ete in place, I find they

Pin.	Riveted.
$	$
276,672	
297,000	
.....	299,413
309,352	
347,950	
351,830	
363,900	
385,653	
.....	385,925
387,495	
.....	415,625
.....	423,315
425,451	
432,910	
.....	458,195
.....	469,640
.....	497,280

nated the Pin Bridge, various plans which tund in the following

N. J.

to fit them for use. rder of merit:—

ster.

n favor of the best

per that I should according to the enting this infor- f a bridge depends

in all cases mainly on the weight of material employed in its construction; on the contrary, of two bridges the heaviest may have its several members so unskillfully arranged and badly proportioned that the lightest may really be the strongest and most durable of the two; but when we take bridges of the same or very similar design, constructed of materials of equal quality, and assume that all the parts have been well proportioned in each case, the weights of span will give a tolerably correct a of the relative strength and value of each.

The weights per span and the total weight of iron in the sixteen spans are presented in the following lists (as far as ascertained) and to enable the Commissioners still further to judge, the total amounts of the tender are divided by the total weights in each case, thus giving the price per ton.

TWO HUNDRED FEET SPANS, F. O. B.

TENDERS arranged according to Price per Ton.

No.	No. of Tender.	Name.	Weight in Tons.		Amount of Tender, F.O.B.	Price per ton, F. O. B.	
			Per Span.	16 Spans.		Pin.	Riveted.
1	5	Darlington Iron Co.....	161	2,576	144,024	.....	56 00
	21	P. & W. McLellan.....	255½ / 260	4,110	244,206	.....	59 00
	C	Wm. Thompson & Co.....	183½	2,018	130,175	.....	64 50
4	14	John Walker.....	243	3,888	276,720	.....	71 00
5	10	Pease, Hutchinson & Co.....	202	3,232	229,348	.....	71 00
6	3	Patent Shaft Co.....	137	2,192	158,540	72 00	
7	22	Fairbairn Engineering Co.....	244½	3,912	289,940	.....	74 00
8	12	Westwood, Baillie Co	250	4,000	297,998	.....	74 50
9	33	John Cockerill.....	206½	3,304	248,640	.....	75 00
10	A	R. Jas. Reekie.....	140 / 143	2,255	169,283	.....	75 00
11	4	Lewis & Stockwell.....	186¼ / 199	3,044	236,955	.....	78 00
12	9	Hopkins, Gilkes & Co.....	221	3,536	275,610	.....	78 00
13	25	E. A. Jones.....	221	3,536	275,610	.....	78 00
14	B	Boxall & Burpee.....	140	2,240	223,328	.....	100 00
15	20	A. Beeker	138	2,208	223,680	101 00	
16	32	Blodgett & Curry.....	126½	2,024	238,500	118 00	
17	26	Kellog Bridge Co.....	109¼	1,748	213,248	122 00	
18	18	Detroit Iron Works.....	140	2,240	315,675	141 00	
19	19	Clarke, Reeves & Co.....	101	1,616	243,852	151 00	
20	30	American Bridge Co.....	144½	2,312	387,160	167 00	
21	29	McNairy & Claflen	128⅝	2,056	350,060	170 00	
22	31	Watson Manufacturing Co	110¾	1,772	333,100	188 00	