

Lloyd's Register of British & Foreign Shipping

2, White Lion Court, Cornhill, E.C.

London September 10th 1892.

This report must bear only the signature of Surveyors to Lloyd's Register of Shipping.

This is to Certify that
Robert T. Johnson the
undersigned Surveyor to this Society did ~~at the~~
~~request~~ according to the instructions
contained in the Secretary's letter
dated August 23rd 1892, attend at
the works of Messrs Binks Bros. Millwall,
for the purpose of testing the steel
wire rigging being made by
them and intended for the
sailing ship N^o 97, building by
Messrs Workman Clarke & Co. Belfast.

On examination of the 4th and 4" wire rope, it was found to be composed of 6 strands with 19 wires in each strand, with a solid annealed wire centre heart composed of 19 wires. All the sizes smaller than the above were examined and found to be made 6 stranded with 7 wires in each strand and a solid annealed wire centre heart. - No humps. -

Two pieces of each ^{an} gauge of wire of which the rigging was composed, were selected and submitted to the following tests. -

Torsion test.

Rope.	^{an} Gauge.	Rule.	Actual
3 $\frac{1}{2}$ - - -	11. - - -	8 turns - - -	21 turns.
2 $\frac{3}{4}$ - - -	13 - - -	12 " - - -	26 "
4 $\frac{1}{4}$ - - -	13 $\frac{1}{2}$ - - -	14 " - - -	27 "
4 - - -	14 - - -	15 " - - -	28 "
2 $\frac{1}{4}$ - - -	15 - - -	18 " - - -	32. "

The remaining pieces of each ^{an} gauge were then submitted to the test of being twisted 8 times round itself as a core and untwisted again, and found to be without fracture.

In addition to the above tests a portion of the 4 $\frac{1}{4}$ and 2 $\frac{1}{4}$ rope were selected to be tested to the breaking strain, these were taken to the testing machine at the Thames Ironworks and broken in my presence, certificate of same being attached to this report.

Size of Rope.	Standard Strain.	^{actual} breaking strain
4 $\frac{1}{4}$	34 Tons	58 $\frac{3}{4}$ Tons.
2 $\frac{1}{4}$	9 "	19 "

Robert. J. Johnson.



Lloyd's Register
Foundation