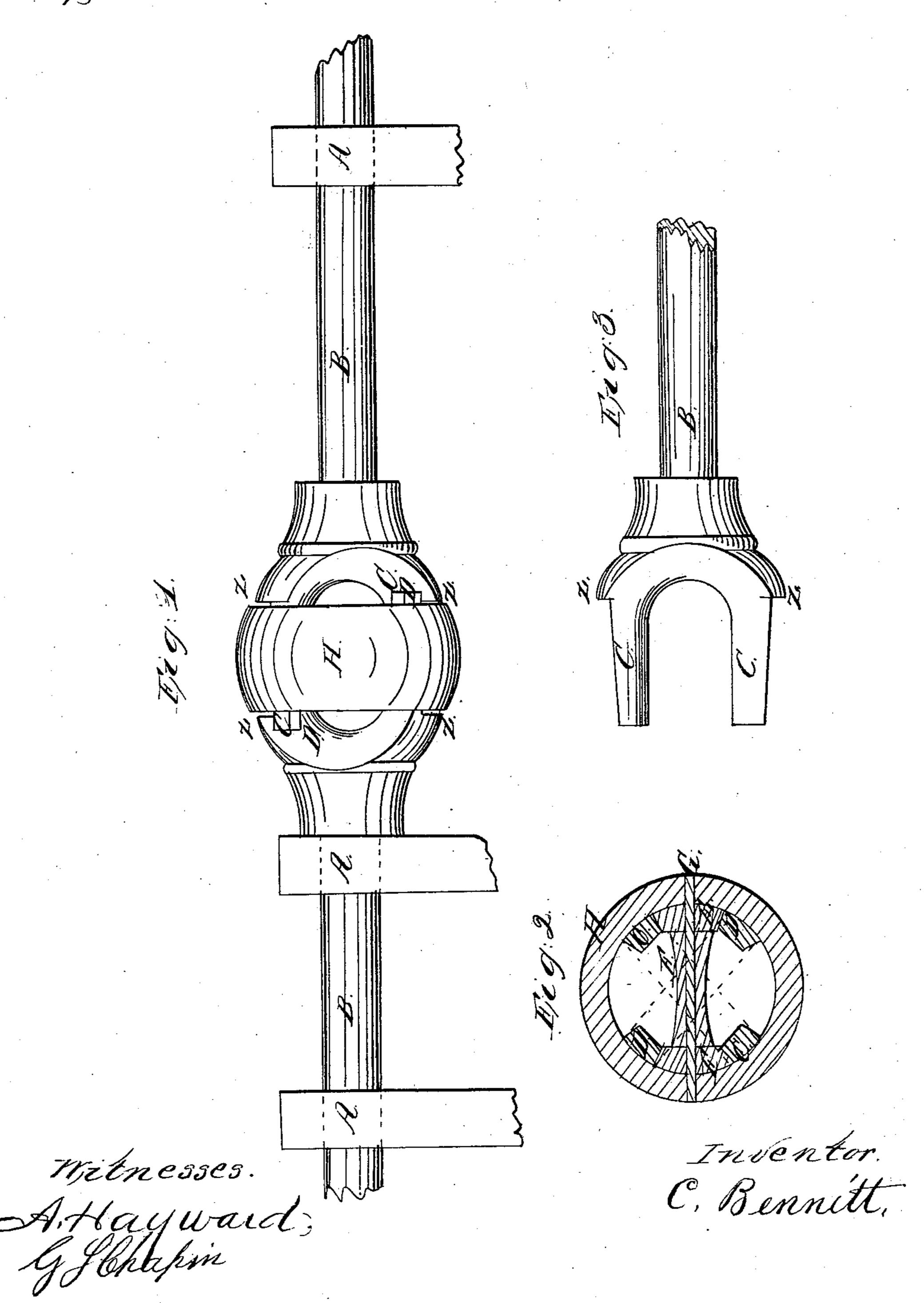
[Bennitt, Universal Joint. Patented Dec.8, 1868.





CHARLES BENNITT, OF BRISTOL STATION, ILLINOIS.

Letters Patent No. 84,672, dated December 8, 1868.

IMPROVEMENT IN SHAFT-COUPLING.

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, Charles Bennitt, of Bristol Station, in the county of Kendall, and in the State of Illinois, have invented an Improved Coupling for Tumbling-Rods; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, and letters marked thereon, making a part of this specification, in which—

Figure 1 is a longitudinal elevation of my invention. Figure 2, a transverse section of the same.

Figure 3, an elevation of one of the rods detached from the other parts, and showing the jaws which bear against the anti-friction rollers in the coupling-band.

The nature of the present invention consists in the application of rollers to the inner periphery of the coupling-band, to relieve the friction of the jaws of the rods.

A material difficulty has heretofore existed in constructing couplings for the tumbling-rods of threshing-machines, and also for couplings for other rods which run out of line, inasmuch as they are necessarily subjected to great strain, and consequently they soon wear out, there being a compound motion and corresponding friction; and

It is the object of this invention to obviate this objection at small cost, and, at the same time, provide a coupling which will, with reasonable care, wear as long as other working-parts of the machinery to which it is attached.

To enable others to fully comprehend the construction of my invention, I have marked corresponding parts of the same with similar letters, and will now give a detailed description.

BB represent the ordinary tumbling-rods, which are made of iron or other s litable metal, and they termi-

nate, at the ends to be coupled, in jaws, C C and D D, which are bevelled at their inner edges, as shown at fig. 2, to fit the peripheries of the conical rollers E E.

An iron coupling-band, H, having an inner diameter large enough to pass over the jaws C C and D D, has holes drilled through it, to receive a journal, G, on which the conical rollers are made to turn, the bases of said rollers being convex, to correspond with the form of that portion of the band against which they bear.

A spool or washer, F, is also put on the journal G, to hold the rollers in place; but, if desirable, the rollers E may be cast long enough to meet at the centre of the journal, and thus do away with the spool, the cost, in either case, being about the same; but the rollers, as shown, will operate with the least friction, as their bearings are shorter.

The journal G may be quite small, as the jaws C D bear equally on the opposite parts of the rollers E, and consequently there is but little strain on any part of the coupling.

The rods B B should be adjusted in the bearings A, so as to leave a little space between the band and the shoulders, ZZ, of the jaws which hold the band in place.

Having thus fully described my invention,

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

The combination of the band H, journal G, pulleys E E, jaws C and D, with the rods B B, as and for the purpose herein specified and shown.

CHARLES BENNITT.

Witnesses:

THOS. D. WAYNE, G. E. CORYELL.