G. E. RIDER.

COUPLINGS FOR TUMBLING-SHAFTS.

No. 179,957. Patented July 18, 1876.

Fig. 1.

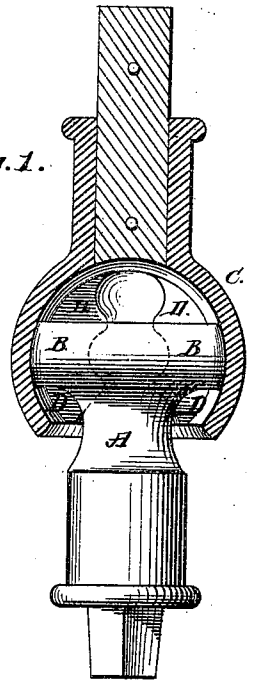
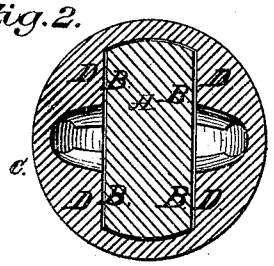


Fig. 2.



Witnesses

La Fayette Bigelow

Geo. H. Graham.

Inventor:

George E. Rider

By Daniel Breed

Atty.

UNITED STATES PATENT OFFICE.

GEORGE EDWIN RIDER, OF MARTIN'S FERRY, OHIO.

IMPROVEMENT IN COUPLINGS FOR TUMBLING-SHAFTS.

Specification forming part of Letters Patent No. **179,957**, dated July 18, 1876; application filed April 30, 1875.

To all whom it may concern:

Be it known that I, GEO. E. RIDER, of Martin's Ferry, in the county of Belmont and State of Ohio, have invented an Improvement in Couplings for Tumbling-Shafts, of which the following is a specification:

My invention consists of an improvement in shaft-couplings, which will be fully understood by the following description.

In the accompanying drawings, Figure 1 is a longitudinal section of the shell with the elliptical head inserted in its place. Fig. 2 is a transverse section of both the shell and the elliptical head.

In the construction of my improved shaft-coupling an important object is to fit the parts very closely together, and thus prevent the backlash from too much play between the head and shell, and also to secure a large wearing-surface between the head and shell, thus preventing increased play by wear.

In Fig. 2 it will be seen that the head A closely fills the cavity in the shell C, the wearing-surfaces B of the head A coming in contact with the flanges D, or wearing-surfaces of the shell C, thus preventing any play or backlash, and securing a universal joint or coupling in the shaft.

I am aware that a shaft-coupling has been made by casting a head with three projections or ribs thereon, and then casting the shell around the same, with three corresponding projections or ribs on the interior of the shell; but this construction requires more space and play between the head and shell, and consequently has the disadvantages of backlash. Therefore I prefer my construction of the elongated and semi-cylindrical head A, closely fitting into the shell, as described.

Having thus described my invention, I claim—

The elongated and oval head A, closely fiting between the flanges or wearing-surfaces D of the shell, for the purpose of allowing a complete joint, and yet holding the head closely, and thus preventing the backlash, substantially as set forth.

GEORGE EDWIN RIDER.

Witnesses:

JAMES EAGLESON,

JACOB RIDER.