A. Zwiebel,

Universal Joint.

No. 99,742. Patented Feb. 8. 1870.

Fig. 1.

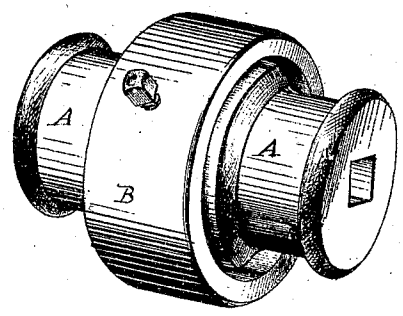


Fig. III

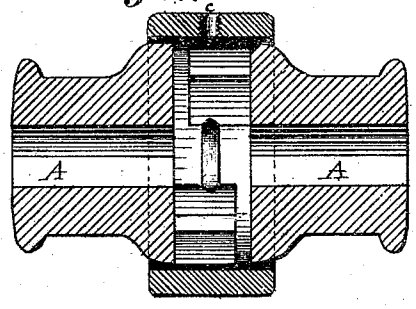


Fig. II

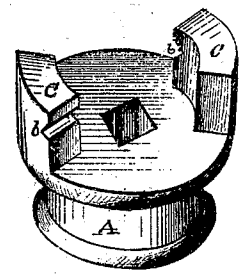


Fig. IV

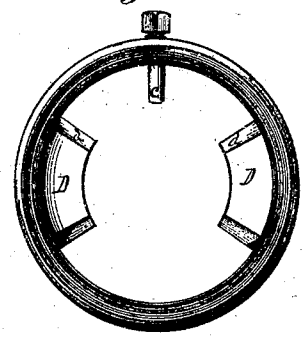


Fig. VI

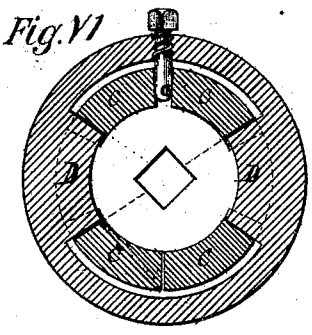
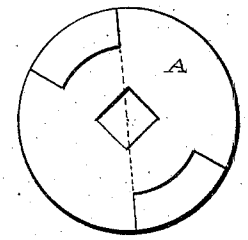


Fig. V



Witnesses:

Fred. Arto's

Wm. M. Evans

Inventor:

Anton Zwiebel

by his attorneys

A. H. & R. K. Evans

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

ANTON ZWIEBEL, OF BURLINGTON, WISCONSIN.

Letters Patent No. 99,742, *dated February* 8, 1870.

IMPROVED UNIVERSAL JOINT.

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, ANTON ZWIEBEL, a citizen of Burlington, in the State of Wisconsin, have invented a new and improved Universal Joint, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings and the letters of reference made thereon, making a part of this specification, in which—

Figure I is a perspective view of my invention.

Figure II is a view of one of the coupling-heads, detached.

Figure III is a sectional view, through the lines *x x*.

Figure IV is a top view of the coupling-ring, with its flanges.

Figure V is a top view of my coupling-head.

Figure VI, sectional view through the lines *y y*.

The object of my invention is to provide a cheap universal joint, which can be applied to machinery requiring a joint to be used at any angle.

To enable others skilled in the art to make and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings—

A A represent the two coupling-heads, constructed with the forks C C, in which are formed the notches *b b*.

B is the couplirg-ring, made with the two flanges D D, each bevelled on the edges *d d*, to correspond with the notches in the forks C C.

When the forks C C are placed in position between the flanges D D, the notches *b b* slip over the bevelled edges *d d* of the flanges D D, and are securely held by the screw *c*, which passes through the coupling-ring and between the forks C C.

It will be observed that the edges *e e* of the forks C C are in one and the same straight line, by which arrangement the strain upon the joint is equalized at all times.

It is evident that a joint thus constructed will work perfectly free at any angle, will need no oil, and will work without friction, and consequently will not wear as do other universal joints now in use.

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

A universal joint, constructed as described.

Also, the notched forks C C, in combination with the bevelled flange D D and the screw *c*, substantially as and for the purpose set forth.

Also, the notched forks C C, having their edges *e e* in one and the same straight line, in combination with the coupling-heads A A and coupling-ring B, constructed with flanges, substantially as and for the purpose described.

ANTON ZWIEBEL.

Witnesses:

FR. REUSCHLEIN,

HIRAM A. SHELDON.