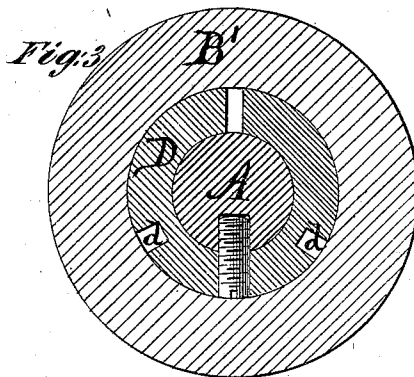
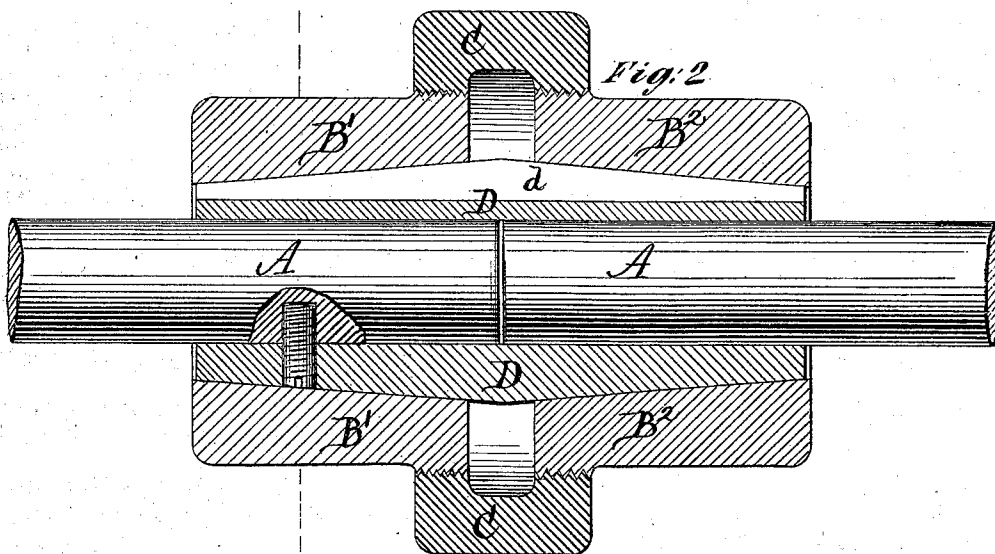
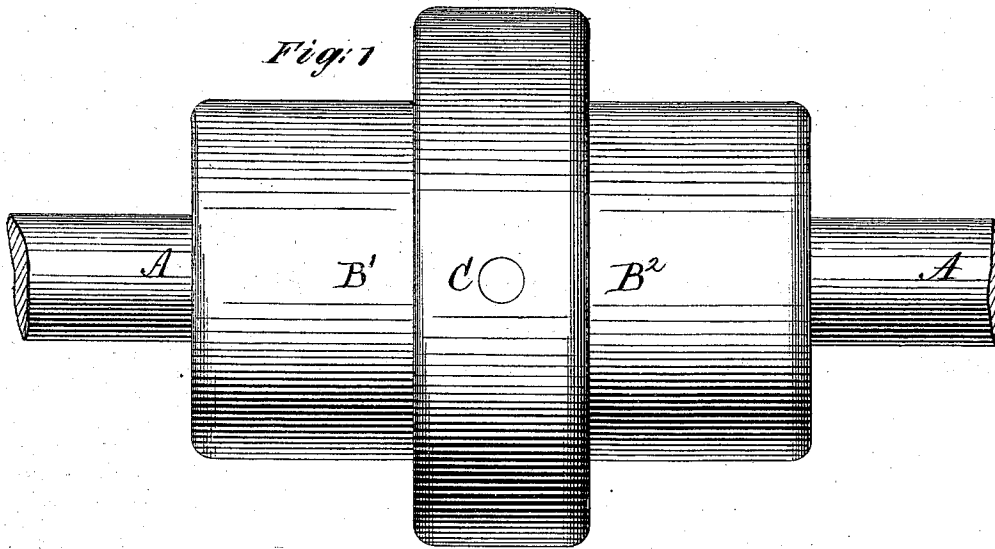


W. J. SILVER.
Shaft-Couplings.

No. 149,798.

Patented April 14, 1874.



Witnesses:
Michael Ryan
Fred Warner

Wm J. Silver
By his Attorneys
Bramhall Allen

UNITED STATES PATENT OFFICE.

WILLIAM J. SILVER, OF SALT LAKE CITY, UTAH TERRITORY.

IMPROVEMENT IN SHAFT-COUPPLINGS.

Specification forming part of Letters Patent No. **149,798**, dated April 14, 1874; application filed March 10, 1874.

To all whom it may concern:

Be it known that I, WILLIAM J. SILVER, of Salt Lake City, in the county of Salt Lake and Territory of Utah, have invented an Improved Shaft-Coupling, of which the following is a specification:

My invention relates to certain improvements on that for which Letters Patent No. 142,288 were granted to me August 26, 1873; and it consists in the combination of a collar or ring-nut with a split sleeve end, two compression-shells having screw-threads on their inner ends, both of said screw-threads running in the same direction, but differing in their pitch, so that when the collar or ring-nut is turned it takes up the difference between the threads, and the operation of coupling is facilitated.

In the accompanying drawing, Figure 1 is a side view of my improved coupling. Fig. 2 is a longitudinal section. Fig. 3 is a transverse section.

The ends of the shafts A A are surrounded by a center sleeve, D, which tapers toward both ends, and receives two compression-shells B¹, B², having screw-threads formed on their inner ends, which threads run in the same direction, but differ in their pitch, the thread on the shell B¹ being finer than that on the shell B². These shells are connected by a

collar or ring-nut, C, having threads corresponding with those on the shells. When the collar is turned to couple the parts, it takes up the difference between the two threads instead of taking up the sum of two threads, as in my patent aforesaid, in which one of the shells has a right-hand thread and the other a left-hand thread. In consequence of this construction, the speed of the collar in turning is retarded, as well as that of the shells in their motion toward each other, so that less power is required to turn the collar, and thus the operation of coupling is facilitated. The center sleeve D is split, longitudinally, in the same manner as in my patent aforesaid, and, in addition, it has one or more longitudinal grooves, *d*, formed in it, whereby its elasticity is increased.

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

The combination of the collar or ring-nut C, the split sleeve and compression-shells B¹ B², having screw-threads running in the same direction, but differing in pitch, substantially as and for the purpose shown and described.

WM. J. SILVER.

Witnesses:

ALEX. MACKENZIE,
SAML. WOODWARD.