

A. T. WINCHELL.
Windmills.

No. 198,829.

Patented Jan. 1, 1878.

Fig. 1.

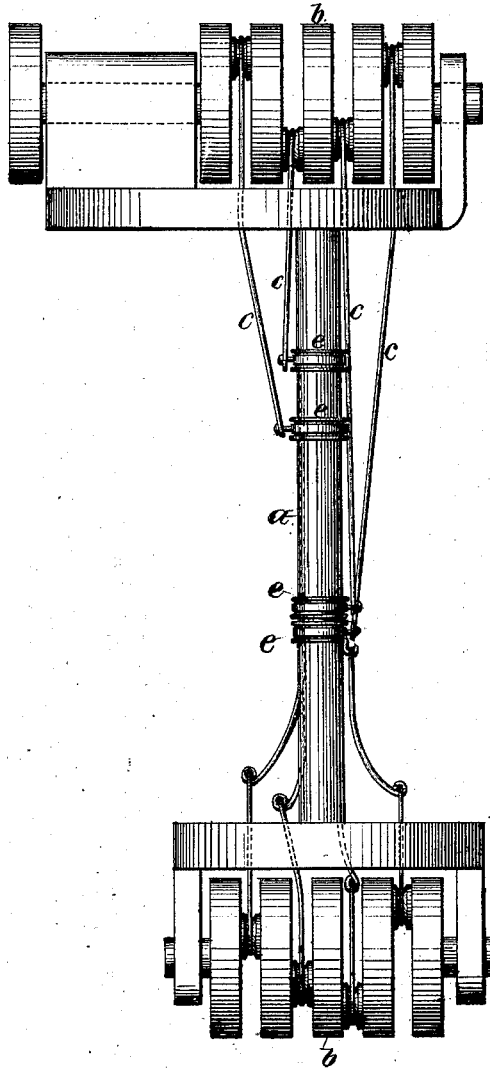
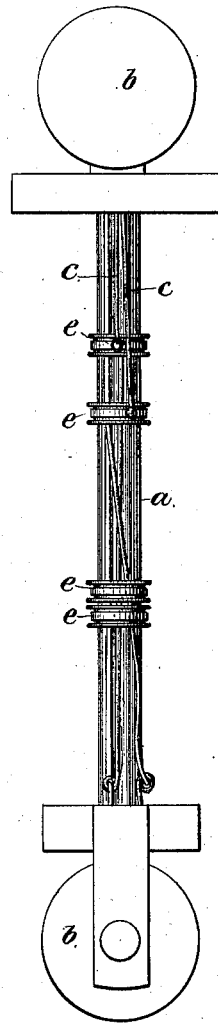


Fig. 2.



Attest.

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ALVIN T. WINCHELL, OF ALBION, MICHIGAN.

IMPROVEMENT IN WINDMILLS.

Specification forming part of Letters Patent No. **198,829**, dated January 1, 1878; application filed May 12, 1877.

To all whom it may concern:

Be it known that I, ALVIN T. WINCHELL, of Albion, Calhoun county, and State of Michigan, have invented a new and useful Improvement for an Attachment to Windmills to produce rotary motion, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to transmit the power from the windmill-shaft to a counter-shaft, by the use of a reel-crank on the windmill-shaft and another corresponding crank on the counter-shaft, placed at the bottom of the derrick or otherwise, said reel-cranks being connected by rods of sufficient strength to transmit the power of the windmill to the counter-shaft, having any number of wrists on the reel-cranks and rods connecting the same, so as always to have one off the center, said reel-cranks being two or more in number, the rods being connected with pitmen to the wrists

of the crank-shafts, each pitman having a swivel or ring joint, to provide for the shifting of the position of the windmill, occasioned by the wind blowing from different directions.

a, the mast, on which the windmill is placed; *b b*, the reel-cranks on the windmill-shaft and the corresponding counter-shaft; *c c c c*, the rods attached to and connecting the crank-shafts; *e e e e*, the swivel or ring joints.

I claim as my invention—

The combination of the reel-crank shafts, connected by two or more rods, or their equivalent, having ring or swivel joints, substantially as described, for transmitting the power of windmills to a counter-shaft, and producing rotary motion.

ALVIN T. WINCHELL.

Witnesses:

J. M. PEABODY,
ISAAC N. MILLER.