

W. B. Dunning,

Shaft Coupling.

No. 92289.

Patented July 6, 1869.

Fig 1

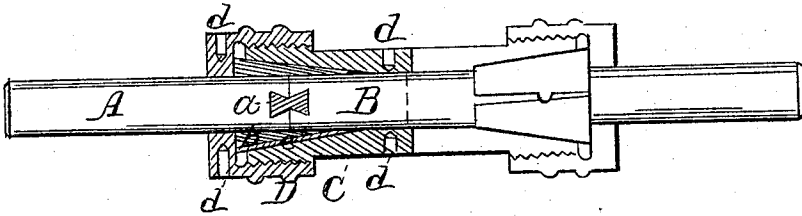


Fig 2



Witnesses.

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WILLIAM B. DUNNING, OF GENEVA, NEW YORK.

Letters Patent No. 92,289, dated July 6, 1869.

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, WILLIAM B. DUNNING, of Geneva, in the county of Ontario, and State of New York, have invented certain new and useful Improvements in Shaft-Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making part of this specification, in which—

Figure 1 is a longitudinal section, the colored portion showing the usual single form, and, together with the outlines, showing also a compound form of my invention.

Figure 2 is an outline of one form of the key *a*.

The nature of my invention will be understood by reference to the drawing and specification.

To enable others skilled in the art to make and use my invention, I will describe its construction and operation.

At the ends of the shafts *A* and *B*, fig. 1, I insert the key *a*, in grooves cut at right angles to the axis of the shafts. This key is in form like two dovetails, joined at their bases, and may be riveted or otherwise fixed in one of the shafts, and allowed to slide easily in the groove of the other. This key prevents end-separation of the shafts, and also assists the coupling proper in performing its functions.

The shell *C* is bored out at one end, to fit the shafts loosely, and at the other to receive the annular wedge *b*.

Upon the outside of shell *C* a thread is cut, on which the cap *D* is screwed. This screw-cap presses against the wedge *b*, and forces it into its seat in the shell.

The annular wedge *b* slides easily upon the shafts, and is cut through longitudinally on one side, and nearly through on the opposite side, the two parts being held together by the thin web of metal shown

at *e*, fig. 1. This allows the wedge *b* to close tightly upon the shafts when forced into its socket by the screw-cap.

The outlined parts of fig. 1, taken with the colored portions, show a compound arrangement, which allows each shaft to be separately grasped by the coupling, the ends of the shafts being indicated by the dotted lines. This plan is preferable in case the shafts are of unequal diameters.

The shell *C* and screw-cap *D* are provided with holes *d d*, to receive levers, for the purpose of tightening the coupling; or they may have portions made square or hexagonal, for the application of a wrench.

The wedge *b* may be made in two distinct parts, kept in their relative position by dowels or projections, cast upon them, as shown in the outlines, fig. 1.

Instead of the screw-cap *D*, a flange may be used, secured to the shell by bolts or studs.

The key *a* may be made with T-heads, or of the form shown in fig. 2.

It will be seen that by the operation of screwing up the cap *D*, the annular wedge *b* is forced to grasp the shafts, by which they are firmly bound. I thus produce a simple and reliable coupling, which can be readily attached to or detached from the shafting.

What I claim as my invention, and desire to secure by Letters Patent, is—

The key *a*, and shaft *A* and *B*, in combination with the annular wedge *b*, shell *C*, and screw-cap *D*, constructed to operate substantially as and for the purposes set forth.

WM. B. DUNNING.

Witnesses:

F. H. CLEMENT,

WM. S. LOUGHBOROUGH.