

APPENDIX III.

GALVANIZED-STEEL-WIRE ROPES.—BREAKING-LOADS.

(Quality : Hawser Basic. Tensile strength of wires, 90 tons per square inch.)

Size of Rope.		Construction : Six Strands of 19 Wires each.	Construction : Six Strands of 24 Wires each.	Construction : Six Strands of 37 Wires each.
Circumference, in Inches.	Diameter, in Inches (approximate).	Actual Breaking-load, in Tons.	Actual Breaking-load, in Tons.	Actual Breaking-load, in Tons.
1	$\frac{5}{16}$	2.9	2.6	3.0
$1\frac{1}{8}$	$\frac{3}{8}$	3.5	3.5	3.7
$1\frac{1}{4}$	$\frac{13}{32}$	4.5	4.3	4.0
$1\frac{3}{8}$	$\frac{7}{16}$	5.2	5.1	5.0
$1\frac{1}{2}$	$\frac{15}{32}$	6.4	6.0	6.3
$1\frac{5}{8}$	$\frac{1}{2}$	7.7	6.9	7.2
$1\frac{3}{4}$	$\frac{9}{16}$	8.6	8.5	8.5
$1\frac{7}{8}$	$\frac{19}{32}$	10.1	9.7	9.8
2	$\frac{5}{8}$	11.7	10.9	11.3
$2\frac{1}{8}$	$\frac{11}{16}$	12.9	12.2	12.9
$2\frac{1}{4}$	$\frac{23}{32}$	15.4	14.2	14.5
$2\frac{3}{8}$	$\frac{3}{4}$	16.7	15.7	16.3
$2\frac{1}{2}$	$\frac{13}{16}$	18.0	17.2	17.7
$2\frac{5}{8}$	$\frac{27}{32}$	19.4	18.8	20.1
$2\frac{3}{4}$	$\frac{7}{8}$	21.7	20.5	22.2
$2\frac{7}{8}$	$\frac{29}{32}$	24.0	22.2	24.0
3	$\frac{15}{16}$	25.6	25.0	26.6
$3\frac{1}{8}$	1	29.1	26.9	27.8
$3\frac{1}{4}$	$1\frac{1}{32}$	30.8	28.9	29.0
$3\frac{3}{8}$	$1\frac{1}{16}$	32.7	31.0	31.5
$3\frac{1}{2}$	$1\frac{1}{8}$	35.6	34.2	34.0
$3\frac{5}{8}$	$1\frac{5}{32}$	37.5	36.4	36.7
$3\frac{3}{4}$	$1\frac{3}{16}$	40.6	38.8	39.5
$3\frac{7}{8}$	$1\frac{1}{4}$	43.8	40.0	42.3
4	$1\frac{9}{32}$	47.1	43.6	45.3
$4\frac{1}{8}$	$1\frac{5}{16}$	49.4	46.1	48.4
$4\frac{1}{4}$	$1\frac{11}{32}$	51.7	50.1	51.6
$4\frac{3}{8}$	$1\frac{3}{8}$	55.3	52.8	54.8
$4\frac{1}{2}$	$1\frac{7}{16}$	60.2	57.0	58.2
$4\frac{5}{8}$	$1\frac{15}{32}$	62.8	59.9	61.7
$4\frac{3}{4}$	$1\frac{1}{2}$	66.8	62.8	65.3
$4\frac{7}{8}$	$1\frac{9}{16}$	69.4	64.3	68.9
5	$1\frac{11}{32}$	72.2	68.9	72.7
$5\frac{1}{8}$	$1\frac{5}{8}$	..	72.1	76.6
$5\frac{1}{4}$	$1\frac{11}{16}$	..	75.3	80.6
$5\frac{3}{8}$	$1\frac{23}{32}$	..	78.7	82.6
$5\frac{1}{2}$	$1\frac{3}{4}$	..	82.0	86.7
$5\frac{5}{8}$	$1\frac{25}{32}$	..	85.5	88.8
$5\frac{3}{4}$	$1\frac{27}{32}$	..	89.0	93.1
$5\frac{7}{8}$	$1\frac{7}{8}$	..	92.6	97.5
6	$1\frac{29}{32}$	..	96.3	104.3