L. R. BURLESON.

ATTACHMENT FOR WINDMILLS.

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Fig. 2.

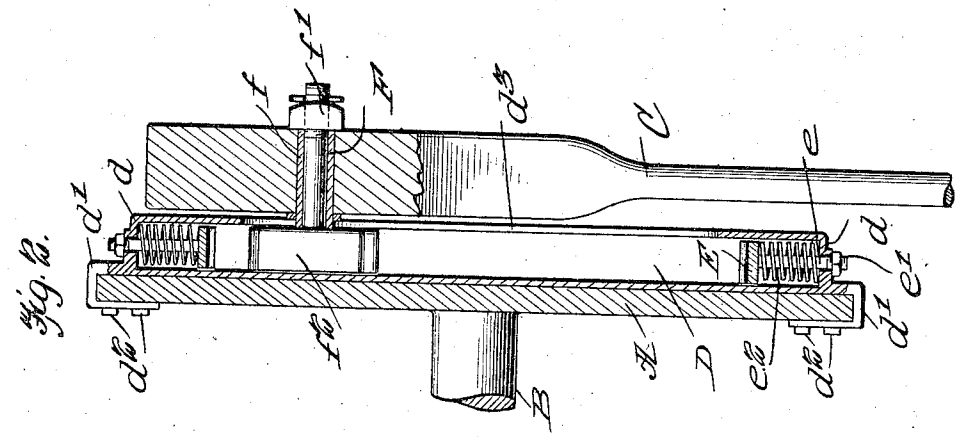
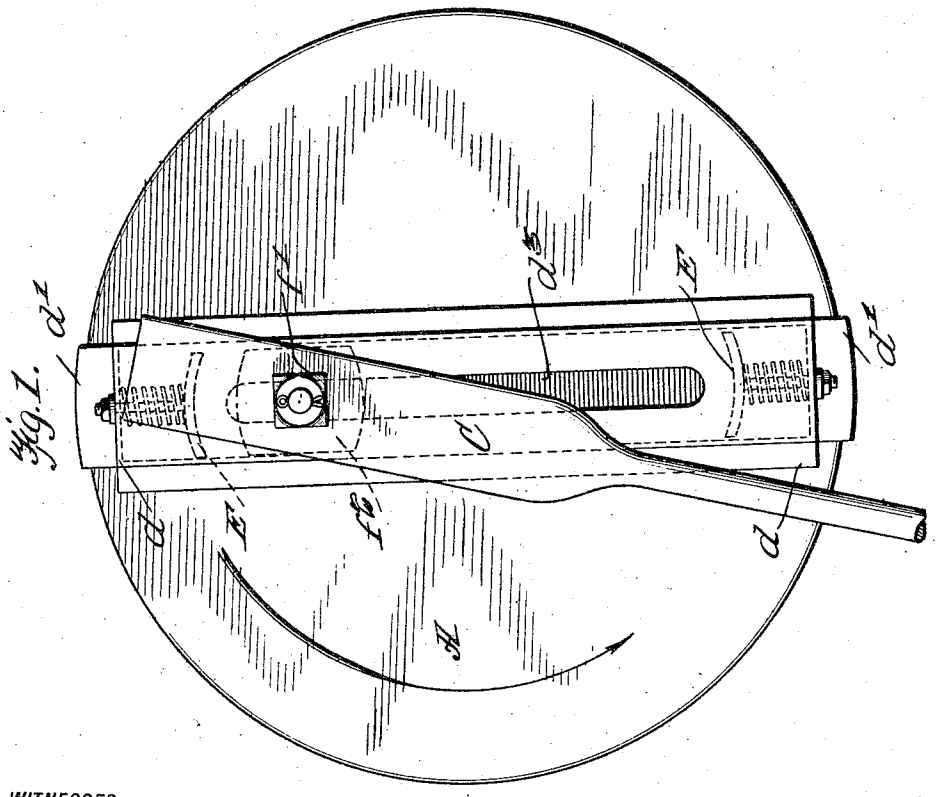


Fig. 1.



WITNESSES

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ATTACHMENT FOR WINDMILLS.

1,066,249. Specification of Letters Patent. Patented July 1, 1913.

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To all whom it may concern:

Be it known that I, LEMUAL R. BURLESON, a citizen of the United States, and a resident of Plains, in the county of Yoakum and State of Texas, have invented a new and useful Improvement in Attachments for Windmills, of which the following is a specification.

My present invention relates to attachments for windmills of that type embodying crank disks or face plates for the purpose of converting rotary motion of the wheel shaft into reciprocating motion for actuating the pitman of the sucker rod.

The object of my invention is to provide a construction applicable to the above type of windmill, through the use of which the life of the surrounding parts will be greatly lengthened and the effectiveness of their operation greatly increased, particularly in the instances to be hereinafter specifically brought out.

In the accompanying drawing, which illustrates the preferred embodiment of my invention, and which forms a part of this specification, Figure 1 is an elevation of a crank disk or face plate, and its connected parts, to which my improvements have been applied; and Fig. 2 is a sectional view taken therethrough.

Referring now to these figures, the usual type of windmill embodies a crank disk or face plate A which is either rigidly secured to, or forms an integral part of, one end of the windwheel shaft B, and to which the wrist pin of the sucker rod pitman C is connected.

In accordance with my invention, I provide an elongated boxing D which is provided with apertured ends d and which is adapted to be secured to extend diametrically across the outer face of the face plate A, by means of its end brackets d' adapted to embrace the periphery of the face plate and to receive fastening members d^2 extending into the inner face of said plate.

Mounted within each end of the boxing D is a transverse curved bearing member or plate E having an outwardly projecting stem or shank e projecting through the aperture of the boxing end d and threaded to receive an external nut e'. A spring e^2 is coiled about the stem or shank and compressed between the bearing plate E and the boxing end d whereby to form a cushioning element at each end of the boxing.

Transversely through the pitman C is extended a sleeve f through which projects the wrist pin F, the latter being threaded at its outer end to receive a nut f' by which it is maintained in position. The inner end of the wrist pin F is provided with an enlarged head f^2 which is disposed, and freely slidable within the boxing D, said wrist pin working in a longitudinal slot d^3 in the outer wall of the boxing. In this manner the wrist pin head f^2 works between the cushioning elements and all jerks and jars, which cause rapid deterioration of the parts, are done away with.

It will be noted that the wrist pin F is incased with the object in view to reduce its wear and maintain the same in good working order by the comparatively infrequent substitution of a new sleeve f. It will be further noted that through the construction employed, the sucker rod is caused to make two strokes to every complete rotation of shaft B. Fig. 1 illustrates the parts in the position they will assume at the start of each downward stroke of the sucker rod under its own weight. As each end of the boxing D approaches the vertical center of the face plate A above the shaft B, the pitman will start to descend, permitting the wrist pin head f^2 to drop into engagement with the cushioning element at the lower end of the boxing, by which lower boxing end it is immediately carried upwardly.

I claim:—

1. The combination of a crank disk having a guide extending diametrically across one face, cushioning elements at the ends of said guide, a reciprocating member, and a wrist pin carried by the reciprocating member and freely slidable within said guide between said cushioning elements during the rotation of the disk.

2. The combination with a crank disk, of a boxing having connecting brackets at its extremities whereby to secure the same diametrically across the crank disk, and a wrist pin having a headed inner end freely slidable within said boxing during the rotation of the crank disk.

3. An attachment of the character described comprising an elongated boxing provided with connecting brackets and a longitudinal slot in its front wall, cushioning elements within the ends of said boxing, and a wrist pin extending through said slot and having a head at its inner end which is

freely slidable within the boxing between said cushioning elements.

4. An attachment of the character described comprising an elongated boxing provided with apertured ends and with attaching brackets projecting from said ends and adapted to embrace the periphery of a crank disk, curved bearing plates arranged transversely within the ends of said boxing and having stems projecting through the apertured boxing ends, and springs encircling said stems for resisting outward movement of said plates, and a wrist pin working through a slot in the front wall of said boxing and having an inner head freely slidable in the boxing between said bearing plates.

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Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."