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Aaron A. Sargent 1883 Designs for Aerial Ship

Extracted on Mar-25-2023 07:48:17

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steel wire. It is 70 ft long & 12 ft high. The frame is made square to give attachment for the balloon ropes. Fig 2, is the floor, Fig 3 the top or roof.

Weight

[[2 column table]]

4 side pipes 70 ft @ 1.67 lbs per foot = | 280 ft

2 arches " [[ditto for pipes] 74.24 ft | 148.48 " [[ditto for ft]]

18 upright pipes 12 ft | 216. ft

9 floor pipes (cross) 10 ft | 90

7 roof pipes (") [[dittos for cross]] 10 ft | 70

[[sum line for 2nd column]]

| 804.48

[[/2 column table]]

at 1.67 per foot (Haswell 119) 1342.68 lbs.

Allow 2000 lbs for frame ready for engines & furnishing.

Envelope;

See p3. There are 3968 sq yds of light canvass, estimated (by me) to weigh .5 lbs per sq yd.

Weight of envelope 1984 lbs, allow 2000 lbs

[[line]]

Netting; Envelope to be surrounded, except at ends by a netting with meshes 1 foot square using 57600 ft of 1/4 inch (diameter) rope of 4 strands (Haswell p 143) at .02 lbs per foot = 1152 lbs. Allow 2000.

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