

W. G. Freeman,

Connecting Rod.

No. 110,842.

Patented Jan. 10. 1871

Fig. 1.

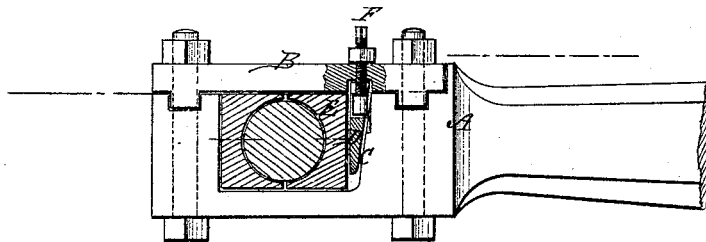


Fig. 2.

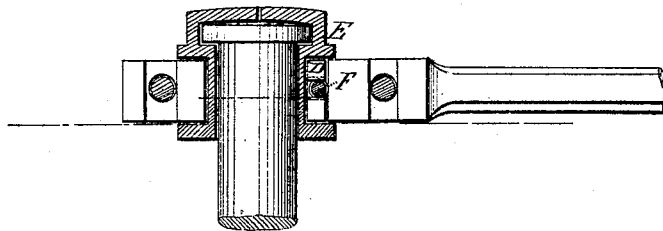
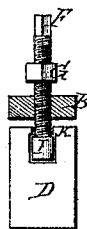


Fig. 3.



Witnesses:

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WILKERSON G. FREEMAN, OF RICHMOND, VIRGINIA.

Letters Patent No. 110,842, dated January 10, 1871.

IMPROVEMENT IN CONNECTING-RODS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILKERSON G. FREEMAN, of Richmond, in the county of Henrico and State of Virginia, have invented a new and useful Improvement in Connecting-Rods; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in apparatus for adjusting and tightening the brasses of connecting-rods, such as are commonly known as stub-ends; and

It consists in a broad wedge the width of the bearing-surface of the back of the brass, arranged behind one of the braces in a wedge-shaped cavity, and a screw connected therewith and screwed through the cap on the side of the "stub-end" to work the wedge back and forth in place of the gib and key now used, said screw being provided with a jamb-nut to prevent it from turning.

Figure 1 is a side view of a part of a connecting-rod, and vertical section through the brasses, wrist, and wedge.

Figure 2 is a top view of the connecting-rod, with the cap removed, and a horizontal section of the brasses.

Figure 3 is a side elevation of the wedge and screw, and a section through the cap.

Similar letters of reference indicate corresponding parts.

A is the connecting-rod, and
B, the cap.

In place of the narrow slot or mortise through the rod for the key, or key and gib, sometimes used, I make the notch for the brasses longer than required for the brasses, with one wall, C, oblique to the back

wall of the brass, and arrange a wedge, D, to fit snugly in the notch between the wall C and the back of the brass E, and as broad as the said brass, but shorter than the cavity, and in connection with the wedge I arrange the adjusting-screw F, to screw up and down through the cap B to move the wedge forward or backward for tightening up the brass.

The upper end of the screw is fitted for the application of a wrench for turning it, and it has a jamb-nut, G, for screwing down upon the cap to hold it from turning.

This arrangement is very simple and cheap in construction, and is very efficient, the broad wedge preventing any vibration or movement of the brass whatever.

The back of the brass may be oblique to form the wedge-shaped space for the wedge, the wall C being perpendicular.

The screw has a head, I, engaging the shoulders K of a notch in the upper end of the wedge for raising it, and the pressing of the head of the screw on the bottom of the notch forces it down; but they may be connected in any suitable way.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The broad wedge D, arranged in a wedge-shaped space between one of the brasses and the wall of the notch in the connecting-rod, and provided with the adjusting-screw F and jamb-nut G, the said screw screwing through the cap, or the side of the rod opposite to the cap, all substantially as specified.

WILKERSON G. FREEMAN.

Witnesses:

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