(P.)

Newfoundland by the Atlantic Telegraph Company in 1858, and of the Cable manufactured for the same
ace Company, Limited, (late Glass, Elliot & Co., and the Gutta Percha Company.)

ND TO NEWFOUNDLAND, 1670 NAUTICAL MILES.

ATLANTIC CABLE, 1865.

pper strand consisting of 7 wires (6 laid round one), and
bs. per nautical mile, embedded for solidity in Chatter-
. Gauge of single wire ·048 = ordinary 18 gauge. Gauge
= ordinary No. 10 gauge.

utta Percha, 4 layers of which are laid on alternately with
s of Chatterton's Compound. The weight of the entire
bs. per nautical mile. Diameter of core ·464, circum-
1·392.

TECTION—Ten solid wires of the gauge ·095, (No. 13
om Webster and Horsfall's Homogeneous Iron, each wire
arately with five strands of Manilla Yarn, saturated with
compound, and the whole laid spirally round the core,
padded with Jute Yarn, saturated with preservative

—35 cwt. 3 qrs. per nautical mile.

TER—14 cwt. per nautical mile.

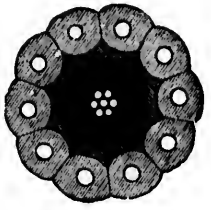
IN.—7 tons 15 cwt., or equal to eleven times its weight
utical mile; that is to say, the cable will bear its own
miles depth of water.

TO BE ENCOUNTERED—2,400 fathoms, or less than
s.

STRAIN is equal to 11 times its weight per nautical

LE SHIPPED—2,300 nautical miles.

NEW ATLANTIC CABLE, 1866.



CONDUCTOR—Copper strand consisting of 7 wires (6 laid round one), and weighing 300 lbs. per nautical mile, embedded for solidity in Chatterton's Compound. Gauge of single wire ·048 = ordinary 18 gauge. Gauge of strand ·144 = ordinary No. 10 gauge.

INSULATION—Gutta Percha, 4 layers of which are laid on alternately with four thin layers of Chatterton's Compound. The weight of the entire insulation 400 lbs. per nautical mile. Diameter of core ·464, circumference of core 1·392.

EXTERNAL PROTECTION—Ten solid wires of the gauge ·095, (No. 13 gauge) drawn from Webster and Horsfall's Homogeneous Iron, and galvanized, each wire surrounded separately with five strands of white Manilla Yarn, and the whole laid spirally round the core, which latter is padded with Jute yarn, saturated with preservative mixture.

WEIGHT IN AIR—31 cwt. per nautical mile.

WEIGHT IN WATER—14¼ cwt. per nautical mile.

BREAKING STRAIN—8 tons 2 cwt., or equal to eleven times its weight in water per nautical mile; that is to say, the cable will bear its own weight in eleven miles depth of water.

DEEPEST WATER TO BE ENCOUNTERED—2,400 fathoms, or less than 2½ nautical miles.

THE CONTRACT STRAIN is equal to 11 times its weight per nautical mile in water.

LENGTH OF CABLE TO BE SHIPPED TO COMPLETE BOTH LINES—2,730 miles.

ruments, is certified by Messrs. Thomson and Varley to be not less than eight words per minute.

; Charles Wheatstone, Esq., F.R.S.; William Thomson, Esq., LL.D., F.R.S., and Joseph Whitworth, Esq., C.E., F.R.S., who
y to examine all Specimens and Tenders submitted to the Company, *unanimously* recommended that Messrs. Glass, Elliot & Co.'s
ed.

S. CANNING, *Engineer Telegraph Construction and Maintenance Company, Limited.*