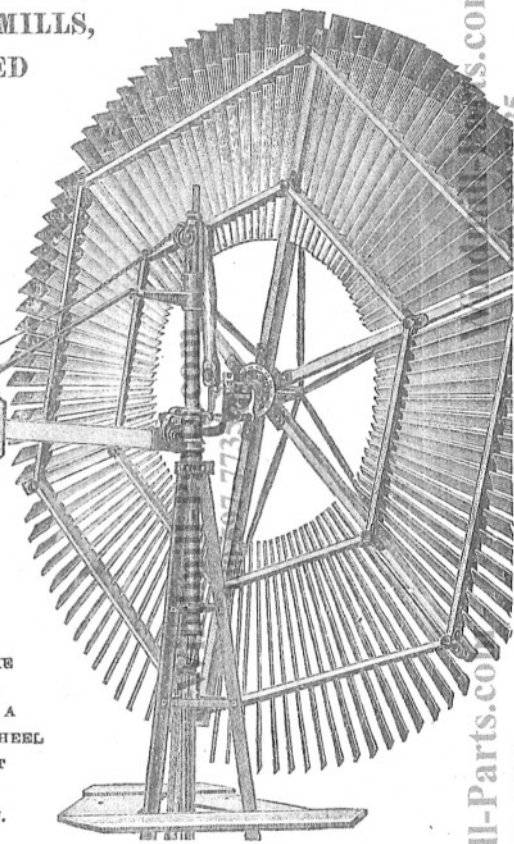


APPLETON-GOODHUE DIRECT STROKE PUMP-
ING WIND MILLS,
GALVANIZED
STEEL OR
WOOD.



B. 10-FT.
DIRECT STROKE
WOOD MILL.
THIS MILL HAS A
LARGE CRANK-WHEEL
WHICH IS NOT
SHOWN IN
ILLUSTRATION.

LIST PRICES, ETC.

Size.	Length of Stroke.	Weight.	Price.
B. 10-ft. galv. steel	4, 5, 7 and 8 inch.	412 lbs.	\$50.00
B. 10-ft. wood	4, 5, 7 and 8 inch.	460 lbs.	40 00
H. 10-ft. "	4 & 5 in. for Cylinder Pumps 7 & 9 in. for Tubular Wells	553 lbs.	44 00
I. 12-ft. "	4, 5, 7 and 9 inch.	697 lbs.	55 00

We furnish without extra charge tower irons for steel or wood towers, or for single timber, as may be desired.

See pages 65 and 66 for size mill to buy, size cylinder and length of stroke to use on different depths of wells, height of tower required, etc. For description and price-list of towers see pages 75 to 79.

These mills have been favorably known both in this and foreign countries for over twenty-five years and have an unrivalled reputation for power and durability.

The general construction of the B 10-ft. Galvanized Steel Direct Stroke Mill is the same as of our Standard back-geared

WHAT SIZE AND STYLE WINDMILL TO BUY.

Ascertain the distance from the surface of water in well at low water mark to the highest point of discharge. This will give you the "elevation," that is, the height the water has to be lifted. The tables on the following page will readily enable you to select the proper size mill for the work and the proper size cylinder required, depending on the "elevation," the capacity desired, etc. It makes no difference how deep the well is—it is merely a question of lifting the water from the surface at low water mark to the point of discharge. For instance, if the water is to be discharged at the well, and the distance from the pump platform to low water mark in well is 30 feet, a reference to the tables will show you that our 8-ft. mill working on the 5-inch stroke, using a 3½-in. cylinder, will do the work and discharge 435 gallons of water per hour. If the water is to be elevated from the same well and discharged into a tank 20 feet above the pump platform you must figure on an "Elevation," or lift, of 50 ft., and by reference to our tables you will find that our 8-ft. mill working on the 5 inch stroke, using a 3 inch cylinder, will do the work and discharge about 320 gallons of water per hour; or working on the 7-in. stroke, using a 2½-in. cylinder, will discharge 360 gallons of water per hour. Of course smaller cylinders may be used for the different elevations than are specified in our tables and a proportionate capacity obtained. You will notice that the estimates of capacity in these tables are based on a 10 mile wind. In higher winds the mills will do more than is specified in our tables, but it is always advisable to select a size mill which will do the required work in as light a wind as possible, being careful to see that the cylinder selected is of the size best adapted to the size and style of mill and the height the water is to be elevated.

BACK-GEARED OR DIRECT STROKE.

On both our direct stroke and back-geared mills the slats are set at the proper angle to give the right speed to the pump. There is very little difference in the speed of the pump rod on our 6-ft., 8-ft., or 10-ft. backgeared mill and our 10-ft. direct stroke mill. All are perfect mills in their class and meet every requirement of those preferring either style, but the back-geared is by all odds the most popular, because they will work in lighter winds, the 8-ft. back-geared doing as much, day in and day out, as a 10-ft. direct stroke.

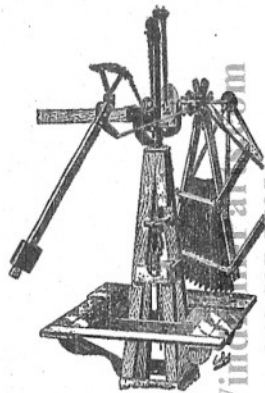
SUBURBAN OUTFITS. Diagrams and detailed information on pages 76 and 77.

DRAINAGE. There are many tracts of land that can be easily drained by windmills and thus made very valuable. We invite parties having such land to write us giving the number of acres to be drained, the height water must be raised to carry it off, a sketch showing the pond or land to be drained, and as complete a description of all surroundings as possible. We can then make an estimate of the probable cost of the outfit required for the work.

WINDMILL IRRIGATION. Irrigation by windmills is a tested success and is growing in popularity. Our 13-ft. and 14-ft. galvanized steel back-geared wind-

mills, described on pages 60 to 62 except that the direct stroke mill is not back-geared and its fans are set at a different angle.

The working parts of the F. 10-ft. Mill are the same design as those of our B. 10-ft. Direct Stroke Galvanized Steel Mill, having cold rolled steel shafts running in self-oiling boxes, hard maple pitman, engine way top, simple and effective governing device, etc. The small illustration shows the working parts of our H. 10-ft. Old Style Changeable Stroke Wood Pumping Windmill, which has been a popular style for over 15 years and is still in great demand. The I. 12-ft. Wood Mill is of the same general design as the H. 10-ft. Mill and either will be found in every way satisfactory and very durable.



WORKING PARTS. H 10-FT. OLD STYLE CHANGEABLE STROKE PUMPING MILL.

What they all say



must be true.

The Appleton-Goodhue Windmill is popular with the dealer because it is easy to sell, stays sold and makes a friend and permanent customer of every purchaser. We have hundreds of letters on file from satisfied users in all parts of the country invariably claiming more for the goods than we do. We quote from a few:

"The 6-ft. Goodhue and 30-ft. 3-post Tower I bought through Mr. C. W. Dailey in March, 1890, has been running nearly all the time and does not show a particle of wear at the present time. The mill stands between four larger mills of other makes. Mine will run whenever the others run, will run longer and with less oil. I oil my mill once in 90 days."—A. B. HOOVER, Alden Kan.

I honestly believe it is the most powerful mill on the market for a 6-ft. mill and can cheerfully recommend it to any person in need of a pumping mill.—Geo. ZULICH, Fargo, Mich.

I find that the suburban water works outfit erected for me meets every requirement and affords all the conveniences that can be obtained from connection with city water works. The 40-bbl. tank placed 40 ft. high in the tower gives strong pressure for carrying water any distance about the grounds and residence and other buildings.

To anyone wishing a reliable water works equipment I can fully recommend the Goodhue Windmill and suburban water works outfit.—J. FRANK KELLEY, Geneva, Ill.

I have had a Goodhue Pumping Mill in use over sixteen years and have never spent anything on it for repairs, and by the appearance of the mill it will stand as long as it has stood already.—M. SOLONBERGER, Naperville, Ill.

mills are particularly adapted to operating large irrigating pumps. However nearly every irrigating plant is different from every other in some respects, and, therefore, the size mill and capacity of pump must be accurately calculated for each plant. We are glad to enter into correspondence with parties contemplating irrigation by windmill.

Tables Showing Guaranteed Capacity of our Pumping Windmills in a 10-mile wind and the size cylinder to use for a given elevation.

6-FOOT BACK-GEARED STEEL MILL.

Elevation.	4-inch Stroke.		5-inch Stroke.		7-inch Stroke.	
	Diameter of Cylinder.	Gallons per Hour.	Diameter of Cylinder.	Gallons per Hour.	Diameter of Cylinder.	Gallons per Hour.
10-foot	3 inch	300	2¾ inch.	260	2½ inch	300
20-foot.	2½ "	175	2¼ inch.	180	1¾ inch	150
30-foot.	2 "	115	1¾ inch.	110	1½ inch	110

8-FOOT BACK-GEARED OR 10-FOOT DIRECT STROKE MILL.

Elevation.	5-inch Stroke.		7-inch Stroke.		8-inch Stroke.	
	Diameter of Cylinder.	Gallons per Hour.	Diameter of Cylinder.	Gallons per Hour.	Diameter of Cylinder.	Gallons per Hour.
10 foot	6 inch	1080	5 inch	1190	4½ inch	1090
20 "	4½ "	710	4 "	750	3½ "	660
30 "	3¾ "	435	3½ "	530	3 "	490
40 "	3¼ "	380	3 "	430	2¾ "	425
50 "	3 "	320	2¾ "	360	2½ "	300
75 "	2¾ "	260	2½ "	300	2¼ "	275
100 "	2½ "	210	2 "	190	2 "	210
125 "	2¼ "	170	1¾ "	145	1¾ "	160
150 "	2 "	135	1½ "	110	1½ "	120
175 "	1¾ "	100				
200 "	1½ "	75				

10-FOOT BACK-GEARED OR 12-FOOT DIRECT STROKE MILL.

Elevation.	5-inch Stroke.		7-inch Stroke.		8-inch Stroke.	
	Diameter of Cylinder.	Gallons per Hour.	Diameter of Cylinder.	Gallons per Hour.	Diameter of Cylinder.	Gallons per Hour.
20 foot	8 inch	2000	6½ inch	2000	6 inch	1940
30 "	5½ "	1020	4½ "	960	4¼ "	980
40 "	5 "	850	4¼ "	840	4 "	860
50 "	4 "	540	3½ "	580	3¼ "	575
60 "	3½ "	420	3 "	430	2¾ "	410
80 "	3 "	300	2¾ "	360	2½ "	300
100 "	2¾ "	260	2½ "	300	2¼ "	275
125 "	2½ "	210	2 "	190	2 "	210
150 "	2¼ "	170	1¾ "	145	1¾ "	160
175 "	2 "	135	1½ "	110	1½ "	120
200 "	1¾ "	100				
220 "	1½ "					

12-FOOT BACK-GEARED MILL.

Elevation	Diameter of Cyl.	Gallons per hour.	Elevation	Diameter of Cyl.	Gallons per hour.
15 ft.	12 inch	8,000	150 ft.	3½ inch	700
25 ft.	10 "	6,000	175 ft.	3 inch	500
40 ft.	8 "	4,000	200 ft.	2¾ inch	425
60 ft.	6 "	2,000	250 ft.	2½ inch	350
80 ft.	5 "	1,500	300 ft.	2¼ inch	200
100 ft.	4½ "	1,200	350 ft.	2 inch	175
120 ft	4 "	900	400 ft.	2 inch	175