

# Tests made on Messrs J. Spencer & Sons ordinary mild steel 25/10/04

## Dimensions of Sample

Plate Thickness	Charge mark	No of test piece	Total Width	Effective Width	Thickness	Area	Total Tons.	Tons per sq in	Remarks.
3/8"	6704/25	21	2.26"	1.38"	.38"	.524	15.7	29.9	Punched for 3/4" rivets
"	"	22	2.25"	1.335"	.37"	.494	14.5	29.3	"
"	"	23	2.25"	1.43"	.38"	.543	15.9	29.2	Drilled for 3/4" rivets
"	"	24	2.26"	1.435"	.38"	.545	16.6	30.4	"
"	"	25	2.26"	1.435"	.38"	.545	15.9	29.1	Punched 3/8" rivets
"	"	32	2.26"	1.435"	.38"	.545	16.9	31	Drilled for 3/4" rivets
"	"	33	2.27"	1.21"	.38"	.460	14.4	31.3	Punched 3/8" rivets
"	"	34	2.27"	1.185"	.38"	.450	13.7	30.4	"
"	"	17	3.76"	1.992"	.38"	.757	25	33	Punched for 3/4" rivets
"	"	18	3.76"	1.992"	.38"	.757	24.2	31.9	"
"	"	19	3.76"	2.135"	.38"	.811	23.3	28.7	Drilled for 3/4" rivets
"	"	20	3.74"	2.115"	.38"	.804	24.1	29.9	"
"	"	28	3.76"	2.135"	.38"	.811	25.4	31.3	Punched 3/8" rivets
"	"	29	3.76"	2.135"	.38"	.811	25	30.8	"
"	"	15	5.25"	2.625"	.38"	.997	27.4	27.4	Punched for 3/4" rivets
"	"	16	5.25"	2.805"	.37"	1.037	30.3	29.2	Drilled for 3/4" rivets
"	"	26	5.25"	2.77"	.37"	1.024	30.6	29.8	Punched 3/8" rivets
"	"	27	5.25"	2.435"	.37"	.901	26.8	29.7	Punched 3/8" rivets

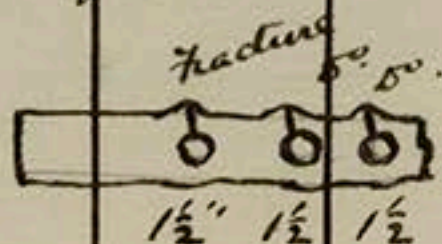
Note all drilled holes irregular in shape.

Effective areas in riveted joints estimated

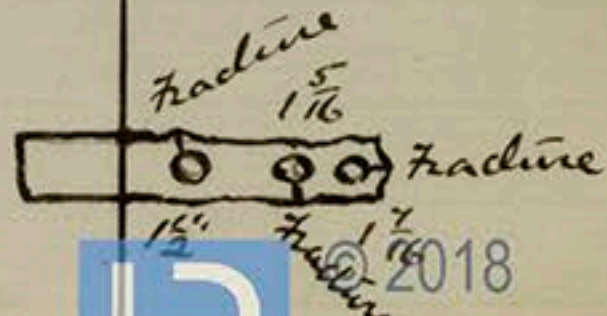
Tensile test of plate gave Breaking Strain of 27.7 Tons per sq" with elongation of 25% or 8"

With tests made on samples 35 & 36 three diameters wide one hole 3/4" dia punched with edge of same one dia from end & with two dia between this & the next hole, these holes drilled out to size shown when fracture occurred.

h<sup>c</sup> 35:-



h<sup>c</sup> 36:-



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