# R. POOLE.

## SHAFT-COUPLING.

No. 181,473. Patented Aug. 22, 1876.

*Fig 1*

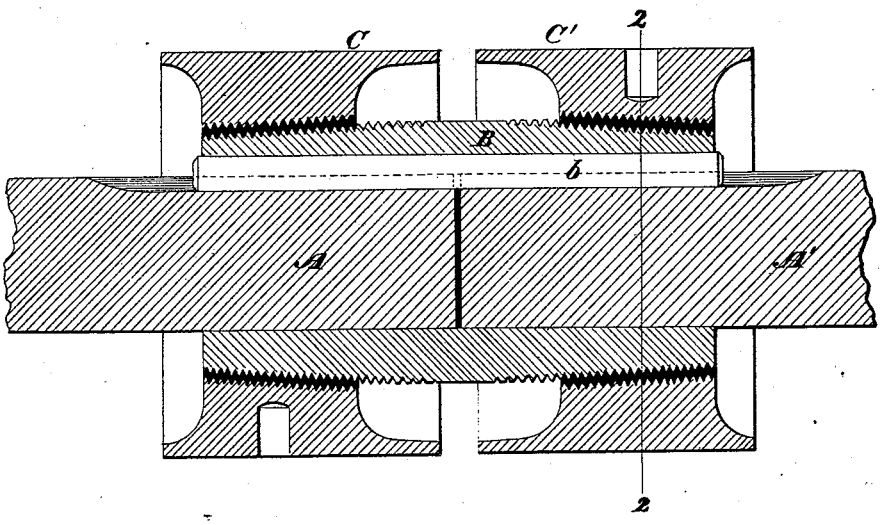
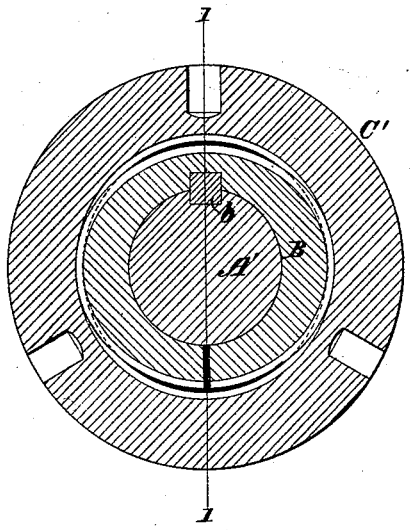



*Fig 2*




WITNESSES

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# UNITED STATES PATENT OFFICE.

ROBERT POOLE, OF BALTIMORE, MARYLAND, ASSIGNOR TO POOLE & HUNT, OF SAME PLACE.

## IMPROVEMENT IN SHAFT-COUPLINGS.

Specification forming part of Letters Patent No. **181,473**, dated August 22, 1876; application filed August 7, 1876.

*To all whom it may concern:*

Be it known that I, ROBERT POOLE, of the city of Baltimore and State of Maryland, have invented certain new and useful Improvements in Couplings for Shafting, of which the following is a specification:

My invention relates to the well-known class of couplings in which the ends of the shaft-sections are secured together by an enveloping split sleeve, a key, and screw-nuts working on the ends of the sleeve.

The objects of my invention and the subject-matter claimed will hereinafter specifically be designated.

In the accompanying drawings, which show so much of my improvements as is necessary to illustrate the subject-matter claimed, Figure 1 is a longitudinal central section through the apparatus on the line 1 1 of Fig. 2, and Fig. 2 a transverse section therethrough on the line 2 2 of Fig. 1.

The ends of the shaft-sections A A′ are grooved longitudinally for the reception of a key, *b*, carried by a longitudinally split sleeve, B, adapted to envelop the ends of the shaft-sections in a well-known way. The periphery of this enveloping-sleeve tapers from a point at or near its center toward each end, and these tapering surfaces are provided with screw-threads for the reception of correspondingly-threaded clamping-nuts C C′.

The construction of this enveloping-sleeve is peculiar, it being so formed as to be slightly elliptical, as is clearly shown in Fig. 2, the axis of the longer diameter being one at right angles to the split in the sleeve, but both axes being concentric with the axis of the shaft.

By this mode of construction the sleeve is rendered capable of yielding more readily to the action of the clamping-nuts, and consequently greater friction can thereby be produced between it and the ends of the shaft-sections than is practicable with the ordinary split sleeve.

The sleeve, it will be observed, is grooved or recessed for the reception of the key *b*, at a point directly opposite its dividing-slot, which still further adds to the elasticity of the sleeve and its efficiency.

The manipulation of couplings of this description is well understood, and the advantages of my improvements will be obvious to those skilled in the art.

I am aware that both round and eccentric split sleeves have heretofore been suggested in connection with shaft-couplings, and I do not broadly claim such device.

I claim as of my own invention—

The combination, substantially as hereinbefore set forth, of the grooved shafting, the elliptic tapering split sleeve enveloping the shafting, the key carried by said sleeve, and the clamping-nuts working on the inclined surfaces of the sleeve.

In testimony whereof I have hereunto subscribed my name.

ROBERT POOLE.

Witnesses:

WM. L. KLINEFELTER,

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