

II. Papers on the Atlantic Cable.

1. HISTORY OF THE ATLANTIC CABLE.

Our columns furnished on the morning the news of the Atlantic Telegraph success arrived, a brief history based on close attention to the movement of the attempts and failures since the first essay, in 1857, to lay the cable. The following, from the New York Herald of Monday, while going over much of the same ground, gives several additional particulars.

THE ORIGINAL PROJECT.

The project of an Atlantic cable was originally conceived in 1853, when the magnetic telegraph had been in existence but ten years. The original projectors were American capitalists, and the directory of the company embraced such New Yorkers as Peter Cooper, Cyrus W. Field, Moses Taylor, Marshall O. Roberts, and others, including Professor Morse. This company succeeded in building the line from St. John's across Newfoundland, and under the Gulf of St. Lawrence to the main land. They also obtained subsidies from the English and American governments; but these have since expired.

THE CABLE OF 1857.

The first attempt to lay the cable across the Atlantic was made in 1857. On August the 5th the shore end was laid with imposing ceremonies in Valentia Bay, Ireland. On the 11th of August, about four o'clock in the morning, the cable parted in over two thousand fathoms of water. The cause of the calamity was the application of the brakes at a time when it was almost fatal to use them.

There was a pretty heavy swell on, and as usual under such circumstances, the stern of the vessel was elevated or depressed as she rose on each wave. It was while her stern was down that the brakes were put on, so that in addition to the strain produced by its rising again, the cable had to bear an additional strain of three thousand pounds, as marked upon the indicator. This was more than it could bear, and the consequence was that it parted, as has been stated. The moment the brakes were used the wheels stopped, and when the stern rose again she remained immovable, so that, between the strain brought upon the cable by the vessel and that caused by the application of the brakes, it had to bear more than it was ever calculated to sustain. The indicator showed a strain of three thousand pounds; but it is impossible to calculate the strain by which it was broken. Had the brake not been applied, there is no doubt whatever that the cable would have remained perfect to the end, unless very great stress of weather had rendered it necessary to cut it. The circumstance, to say the least of it, was most unfortunate; but, if the enterprise failed, the expedition proved one thing beyond all possibility of doubt—the practicability of laying a submarine telegraph cable across the Atlantic between Ireland and Newfoundland.

THE CABLE OF 1858.

The success attained on the first effort, although not complete, was considered encouraging, and in the following year the cable fleet rendezvoused at Plymouth, England, and began in June. Two unsuccessful efforts were made on 25 and 26, the line parting. On June 28 the work was again resumed; one hundred and forty-five miles were paid out when it again broke. A fourth attempt was then made and succeeded. The cable was laid from shore to shore, the signals were pronounced perfect and news was actually transmitted over the wires.

Telegrams from London of August 27 and Alexandria of August 9 were received on the following day, but these were the last. They were received with the wildest demonstrations of joy. New York went into ecstasies over the "fixed fact of the century," and on September 1 the citizens engaged in a celebration which had had no parallel, and which was almost equal to some of the displays made during the war. The officers of the British vessels, Gordon and Indus, Cyrus W. Field and the officers of the Niagara were the heroes of the occasion, and were toasted and feted in Gotham's grandest style. Imposing ceremonies were held at Trinity church, in which nearly two hundred clergymen participated and an immense choir engaged. Broadway was decorated as Broadway never had been before—with hundreds of banners and hundreds of mottoes. The military, the trades, the professions of the city, soldiers and sailors of the nation, and all creation generally took part in the procession. David Cudley and Cyrus W. Field, and Mayor Tiemann made grand addresses in the Crystal Palace; but all this time the telegraph under the manipulation of DeSauty said never a word. The people began to smell a mice early in September, and the press began to demand its European news. It then began to leak out that the cable would not work, and the press said as much. At last DeSauty was forced to open his mouth, and, since the cable

could not say it for itself, he was induced to say on September 24 that "Nothing intelligible had been received from Valentia since September 1!" Every effort at restoring the insulation failed, and at last the cable came to be considered a failure. Before the attempt could be renewed the American people became engaged in a war which absorbed all their energy and interest, and the efforts at a renewal of the attempt to lay a third cable have not been watched with that intense interest which they would otherwise have commanded.

THE CABLE OF 1865.

This failure served only to dampen the enthusiasm of the projectors of the cable; they did not abandon the enterprise, but shared their interest in the war with their interest in the scheme of a submarine cable. The United States public could not be expected to fully share their feelings, and the directors have endeavored to obtain more particularly the aid and countenance of our trans-Atlantic cousins, and in this last project England has the lion's and the controlling share.

During the year or two following the failure of 1858, great improvements were made in the construction, laying and working of submarine telegraphs, and it was finally concluded by a board which was appointed to enquire into all such work and improvements, that there was no reason why a cable should not be a success. Early in 1859 a committee was appointed by the London Board of Trade to investigate the subject.

They declared that the difficulties of laying and working a wire had at all times been overrated, and another attempt was resolved upon. The proposition of Glass, Elliott & Co., to manufacture a suitable cable was accepted. The copper wire was completed as early as April, 1864, and the work of covering it with layers of gutta percha was begun on April 14. The wire was not coupled, however, until July, 1865, and it was only stored on the Great Eastern about the middle of that month. On July 19 the Great Eastern and her convoys rendezvoused at Valentia. On the 22nd of June the shore end was laid, and on the 23rd splice made with the main cable on board the Great Eastern. On the morning of the 24th the vessel was fairly under way, when a defect in the insulation was discovered and she had to haul in about eighty miles of the cable to repair it. On the 29th of July, when seven hundred miles of cable had been laid, insulation again suddenly ceased. The ship was stopped and the cable transferred to the picking-up gear, which commenced hauling in. After picking up two and a quarter miles of cable the fault was found to be the presence of a stout piece of wire which had been driven through the cable. Two and a quarter miles of cable were recovered from a depth of nineteen hundred fathoms. The defect being repaired, the work was resumed and continued until August 2, when, after one thousand three hundred and twelve miles had been paid out, the insulation again ceased.

The ship was soon afterwards stopped, and the cable transferred to the picking-up gear at the bows. The operation of hauling in commenced. By noon the engine used for picking-up stopped for want of water for a considerable time. Two miles had been recovered, and the cable was cut to see whether the fault had come on board. At about half-past twelve p.m. the cable caught and chafed on the mouth of the "horse pipe," and was with considerable difficulty removed, and at twenty-five minutes to one it parted on board where it was injured, just behind the stoppers, and in a moment the end disappeared in the water.

After three unsuccessful attempts to raise it by grappling, the Great Eastern, with the remainder of the cable on board, returned to Sheerness on the 11th. It seems there was no difficulty in grappling the cable, even at the great depth of water of two thousand fathoms; and the object of the return of the Great Eastern was to obtain stronger grappling gear, that on board having broken three times.

The place at which the cable had sunk was buoyed and the vessels abandoned the attempt for the year.

THE CABLE OF 1866.

It was settled that the next attempt should be crowned with success. The history of that attempt and how it succeeded is given in the Herald of this morning, in the diary of Cyrus W. Field, and the telegrams of our correspondent at Heart's Content. The Great Eastern has yet another duty to perform in the attempt to be made to raise the cable of 1865 and finish it to Heart's Content, and this stupendous work may yet be a success.—*Montreal Gazette*.

2. THE QUEEN'S MESSAGE TO BRITISH AMERICA.

LEGISLATIVE ASSEMBLY.

Ottawa, August 2nd, 1866.

Hon. Mr. McDougall brought down a message from his Excellency, signed by himself, which was read as follows:—