

No. 668,812.

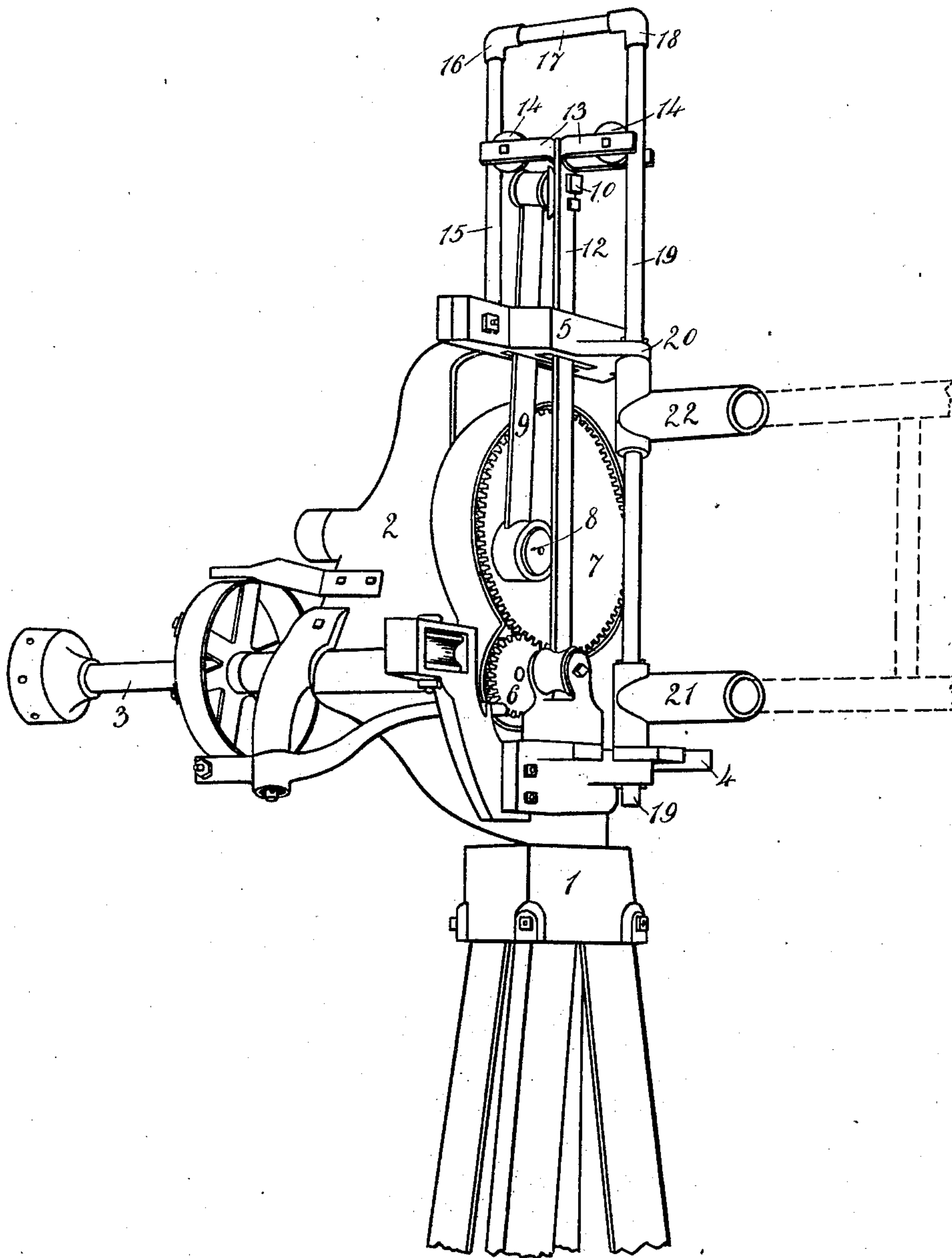
Patented Feb. 26, 1901.

C. B. DEMPSTER & F. H. KLINE.

WINDMILL.

(Application filed Apr. 30, 1900.)

(No Model.)



WITNESSES:

C. F. Patterson
Ray J. Davenport

INVENTORS:

Charles B. Dempster
Frank H. Kline
PER *Geo. W. Sues.*
ATTORNEY

UNITED STATES PATENT OFFICE.

CHARLES B. DEMPSTER AND FRANK H. KLINE, OF BEATRICE, NEBRASKA.

WINDMILL.

SPECIFICATION forming part of Letters Patent No. 668,812, dated February 26, 1901.

Application filed April 30, 1900. Serial No. 14,983. (No model.)

To all whom it may concern:

Be it known that we, CHARLES B. DEMPSTER and FRANK H. KLINE, residing at Beatrice, in the county of Gage and State of Nebraska, have invented certain useful Improvements in Windmills; and we do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, which forms a part of this specification.

This invention has relation to an improvement in windmills.

The object of our invention is to provide a windmill the pump-rod of which is provided with a roller-guide securing the same to the pitman to prevent the rod from bending and insuring a straight lift on the upward stroke.

In the accompanying drawing we have shown a perspective view of a windmill provided with our improvement.

In the accompanying drawing we have shown a windmill of usual construction embodying a tower-bed, one of which is secured to a revolving frame 2, provided with the usual shaft 3 and a lower bracket 4 and an upper bracket 5. To the shaft 3 is secured a gear 6, meshing with the gear 7, provided with a wrist-pin 8, to which is secured the pitman 9, working through the upper bracket 5, as shown. To the upper end of the pitman 9 is secured a pin 10, movably securing the upper end of the pitman 9 to the pump-rod 12. Secured to the upper end of the pump-rod 12 are two U-shaped brackets 13, each being provided with a suitable sheave 14, as is shown. Extending from the frame 2 is a pipe-section 15, provided above with an elbow 16, supporting the transverse section 17, which upon its end is secured to an elbow 18, from which extends downward the main pipe-section 19, passing through an ear 20 of the bracket 5 and being secured below

to the bracket 4, as has been set forth. Secured to this pipe-section 19 are the vane-castings 21 and 22, to which the vane is secured. From this it will be seen that we have provided a windmill with a three-sided frame, comprising the tubular sections 15, 17, and 19. While we have described this frame as made of iron tubing, it should be understood that a solid rectangular bar or round bar-iron could be used.

The sheaves 14 are so positioned within their supports 13 that they nicely ride between and upon the bars 15 and 19, so that as the pitman 9 is reciprocated in the working of the windmill the supports 13, which in effect form a carriage, insure the pump-rod 12 secured thereto passing upward and downward in a straight line and reducing friction to a minimum and also insuring the upper end of the pitman working in a straight line.

While we have shown our improvement in connection with what is known as the "Dempster" windmill, it should be understood that the attachment could be used upon any windmill of direct stroke or back gear.

Having thus described our said improvement, what we claim as new, and desire to secure by United States Letters Patent, is—

In a windmill of the character described, an actuated pitman, a pump-rod movably secured to said pitman, of a three-sided frame suitably supported and extending upward, one side or branch of said frame being adapted to support the vane, of a carriage reciprocating within the upper end of said frame, said carriage being adapted to be movably secured to said pitman and carrying said pump-rod.

Signed in the presence of two witnesses.

CHARLES B. DEMPSTER.

FRANK H. KLINE.

Witnesses:

J. W. BURGESS,

H. W. SCHAFER.