

H. ALBRECHT.
SHAFT-COUPLING.

No. 174,177.

Patented Feb. 29, 1876.

Fig: 1.

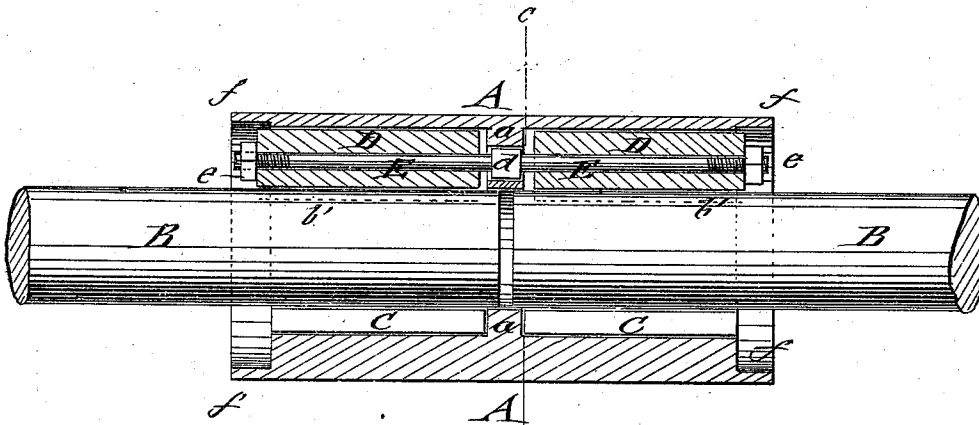


Fig: 2.

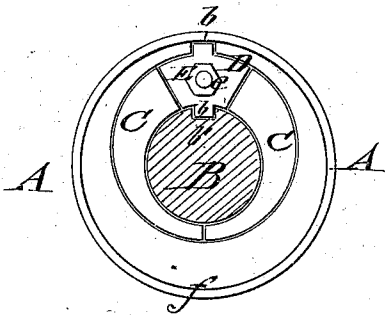


Fig: 3.

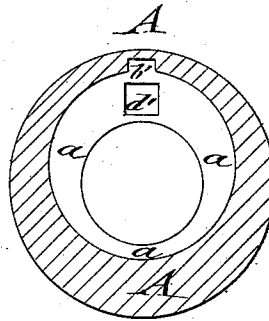
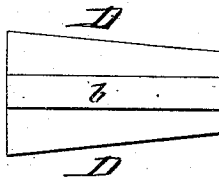


Fig: 4.



WITNESSES:

Chas. Nida
John Goetz

INVENTOR:

H. Albrecht
BY *Munn*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

HERMAN ALBRECHT, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN SHAFT-COUPPLINGS.

Specification forming part of Letters Patent No. 174,177, dated February 29, 1876; application filed February 5, 1876.

To all whom it may concern:

Be it known that I, HERMAN ALBRECHT, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Shaft-Coupling, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of my improved shaft-coupling. Fig. 2 is an end view; Fig. 3, a vertical transverse section of the same on the line *c c*, Fig. 1, and Fig. 4 a top view of the jaw or wedge locking-key.

Similar letters of reference indicate corresponding parts.

My invention relates to an improved shaft-coupling, that locks the shaft securely and has the advantage of coupling shafts of different diameter with equal facility as shafts of the same diameter.

The invention consists of a connecting sleeve or tube with central partition that divides the sleeve into two sections, to each of which the end of a shaft is coupled by means of eccentric jaws or wedges, a main key with top and bottom tongues, and a longitudinal key-binding bolt. The sleeve has circumferential flanges to protect the nuts of the bolt ends.

In the drawing, A represents a sleeve or tube for a shaft-coupling, which sleeve has a central partition, *a*, that divides the interior of the sleeve into two sections. The partition *a* is centrally perforated for the insertion of the shafts B to be coupled, and the end sections are bored out eccentrically for the curved jaws or wedges C, that fit the space between the shaft and sleeve, and are rigidly locked by a tapering key, D, that is inserted in longitudinal direction between the eccentric jaws to produce their equal clamping on the shaft throughout their entire length. The tapering key D is provided with longitudinal top and bottom tongues *b*, that enter grooves *b'* of the sleeve and shaft, and prevent thereby the play

of the shaft in either direction. The two keys C, that are inserted from the ends of the sleeve and moved toward the partition *a*, are further connected by a screw-bolt, E, which passes through longitudinal perforations of the keys D, and fits by a square central shoulder, *d*, into a corresponding recess, *d'*, of the partition *a*. The screw-bolt E is threaded at the ends, and fastened to the keys by nuts *e*, the bolt preventing, in connection with the wedges and key, the rotating of the shaft ends. By loosening the nuts, the keys may be taken out with the bolt, and thereby the coupling of the shafts disconnected.

As each shaft forms an independent coupling with the sleeve, shafts of different diameter may be coupled to the sections of the sleeve, the jaws and key merely varying in size.

The ends of the sleeve A are provided with circumferential flanges *f*, that extend over the fastening-nuts of the keys to prevent the catching of any belting with the same.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent—

1. The dividing partition *a* of the sleeve, having central perforations for the shaft ends and square recess for the key-binding bolt, substantially as described.

2. The combination of the sleeve and shaft, having longitudinal grooves, the eccentric wedges or jaws, and the tapering key, having top and bottom tongues to produce the rigid clamping of shaft, substantially as specified.

3. The combination, with the tapering keys, of the divided sleeve sections, and with the central partition, having square recess of a longitudinal connecting screw-bolt and fastening end nuts, for the purpose set forth.

HERMAN ALBRECHT.

Witnesses:

PAUL GOEPEL,
T. B. MOSHER.