

The calculations of the contractors, by which the draw was framed, were made on the supposition that each arm acts as an isolated truss when the draw is closed ; the panel ties are therefore of the same size at the centre and ends of the draw. To make the actual strains agree with these calculations, the lifting jacks placed under the end posts must carry one-half the weight when the draw is fully loaded, the weight carried by each jack being

$$91 \times 2080 = 189,280 \text{ pounds.}$$

The weight carried by each end bearing, under the present arrangement of wedge plates, is

$$(182 - 145.25) \times 2080 = 76,440 \text{ pounds.}$$

making the weight which would actually be lifted by the jacks under each post, after closing the draw, 112,840 pounds.