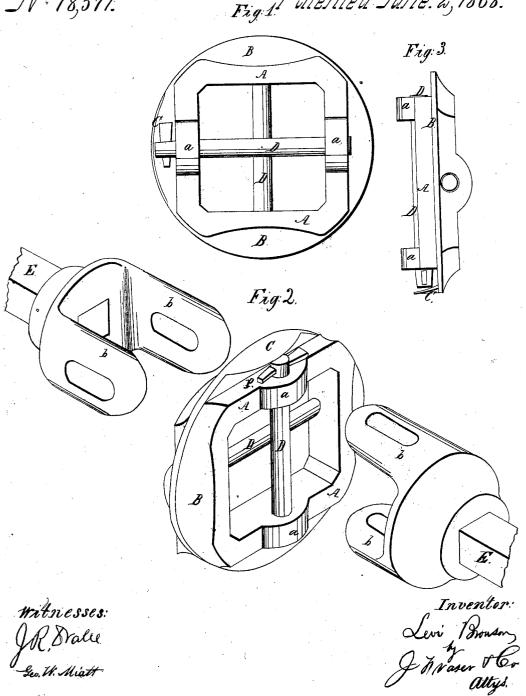
# L. Bronson, Universal Joint.

Fig 1 Patented June. 2, 1868. N°78,571.



ERS, PHOTO-LITHOGRAPHER, WASHINGTON

### Anited States Patent Office.

## LEVI BRONSON, OF BUFFALO, NEW YORK, ASSIGNOR TO HIMSELF AND JAMES BRAYLEY, OF SAME PLACE.

Letters Patent No. 78,571, dated June 2, 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; Levi Broncon, of Buffalo, in the county of Erie, and State of New York, have invented a certain new and useful Improvement in Shaft-Couplings; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a plan of the ring.

Figure 2, a perspective view, showing the shafting detached from the ring.

Figure 3 is an edge view of the ring.

Like letters of reference indicate corresponding parts in all the figures.

My invention consists in providing the ring with guards, and employing, in combination therewith, headless

bolts, keyed in place, for holding the sections of the shafting.

In the drawings, A represents the coupling-ring, and B its outer circular rim, provided with right-angled flanges or guards, C C, raised on its edge on opposite sides. D D, are headless bolts, which pass through raised bearings, a, at right angles with each other, and secure the forks b of the ordinary sections of shafting E, which are shown detached in fig. 2. One end of these bolts comes in contact with the flanges C, which prevent their dropping out or protruding beyond the ring, and they are held from slipping out by keys, p p.

The great advantage of this arrangement consists in the guards C with the headless bolts D. The ring is cast in a single piece, of open form, with the guards constituting a part of it, the latter serving not only to keep the bolts in place against end movement, but also as a shield to prevent contact therewith. Thus, there is no danger of the clothing or other articles coming in contact, and winding up. By this construction, also, I am enabled to make the bolts D D headless, being retained in place against end movement in one direction by the guards, and in the other by the keys p p.

I am aware that headless bolts have before been used in connection with a wide cylindrical ring, in which

the bolts are inserted by bayonet-slots, or other indirect communication.

In such cases the construction is complicated and expensive. In my invention the device is exceedingly cheap and simple. The bolts are entered in the bearings a a directly, and without any trouble, and, at the same time, are perfectly locked in place, and an effective shield is produced to prevent accident.

With my invention, shafting can be coupled and uncoupled with less trouble than by any other device that

I am acquainted with.

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

The guard-flanges C C of ring A, in combination with the forked shafting E, headless bolts D D, held by keys p p, the whole arranged as described, and operating in the manner and for the purpose set forth.

In witness whereof, I have hereunto signed my name, in the presence of two subscribing witnesses.

LEVI BRONSON.

Witnesses:

ALBERT HAIGHT, J. R. DRAKE.