

Duplex Open Wheel Vaneless Windmills

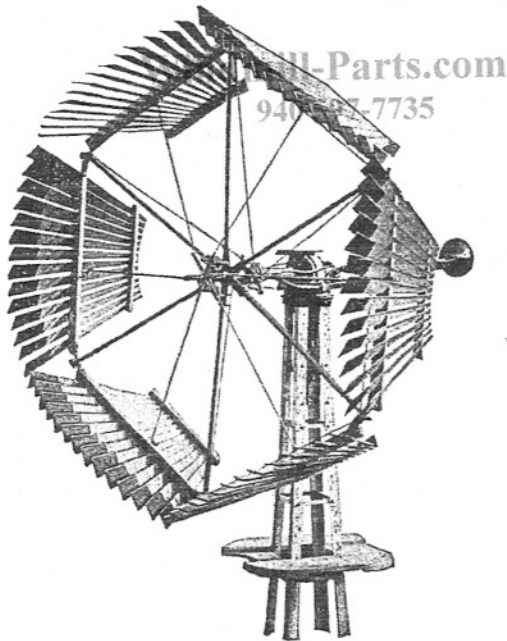


Illustration shows position of the fans when the mill is not in use or when working in a high wind. The harder the wind blows the more the fans open, allowing the wind to pass through thus relieving both mill and tower of undue strain.

The automatic governing arrangement is constructed on the same lines as a ball governor on a gasoline engine. Will automatically regulate the opening and closing of the fans according to the velocity of the wind. The speed of pumping does not increase in a high wind.

Direct stroke and makes one pumping stroke to every revolution of the wheel, therefore runs only one-third as fast as back geared mills.

Quoted less Wood Pumping Rod, which when ordered will be charged extra 940 597-7735

- No. 22—10-ft. Open Wheel, to fit Duplex Towers. Weight 477 lbs.
 - No. 24—10-ft. Open Wheel, with 5-ft. Stub, for old towers. Weight 528 lbs.
 - No. 25—12-ft. Open Wheel, to fit Duplex Towers. Weight 630 lbs.
 - No. 31—12-ft. Open Wheel, with 5-ft. stub, for old towers. Weight 675 lbs.
- Use No. 3, No. 4 or No. 5 Steel Towers with Duplex Open Wheel Mills.

Windmill-Parts.com
940 597-7735
Details of Construction

Windmill-Parts.com
940 597-7735

Main shaft runs in a grease chamber similar to the back axle on an automobile, and is packed with sufficient cold-proof grease to last for at least 12 months.

Other bearing points are equipped with grease cups, but with the main shaft well oiled no particular attention need be given to the oiling of the mill for a year.

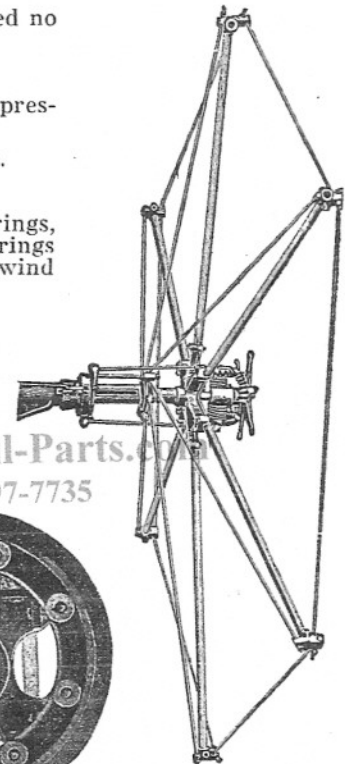
All material that enters into the construction of the wheel frame is steel or iron.

The arms are 3/4-inch steel pipe, projecting forward and are rigidly guyed against the pressure of the wind by stay rods.

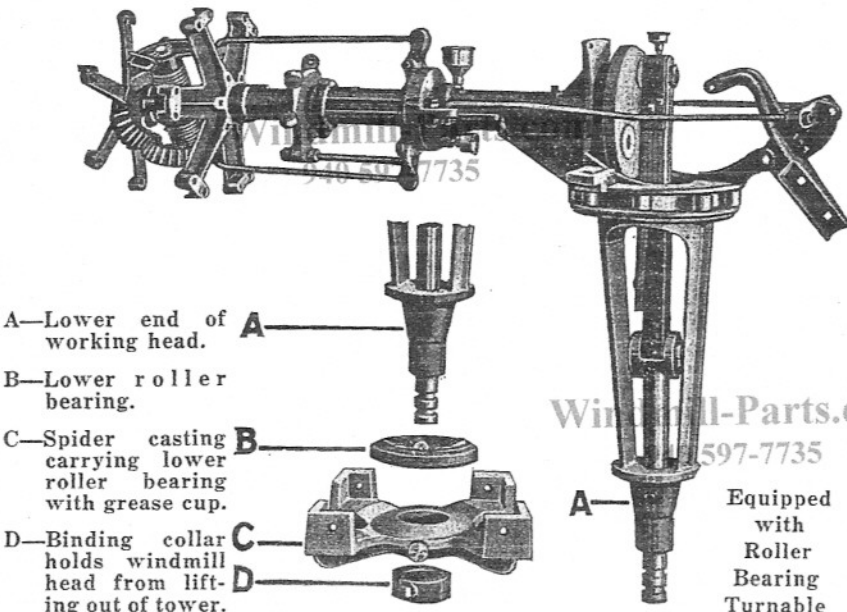
Steel tie rods bind the arms together and form a complete cord around the frame.

The stay rods would have to break before the arms could buckle.

The arrangement of the wheel hub, sector gears, governor wheel and governor springs, remove friction from the slide head and prevent wear, an exclusive feature of this mill. Springs exert a back pressure of 140 pounds on slide head, thus overcoming an equal amount of wind pressure.

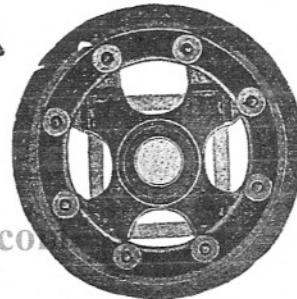


Steel Frame to which Fans are fastened.



- A—Lower end of working head.
- B—Lower roller bearing.
- C—Spider casting carrying lower roller bearing with grease cup.
- D—Binding collar holds windmill head from lifting out of tower.

Windmill-Parts.com
940 597-7735



Top View of Tower Casting and Roller Ring
Roller race is machine finished. Lower bearing is chilled iron.

Windmill-Parts.com
940 597-7735

Equipped with Roller Bearing Turnable