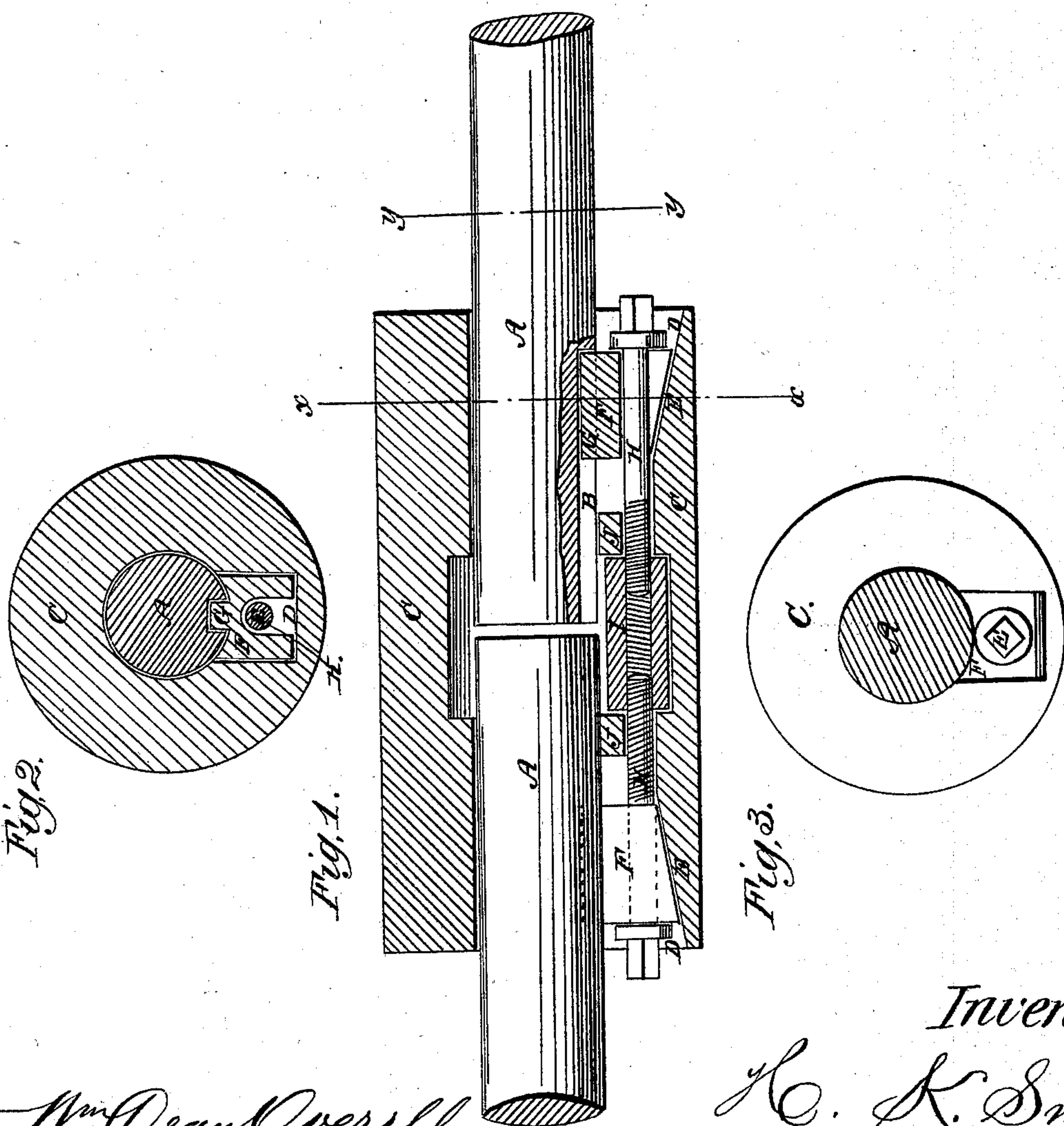


*H. K. Smith,*

*Shaft Coupling.*

*N<sup>o</sup> 62,081.*

*Patented Feb. 12, 1867.*



*Wm Dean Overell.*  
*Jr. Service.*

*Inventor.*  
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*Per Munroe & Co.*  
*Attys*

# United States Patent Office.

HENRY K. SMITH, OF NORWICH, CONNECTICUT, ASSIGNOR TO HIMSELF  
AND CHARLES OSGOOD, OF THE SAME PLACE.

*Letters Patent No. 62,081, dated February 12, 1867.*

## IMPROVEMENT IN SHAFT-COUPPLINGS.

*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, H. K. SMITH, of Norwich, New London county, and State of Connecticut, have invented a new and useful Improvement in "Shaft-Couplings;" 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.

The present invention relates to an extremely novel and simple coupling for shafts, whereby they can be readily secured together or released from each other at pleasure, and when coupled or fastened, perfectly centred. In accompanying plate of drawings, my improvement is illustrated—

Figure 1 being a central section through the coupling, taken in the direction of its length.

Figure 2, a transverse vertical section, taken in the line *x x*, fig. 1; and

Figure 3, a transverse section, taken in the line *y y*, fig. 1.

Similar letters of reference indicate like parts.

A A, in the drawings, represent the ends of two shafts which are to be coupled together. These shafts are each grooved at B in the direction and for a portion of their lengths. C, a sleeve or tube, of sufficient length and size to embrace the ends of the two shafts A, the inside of which sleeve, upon one or more sides, and from each end towards its centre, is provided with two or more ways or square-shaped grooves D, having their bottoms or lower sides E made of an inclined or bevelled shape from a point near the centre of the sleeve toward each end of the same. In each of these ways or grooves D of the sleeves, wedge-shaped pieces or blocks, F, are placed, which, by means of ribs G, play or slide in the grooves B of the shafts, when moved either forward or backward in the sleeve C, by screwing the screw-bolts H in the proper direction therefor. These bolts H each screw into a common nut, I, placed between the two projections J of the interior of the sleeve C, and both pass loosely through the sliding wedge-pieces or blocks F.

From the above description it is plain to be seen that turning the screw-bolts H in the proper direction therefor, the wedge-pieces or blocks F may be brought to bear against the shafts A, jamming and tightening the same against the opposite side of the sleeve C, around the shaft or similar blocks F, placed at suitable points therefor, and thus firmly uniting and securing them together, with the centre lines in a line with each other, as is obvious without further explanation.

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

The shaft-coupling herein described, the same consisting of the sleeve C, having bevelled or inclined ways or grooves D, pieces or blocks F, and screw-bolts H, when combined and arranged together substantially as and for the purpose specified.

HENRY K. SMITH.

Witnesses:

GEO. L. CLARK,

F. A. SMITH.