

E. SMITH.  
UNIVERSAL COG WHEEL COUPLING.

No. 110,938.

Patented Jan. 10, 1871.

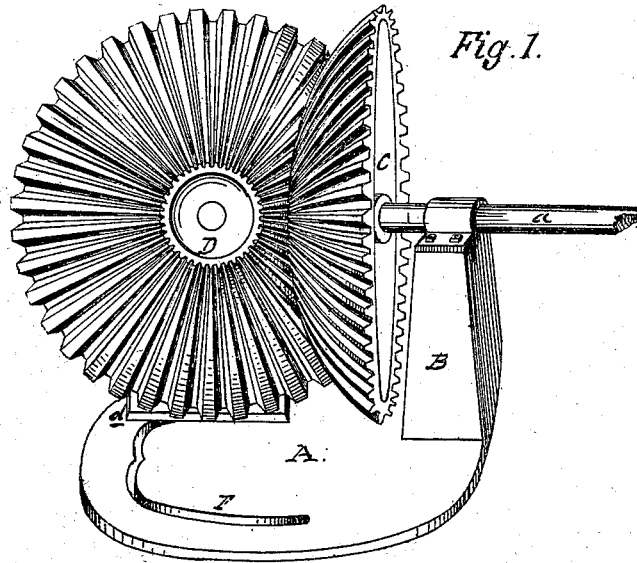


Fig. 1.

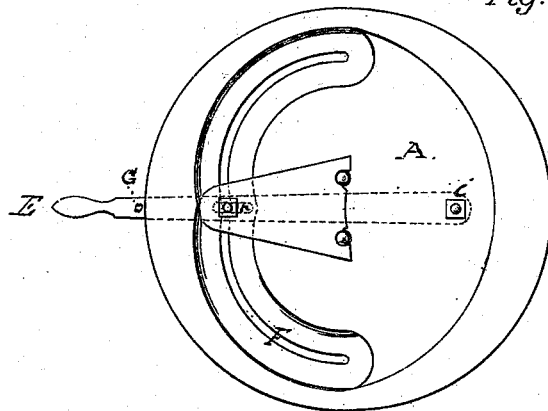


Fig. 2.

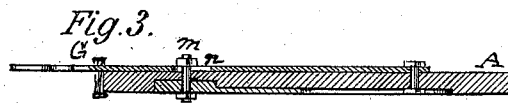


Fig. 3.

Witnesses:

*John W. Astor*  
*Herm. Lauter*

Inventor:

*Egbert Smith*  
by his Attorneys  
*A. H. & R. K. Evans*

# United States Patent Office.

EGBERT SMITH, OF ADAMS COUNTY, ILLINOIS, ASSIGNOR TO HIMSELF  
AND MARTIN SHERRICK, OF SAME PLACE

Letters Patent No. 110,938, dated January 10, 1871.

## IMPROVEMENT IN UNIVERSAL COG-WHEEL COUPLINGS.

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, EGBERT SMITH, of Adams county and State of Illinois, have invented a new and improved Universal Cog-Wheel Coupling and Joint, to be used on thrashing and other machines wanting to be changed from one direction to another; and I declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing which make a part of this specification, and in which—

Figure 1 is a perspective view of my invention.

Figure 2 is a view of the under side or bottom of the platform on which the cog-wheel coupling stands.

Figure 3 is a vertical sectional view of the platform.

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 drawing—

A is a platform, on which is rigidly secured the box B.

On the end of the shaft *a*, having its bearing in the top of the box B, is secured the oval-faced cog-wheel C, which gears into the oval-faced cog-wheel D, secured upon a shaft, having its bearing in the box *d*.

The box *d* is secured to the platform A by means of the bolt *m*, and may be moved around the platform, the bolt *m* sliding in the slot F, so as to keep the cogs of the two wheels C and D properly locked or geared.

and thus changing at pleasure the direction of the motion or power.

E is a lever secured to the bottom of the platform at *i*, (see fig. 2,) so as to turn easily upon the bolt *i* as a pivot, while the opposite end of the lever is left free to move around the circumference of the platform, and to be secured at any desirable point thereof by means of the screw-bolt G, or any other suitable means.

The lever E is slotted at *n*, and in its passage around the platform, as set forth above, the slot *n* passes along the line, and immediately under the slot F in the platform.

The bolt *m* which secures the box *d*, and which slides in the slot F, also passes through the slot *n*, and, by means of the lever E, is firmly held in position while the machinery is in motion.

### *Claim.*

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

A universal cog-wheel coupling and joint, constructed and operated substantially as and for the purpose described.

EGBERT SMITH.

Witnesses:

L. A. STEWART,  
H. ROBERTS.