

Holland. In 1857 two vessels left Ireland, carrying a length of 2,500 nautical miles of electric cable to connect Valentia, in Ireland, and Trinity Bay in Newfoundland. The cable broke after 380 miles had been payed out. The next year success attended the second effort, and on the 12th August, 1858, Queen Victoria and the President of the United States exchanged greetings by cable messages. On the 1st September, 1858, the first transatlantic cable was rendered useless by a breakage. For a few years little was done in the way of laying submarine cables. Lines were laid between Malta and Alexandria, and between Malta and Tripoli. Lines were also laid in other parts of the Mediterranean Sea and in the Red Sea. The engineers in these experiments perfected their knowledge by the experience gained. In 1865 the "Great Eastern" commenced on the 21st July to lay the second transatlantic cable, but on the 12th August the cable broke. On the 13th July, 1866, the "Great Eastern" started on her second attempt to connect Canada and Great Britain, and on the 10th of August the cable was safely landed on the shores of Newfoundland. From that time the submarine systems increased rapidly. By 1868, 15,830 nautical miles of cable had been laid. In 1870 more than 12,000 miles were put down; in 1871, 7,777 miles, and in 1873, 7,918 miles. Between these dates the immense line connecting Suez with Bombay was established. In 1874 Europe and South America were connected by cable.

1161. In 1875 the various State systems comprised 420 cables of a total length of 4,442 miles, and 5,727 miles of wire. Of this total British India had the largest share, viz.: 1,781 miles, distributed among 8 lines. France had 673 miles; Great Britain, 283; Norway, 233; Italy, 218; Germany, 149; Turkey, 143; Denmark, 101; Japan, 71; the Netherlands, 36; Russia, 62; Sweden, 22; New Zealand, 20, and Greece, 3½ miles.

1162. While the various State systems comprised, as above stated, 420 cables in 1875, private companies owned a much larger extent of submarine cables. In 1875 they had 59,547 miles of cable and 65,535 miles of wire. The Eastern Cable Company, undertaking the business between England and Spain, the service of the Archipelago and the line between Aden and Bombay, owned 39 cables, aggregating 14,502 miles in length. The Anglo-American, owning the Valentia-Newfoundland line and that joining Brest to the United States, had 17 cables and a length of 12,315 miles.

Since 1875 the oceans have been net-worked with submarine cables. In 1879, 10,550 miles were laid; in 1883, 2,584; in 1884, 13,671; in 1885, 4,382 miles, and from 1886 to 1888, 5,893 miles.

1163. In 1889 the actual situation as regards the extent of submarine telegraph was:—

Total.....	113,084 nautical miles of cable.
Of which single wires. ....	110,516 " "
And several wires.. ..	2,568 " "