provided with serrations or teeth upon its lower face for incision into the shaft to hold the collar thereon, as set forth.

CONSTANT MEESE. [L. S.]

Witnesses:

EDWARD E. OSBORNE,
G. W. EMERSON.