

APPENDIX G.

STRAINS IN THE DRAW.

LENGTH OF ONE ARM, 182 FT.; CENTRAL HEIGHT, 34.3; END HEIGHT, 20.8; DEAD LOAD PER FOOT ON EACH TRUSS, 960 LBS.; LIVE LOAD, 1,120 LBS.

For Numbering and Lettering of Ties and Posts, see Plate XII.

DESIGNATION OF POST.	QUANTITIES TAKEN FROM DIAGRAM.		MAXIMUM STRAINS IN THE CHORDS.		DRAW OPEN.		BOTH ARMS LOADED. FORMULA: $S = 69,720 - .964x^2 - 480x$.				ONE ARM LOADED. FORMULA: $S = 23,520 - 2.857x^2 - 480x$.				
	Moments.	Chord Strains.	Upper Chord.	Lower Chord.	No. Tie.	Weight Carried.	Strain in Tie.	No. Tie.	Value of x .	Weight Carried.	Strain in Tie.	No. Tie.	Value of x .	Weight Carried.	Strain in Tie.
A	20,536,880	598,800	363,500	599,000	1	87,360	96,100	1	290.5	151,060	166,170	..	.....	.....	.....
B	16,164,512	472,700	267,000	473,000	2	79,920	106,560	2	275	135,170	180,230	..	.....	.....	.....
C	12,322,128	363,500	215,500	363,500	3	72,600	96,800	3	259.75	119,990	159,990	..	.....	.....	.....
D	8,943,480	267,000	169,000	267,000	4	65,400	87,200	4	244.75	105,500	140,670	..	.....	.....	.....
E	7,088,536	215,500	132,000	215,500	5	58,320	77,760	5	230	91,920	122,560	..	.....	.....	.....
F	5,432,336	169,200	99,000	169,000	6	51,360	68,480	6	215.5	78,480	104,640	..	.....	.....	.....
G	4,107,376	132,100	78,000	132,000	7	44,520	56,360	7	201.25	65,920	87,890	..	.....	.....	.....
H	2,981,160	99,400	92,000	99,000	8	37,800	50,400	8	187.25	53,960	71,950	..	.....	.....	.....
I	2,252,432	78,200	92,000	78,000	9	31,200	41,600	9	173.5	42,570	56,760	..	.....	.....	.....
J	2,517,424	91,900	92,000	78,000	10	24,720	32,960	10	160	31,760	42,350	..	.....	.....	.....
K	2,384,928	92,100	92,000	92,000	11	18,360	24,480	11	146.75	21,480	28,640	20	33	Negative.	.....
L	1,854,944	76,300	92,000	76,000	12	12,120	16,160	12	133.75	11,720	15,630	19	46.5	4,980	6,970
M	1,059,968	46,900	92,000	47,000	13	6,000	8,000	13	121	2,470	3,290	18	59.75	15,360	21,500
N	.....	.....	76,000	.....	14	6,000	6,600	14	108.5	Negative.	.....	17	72.75	26,300	36,820
.....	.....	.....	.....	.....	..	.....	.....	..	.....	.....	.....	16	85.5	38,410	53,770
.....	.....	.....	.....	.....	..	.....	.....	..	.....	.....	.....	15	98	50,960	57,330