CYRUS WEST FIELD AND THE ATLANTIC CABLE.



is narrated of an old philosopher that in one of his fligh's of pro phetic fancy, he saw many wonderful things that were to come to pass, and which his prophetic soul told him

would one day be actually consummated; prodigies, the mere mention of which caused a smile of derision to play about the lips of the knowing ones. Among those marvels, however, even the wildest flights of imagination never carried him to the impossible feat of annihilating space and time, and the most extravagant metamorphosis of Ovid would have been more readily believed than that, two persons at a distance of a few miles from each other could have instantaneous communication with one another. Truth, however, has again outdone fiction and not only can neighboring cities converse with one another, but across the depths of the mighty ocean, has the wonderful mind of man devised a plan to harness the winged electrical messenger, and the events of Europe can be served up in the American papers with the same speediness with which the London *Times* regales its readers with the events of the previous day and night.

The history of the then utopian attempt to connect the two continents by electricity reads like a piece of fiction, and in going over the life of its intrepid promoter and chief organizer, Cyrus West Field, we cannot but marvel, not only at the daring conception, but also at the dogged perseverance with which he fought against disappointments sufficient to dishearten any but a Napoleon of enterprise.

In the limited space of an article in the Own it is not for a moment to be presumed that much justice can be done to a subject of such import, and in place of starting at the beginning, we must content ourselves with commencing in "medias res," in supposing that the Own's readers are familiar with the origin and do velopment of electricity in its first mercantile adaptation; that they know how it became a transmitter of news by means of the telegraph, under the skilful manipulation of Morse and other experts, after the discovery of constant batteries by Volta and Galvani. All of this do we take for granted that our readers know, and we at once proceed to treat of the subject of this article, submarine telegraphy, with special reference to the promoter of the scheme, Cyrus West Field.

The idea of sending messages under water is said to have first been proposed by Salva in 1797 between Barcelona and Palma in Majorca; in 1839 Dr. O'Shaughnessy tried it in India. Morse successfully laid a copper wire from Governor's Island in New York Bay to New York City, and Samuel Colt did likewise from Coney Island to the city. In Europe the first cable was laid across the Rhing at Cologne by Siemans, who used gutta-percha as an insulator.

The success of all these attempts justified the British, always the first promoters of commercial projects, to attempt the laying of a cable across the Channel, and accordingly in 1850 a single copper wire was laid from Dover to Calais. The success of this venture, however, was shortlived, but in 1851 four wires were laid with complete satisfaction.

The Channel cable was submerged by a British vessel by fastening one end to the coast and slowly paying out the rest across the Channel. The success soon induced attempts in other directions and between 1850 and 1860 many nules of cable were laid.

But although all these minor attempts were successful, not even the most sanguine thought of connecting the continents. The nearest approach was to cable the Gulf of St. Lawrence and the Irish Sea and to have a fast line of steamers ply between Newfoundland and the west coast of Ireland and thus put the continents within five days of each other. But in 1857 some experiments attempted in wires two thousand mileslong brought the hope of connecting the continents more within the

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