# PATENTS.

Applicant: T. PARRS. No. 18825

Invention: WINDMILL. Date: 1 : 12 : 04

APPLICATION—

Received with COM. specification and fee (10s.) paid ... 3 : 12 : 04

Accepted, : : Acknowledged, 29 : 12 : 04 Gazetted, 12 : 1 : 05

COMPLETE SPECIFICATION (if left subsequently)—

Received and fee (10s.) paid ... ... ... ... ... ... : :

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COST OF COPYING—

Specification, £ : 1/- : Drawings, £ : 1/-

LETTERS PATENT—

Memorandum and form *re* issue posted to H. Hughes (6) 11 : 3 : 05

Issue applied for and fee (£2) paid ... ... ... ... ... 12 : 2 : 06

Prepared, 21 : 2 : 06 Issued to agent 8 : 3 : 06

Advice to the Governor with No. 1859 . Receipt Kenneth

FEES FOR SECOND AND THIRD TERMS—

Reminder sent to Applt. 22 : 10 : 08 Fee (£5) paid, 28 11 : 08

Reminder sent to Applt 6 : 11 : 11 Fee (£10) paid, 24 : 11 : 11

MEMORANDA.

Circular *re* provision where Patent not worked in New Zealand (sect. 29) to Applt 2.7.13

COMPLETE SPECIFICATION.

"IMPROVEMENTS IN OR RELATING TO WINDMILLS."

I, THOMAS DANKS, of Christchurch, in the Colony of New Zealand, Manufacturer, do hereby declare the nature of my invention for "Improvements in or relating to windmills", and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:-

My present invention refers to means for causing the vane of a windmill constructed according to my Patent No:6950 to swing easily into or out of the wind for the purpose of governing the movement of the mill wheel.

In the accompanying drawing:-

Figure 1 is a side elevation of part of a windmill and vane.

Figure 2 is a special shaped cap of one of the crank shaft plummer blocks, and

Figure 3 is a perspective view of a swivel connecting piece.

In my New Zealand Patent No:6950 the vane bracket a is hinged to a tubular pin b, about which it turns as the mill is swung into or out of gear.

Owing, however, to the weight of the vane c and its rod d upon the bracket, there is a tendency for the latter to drag upon the pin b, and it is to overcome this that I have devised my present apparatus.

In order to take the weight of the vane off the pin as much as possible, I provide stays e that are connected to the outer portion of the vane rod at one end and at their other end secured to a stationary portion of the windmill mechanism. For this latter purpose I form the cap of one of the crank spindle bearings with a boss f, on which a casting g is adapted to swivel. The casting has lugs h wherein the ends of the stays e are secured.

The vane c is thus supported by the stays e, which are permitted to turn with it by virtue of their connection with the swivel g.

The stays may be adjusted in length when necessary in order that the bearing of the bracket, with the attached vane,

upon the pin b, may always be the same. If this is maintained it will be easier for the vane to move and to come into and out of the wind as the wire cord j is operated.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:-

1. For the purpose indicated, the general arrangement construction and combination of parts, substantially as described and as set forth.

2. For the purpose explained, stays attached to the outer end of the vane rod of a windmill and to a swivel piece upon the crank bracket, as specified.

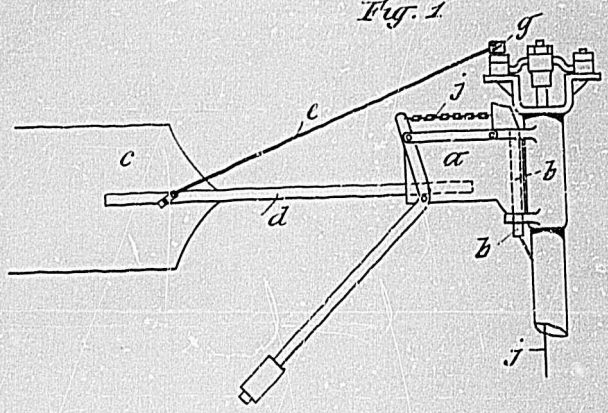
Dated the 30th day of November 1904.

Thomas Danks

By his Agent Henry Hughes

18825

Fig. 1



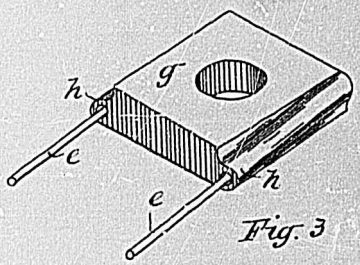




Fig. 2

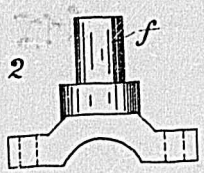



Fig. 3