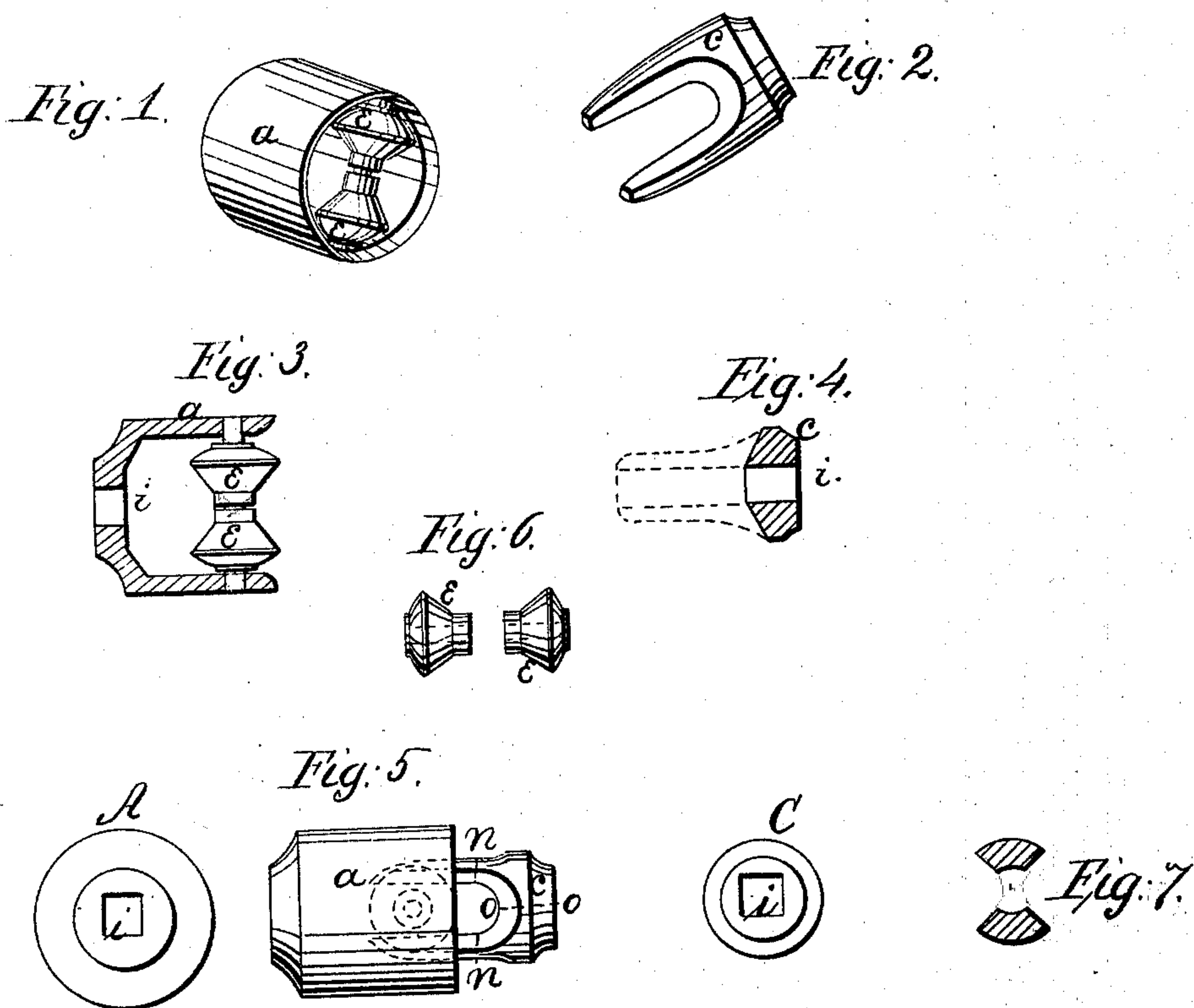


J. W. Taylor,
Universal Joint.
N^o 69,044. Patented Sep. 17, 1867.



Witnesses;
W. H. Ritch
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United States Patent Office.

JAMES W. TAYLOR, OF OSHKOSH, WISCONSIN.

Letters Patent No. 69,044, dated September 17, 1867.

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, JAMES W. TAYLOR, of the city of Oshkosh, county of Winnebago, and State of Wisconsin, have invented a new and improved Device for Coupling Shafting when the shafting is required to be placed in an oblique position relatively to each other, and known to the art as a knuckle-joint or a universal joint.

The object of this invention is to provide a simple and direct mode for the purposes specified, that, while it works free and easy, is compact and secure, and by having the workings of the coupling encased in a cylinder avoid the possibility of catching the clothes of attendants incident to the coupling of tumbling-rods of threshing machines and of other shafting of like dangerous character.

I 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 annexed drawings, making a part of this specification, in which—

Figures 1 and 2 are perspective views of the respective parts.

Figure 3 is a longitudinal section of fig. 1.

Figure 4 is a longitudinal and Figure 7 is a vertical section of fig. 2, seen at *o o* and *n n*, fig. 5.

Figure 5 represents figs. 1 and 2 partially adjusted for service.

Figure 6 is a pair of irregular-shaped friction-rollers, seen at *e e*, fig. 1.

A is an outer end view of fig. 1. C is an outer end view of fig. 2; A and C each having mortises *i i*, in which the shafting is to be inserted. *a* is a hollow cylinder with a head in one end. The inner periphery of the opposite end of the cylinder is rounded out to near the outer periphery of the cylinder. *e e* are duplicate friction-rollers independent in their action; are bevelled on one end and rounded on the other end. They are provided with hubs or collars, (seen in fig. 6,) and are used together on one shaft, the bevelled ends facing, leaving an opening between bevels similar to that of a spool, and are inserted crosswise in the centre of the open end of the cylinder *a*. *c* is an irregular cylindrical form. Its diameter is somewhat smaller than the inner diameter of cylinder *a*. One end is slotted, leaving a stubbed forked head, seen in fig. 2. The inner edges of the prongs are bevelled, as seen in fig. 7, to fit the friction-rollers. Fig. 2 is inserted in fig. 1, as seen in fig. 5, and when fully inserted is adjusted for service.

My invention consists in providing a hollow metallic cylinder with a pair of friction-rollers, spool-like in form, when used together, each roller or spool end working independently on a common shaft, and the whole inserted crosswise in the open end of the cylinder. Used in conjunction with the above is a circular metallic head, with two prongs of a size and shape for easy oblique working in and corresponding to the openings in the said cylinder, remaining between the friction-rollers and the inner periphery of the cylinder. The two parts complete the knuckle-joint.

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

The hollow cylinder *a* provided with friction-rollers *e e*, substantially as described, when used in combination with the dual pronged head *c*, as and for the purposes set forth.

J. W. TAYLOR.

Witnesses:

W. G. RITCH,

CHR. SUMER, Jr.