DEMPSTER STEEL WINDMILL TOWERS

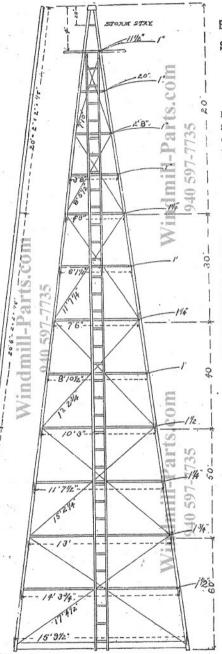


Fig. 1046

DIAGRAM OF TOWER.

FOR 8 and 10 FOOT WINDMILLS

Showing Dimensions and Sizes of Material.

Towers for other sizes of windmills are made on practically the same general lines of construction, except in weight and sizes of material.

Sizes and Weights of Fo ur-Post Steel Towers.

Made with 2-inch angle corner posts and steel girts every five feet for 6, 8 and 10 foot wood or steel mills.

		00	10	We	ight
20	foot	 	<u> </u>		385
25	foot	 (repo)			455
30	foot	 0			550
40	foot	 1	ò		740
50	foot	 feered a pool	W)		1000
60	foot	 Small	70		1300
		janes	ARRIVA .		

Made with 2½ inch angle corner posts and steel girts every five feet for 8 and 10 foot wood or steel mills.

		ight
	foot	
60	foot	1375

Made with 3-inch angle corner posts and steel girts every five feet for 12 and 14 foot wood or steel mills.

		We	ight
20	foot	·	530
30	foot		750
40	foot		1005
50	foot		1285
60	foot		1685

All towers are shipped complete with anchor posts and plates.

DEMPSTER STEEL WINDMILL TOWERS RIGID CORNER POSTS.

The corner posts are made of either 2"x2", 21/2"x21/2", or 3"x3" angle teel, depending on the height of the tower and the size of the mill for which t is to be used. ey are cut to length and punched by a special process in

Vindinil-Par 940 597-773 our own plant before they are galvanized, obviating any chance of the galvanizing becoming broken or peeling off.

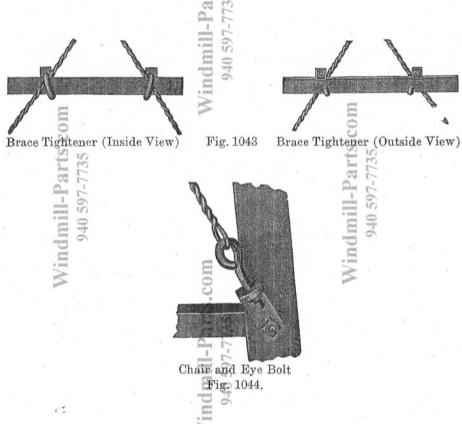
From a mechanical standpoint, the "Sprung" Tower is from 15% to 20% stronger than the tower with straight corner posts. By using the "Sprung" construction we are able to come straight down to a point a little below the platform with the corner posts, thus giving us more room between the wheel and the tower. From the platform down to the anchor posts, the tower is sprung, giving a wider spread at the base of tower and a greater distance between the corner posts at the base of tower than it is possible to obtain with any other construction.

GIRTS ONLY FIVE FEET APART

We use only the best quality of galvanized angle steel, braced with twisted galvanized wire cable and heavy aurle steel girts every five feet apart. Some man. leave ten feet between the girts on some of their towers, but actual test proven that a tower with girts 1. apart has double the strength and registing power of one with girts ter 'eet apart.

Illustrations below show how braces are connected to corner post. Also to intermediate girts.

Every girt on DEMPSTER towers is made of steel with the exception of the bottom girt, which is made of wood. At the first thought you may think that this should be steel, but consider this girt is at the botton of the tower and that every time you go for water you step over this girt. It wou, natural that sometimes you would step on this girt. It it was made or steet. you bend the girt down and it would then cease to be a brace for the tower,

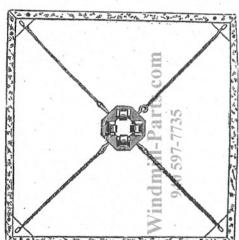


would immediately become a strain trying to pull the tower together at the bottom, loosening the brace wires and throwing the tower out of alignment, while with the wood it cannot bend, even under pressure, but will always remair substantial and reliable brace for the towers.

He end of each brace is equipped with an eye bolt and nut, which passes ugh a chair or wrought iron clamp as shown in Fig. 1044, that is bolted to are post, making it possible to draw the brace wire as tight as desired. The brace wire are also clamped to the intermediate girt, as shown in Fig. 1043.

ROLLER GUIDE FOR PUMP ROD.

Illustration shows the Roller Pump Rod Guide, which is an important



feature of every **DEMPSTER** Tower. It serves not only to keep the rod in perfect alignment, and to permit of its operation without friction, but the method of securing same to the triangular steel corner brace plate contributes in a remarkable degree to that rigid construction so vitally essential in a windmill tower.

The roller guide and wires fasten to the corner of the tower by means of the angle, and the wires running from the four corners brace the tower very materially. We place one of these roller guides every ten feet in

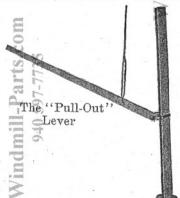
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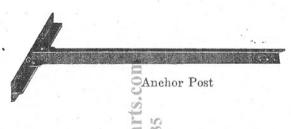
our towers. The triangular corner plate in each corner is not bolted, but is riveted to the girt. This is done before the girt is tightened, and makes an exceptionally strong brace.

DEMPSTER "PULL-OUT" LEVER

is the device by which the wheel of the **DEMPSTER** Mill is thrown out of the wind when pumping is not required. This lever is a great improvement over the usual method. There is no windlass to wind or ratchet to wear out and



slip—only a simple, self-locking lever to pull by, a casting which is attached corner post of the tower, forming a hinge for the lever, which automaticks the mill out of gear. The pull-out wire is fastened to a simple likever. This arrangement is so simple that any child can operate it.



A strong anchorage is very important for a windmill tower. A glance at the illustration shows a **DEMPSTER** Galvanized Steel Anchor Post that will not rot or rust and is so constructed that your tower will be safe in the strongest wind.

A bed of cobble stones or cement should be placed under the anchor plate to prevent tower from settling. Then fill the hole on top of plate with cement, gravel, crushed stone or earth and tamp it well down.

FOUR POST GALVANIZED STEEL TOWERS	
FOOR POST GALVANIZED STEEL TO WELL	77

instant (C)	For 6, 8 and 1 Corner		For 12 and 14-ft. Mills Corner Posts
Height	2x2 inch	2 ½ x2 ½ inch	3x3 inch
20 feet 25 feet 30 feet 40 feet 50 feet 60 feet	385 lbs. 455 lbs. 550 lbs. 740 lbs. 1000 lbs. 1300 lbs.	435 lbs. Not made 620 lbs. 830 lbs. 1075 lbs. 1375 lbs.	530 lbs. Not made 750 lbs. 1005 lbs. 1285 lbs. 1685 lbs.

WINDMILL AND TOWER GUARANTEE

rantee **DEMPSTER** windmills and towers to be of the best material be constructed in the best and most workmanlike manner. We guarathem against breakage from defective material or faulty workmanship ear from date of purchase. If any part does break from these causes splace it free of charge f. o. b. factory.

the essential points of merit which you demand of a windmill and tower, of any article you purchase. A guarantee of this kind backed by the standing of ours, is full and complete protection for you.

REPAIRS AND PARTS FOR STEEL WINMILL TOWERS

Name of Tower Part	4 Post for 6, 8 and 10-ft. 2-in. Angle	Mills	4 Post for 6, 8 and 10-ft. 2½-in Angle	Mills	4Post for 12-ft. Mi 3-in. Angle	ill .	3 Post for 8 and 10-ft. I	Mills
Traine of Tower Tare	Dimensions	Price	Dimensions	Price	Dimensions	Price	Dimensions	Pric
Top steel girt for 20-ft. tower, ea 2nd steel girt for 20-ft. tower, ea 3rd steel girt for 20-ft. tower, ea 4th steel girt for 20-ft. tower, ea 5th steel girt for 30-ft. tower, ea 5th steel girt for 30-ft. tower, ea 6th steel girt for 30-ft. tower, ea 7th steel girt for 30-ft. tower, ea 1th steel girt for 40-ft. tower, ea 1th steel girt for 50-ft. tower, ea 1th steel girt for 50-ft. tower, ea 1th steel girt for 50-ft. tower, ea 2th steel girt for 60-ft. tower, ea 2th steel girt for 25-ft. tower, ea 2nd steel girt for 25-ft. tower, ea 2nd steel girt for 25-ft. tower, ea 5th steel girt for 25-ft. tower, ea 5th steel girt for 25-ft. tower, ea 5th steel girt for 25-ft. tower, ea 6to brace wire for 25-ft. tower, ea 3rd brace wire for 20-ft. tower, ea 2nd brace wire for 30-ft. tower, ea. 3rd brace wire for 30-ft. tower, ea. 3rd brace wire for 30-ft. tower, ea. 3rd brace wire for 60-ft. tower, ea. 3rd brace wire for 30-ft. tower, ea. 3rd brace wire for 50-ft. tower, ea. 3rd brace wire for 60-ft. tower, ea. 4th brace wire for 60-ft. tower, each 3orner post for 70-ft. tower, each 3orner post for 50-ft. exten, each 3dder for 20-ft. tower, each 4dder for 30-ft. exten, each 4dder for 40-ft. exten, each 4dder for 60-ft. exten, each 50. 185 steel clamp for pullout. 50. 185 steel bail for pullout.	1 x1 x½x 2-ft. 8 -in. 1 x1 x½x 2-ft. 8 -in. 1 x1 x½x 3-ft. 8 -in. 1 x1 x½x 3-ft. 8 -in. 1 x1 x½x 4-ft. 9 -in. 1 x1 x½x 5-ft. 6 -in. 1 x1 x½x 5-ft. 6 -in. 1 x1 x½x 5-ft. 6 -in. 1 x1 x½x 5-ft. 7 ½-in. 1 x1 x½x 1-ft. 7 ½-in. 1 x1 x½x 1-ft. 3 ¼-in. 1 x1 x½x 1-ft. 3 ¼-in. 1 x1 x½x 1-ft. 3 ¼-in. 1 x1 x½x 2-ft. 1 x1 x½x 1-ft. 3 ¼-in. 1 x1 x½x 3-ft. 5 -in. 1 x1 x½x 3-ft. 5 -in. 1 x1 x½x 3-ft. 5 -in. 1 x1 x½x 3-ft. 9 -in. 1 x1 x½x 1-ft. 9 -in. 1 x1 x½x 1-ft. 9 -in. 1 x1 x½x 2-ft. 9 -in. 1 x1 x½x 2-ft. 9 -in. 1 x1 x½x 3-ft. 5 -in. 1 x1 x½x 3-ft. 6 -in. 2 x2 x½x 3-ft. 6 -in. 2 x2 x½x 3-ft. 6 -in. 2 x2 x½x 3-ft. 6 -in. 2 x3 x½x 3-ft. 6 -in. 2 x4x 3-ft. 5 -in. 2 x5 x½x 3-ft. 6 -in. 2 x5 x3 x3 x5 x	242 46877826644 778844687788466204446884662044468846622448884662244888466224488846622448884662466466466466646	1 x1 x \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	24 36 78 78 120 184 187 28 380 600 20 14 28 38 600 20 14 28 44 43 44 44 45 46 47 47 47 47 47 47 47 47 47 47	7-ft. 10 -in. 8-ft. 5½-in. 11-ft. 7½-in. 13-ft. 2¾-in. 15-ft. 2¾-in. 15-ft. 2¼-in. 3 x3 x¾-x20-ft. 3 x3 x½-x20-ft. 3 x3 x½-x20-ft. 6 -in. 3 x3 x½-x20-ft. 6 -in. 3 x3 x½-x20-ft. 6 -in. 5 x3 x½-x20-ft. 6 -in. 5 x3 x½-x20-ft. 6 -in.	32 46 60 80 1 34 16 11 16 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 17 16 17 17 18 18 18 18 18 18 18 18 18 18	1 x1 x½x 20½-in. 1 x1 x½x 2-ft. 8 -in. 1 x1 x½x 3-ft. 8 -in. 1 ½x1¼x½x 4-ft. 9 -in. 1 ½x1¼x½x 7-ft. 6 -in. 1 ½x1¼x½x 7-ft. 6 -in. 1 x1 x½x 8-ft.10½-in. 7-ft.10 -in. 8-ft. 5½-in. 11-ft. 7½-in. 13-ft. 2¾-in. 21½x2½x 14x20-ft.	1 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

For galvanized tower bolts add one-third to bolt list. (Use tower repair discount.)

(Continued on next page.)

Windmill-Parts.com

Windmill-Parts.com

940 597-7735

Steel Anchor Posts punched for wood tower at same list prices.

0L	97 00 8 81 4 74 9 01 1 01 1	ui-81x8/x8x8 ui-81x8/x8x8	92 98 98 14 14 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	Vui-91x%N%zx5tz ui-91x%x%z%tz J-9x9tzx%tzx5tz	98 90 90 90 90 90 90 90 90 90 90 90 90 90	ui-gix%x%zx%z ui-gix%x z% z z z z z x z z z z z z z z z z z	Anchor plate, 20 to 40-ft, (2 piece), each Anchor plate, 20 to 40-ft, (2 piece), each Anchor plate, 40 to 60-ft, (2 piece), each Stub tower, 4-ft, for top of wood tower. Stub tower, 5-ft, for top of wood tower. Stub tower, 5-ft, exhibit. Stub tower, 6-ft, exhibit. Stub tower, 6-ft, exhibit.
2 I 2 2 2 2 2 2 2 2 2	1 1 2 2 2 2 2 3 3 4 6 0 6 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1J-9x91-2x2x8 1J-9x9	## ## ## ## ## ## ## ## ## ## ## ## ##	11-2x3-1x3-1x1-4 11-2x3-1x3-1x2-2 11-2x3-1x3-1x2-2 11-2x3-1x2-2 11-2x3-1x2-2 11-2x3-1x2-2 11-2x3-1x2-2 11-2x3-1x2-2 11-2x3-1x2-2 11-2x3-1x2-2 11-2x3-1x3-2 11-2x3-2x3-1x3-2 11-2x3-2x3-2x3-2 11-2x3-2x3-2x3	9911	1-9x91-8x %; 2x %; 2 13-9x91-8x 6x 7 13-9x91-8x 6x 7 13-9x91-8x 7; 2x 6 13-9x91-8x 7; 2x 6 13-9x91-8x 7; 2x 6 13-9x91-8x 7; 2x 6 13-9x91-8x 7; 2x	Steel platform support, each Wood lookout platform. Bot, wood girt for 20-ft, tower, 4 pieces. Bot, wood girt for 25-ft, tower, 4 pieces. Bot, wood girt for 25-ft, tower, 4 pieces. Bot, wood girt for 30-ft, tower, 4 pieces. Bot, wood girt for 40-ft, exten. Bot, wood girt for 60-ft, tower, 4 pieces. Bot, wood girt for 50-ft, tower, 4 pieces. Bot, wood girt for 50-ft, tower, 4 pieces. Bot, wood girt for 40-ft, exten. Roller guide with wires, 50-ft, tower, each. Roller guide with wires, 50-ft, tower, each. Guide wire only, 50-ft, exten. each. Guide wire only, 60-ft, exten. each. Frame for windlass, each. Guide wire only, 60-ft, with plates, each. Anchor post, 20 to 40-ft. with plates, each.
10-ff. Mills Dimensions Price	Price	3-in, Angle Dimensions	Price	Mills—2½-in, An	Price	Mills—2-in, Ang	Name of Tower Part