1858 - 9.

VICTORIA.

SUBMARINE

TELEGRAPHIC CONNECTION

CAPE OTWAY AND TASMANIA

SECOND REPORT OF THE GENERAL SUPERINTENDENT OF THE ELECTRIC TELECRAPH RELATIVE TO THE SURVEY FOR LAYING DOWN THE CABLE BETWEEN CAPE OTWAY AND TASMANIA.

PRESENTED TO BOTH HOUSES OF PARLIAMENT, BY HIS EXCELLENCY'S COMMAND

By Authority: JOHN FREERS, GOVERNMENT PRINTEE, MELEOURNE.

No. 27.

REPORT

Office of the General Superintendent of Electric Telegraph, Melbourne, 25th October, 1858.

In pursuance of the decision arrived at between the Governments of Victoria and Tasamaia in the month of May last, when it was determined that a deviation should be made from the course originally indicated for the line southward of Sea Elephant Bay, King Eland, I proceeded in the C.W.S. Victoria, Captain W. H. Norman, on the 16th thims, to effect the necessary examination and additional survey of the submarries portion of the line, requisite upon enzyping out the intended deviation. Having landed at Sea Elephant Bay on the 17th, I proceeded to inspect the work already performed in constructing the overland section between that point and Victoria Cove; I found the excention of the construct, soft are as it hal been proceeded with, (about eight miles) generally quite satisfactory, particularly the eleving of this line remain to be completed, and the contractors informed me int they expected to finish their work by the latter part of December next.

On Monday, the 20th, the vessel was taken to Cape Wickham with the view of landing Mr. Falconer, the engineer to the Marine Board of Tasmania, who-laid been despatched by the Government of that Colony, for the purpose of powering certain local information necessary to the crection of the Lighthouse on the northern extremity of the island, but, the wind being strong from the westward and southward with a heavy sea colling into Vigoria Cove, landing was found impracticable ; the vessel was therfore taken to Frankfin Roads, and anchored under the New Year Island, from which point a landing was effected in safety. Mr. Falconer and his party returned to the vessel on le 24th, the watcher in the internit harving been very hoisterous with heavy rain, and hall squalls from south-west. Between the 24th and 29th the watcher continued with a slight intermission on the 25th, most inclement, a succession of gales prevailing from north-west round to south-west, accompaniel by frequent heavy rain squalls, and a frightful sea.

On Thursday, the 30th, the weather having moderated it was deemed practicable to effect a handing at Vitoria Cove, for the purpose of creacing the necessary beacons for leading marks (corresponding with satisfactory soundings into the entrance), and also to afford the Falseover an opportunity of making a further examination of the site for the Lighthouse, but on proceeding to the cove the sea was found to be too heavy to admit of any attempt being made, as the vesterly swell was still so great as to create an impossible surf; it was therefore considered advisable to proceed for miles along the coast further to the castward, where on arriving alveast of a sandy bay three miles from Cape Weidsun, the vater suppearing mouto in show, promeling the onter surf the host filled and capsized, precipitating the officer u charge, and mine men, together with Mr. Haloneme and myssif, into the water. As we were at the time of the accident unwards of one hundred and fifty vards from the beach, with a double surf running very strong, the lives of all were in imminent danger. I therefore regret to have to report the loss of Phillip Cabot, one of the seamen, who not being able to swin perished when washed away from the beat, after the capsize. The remainder of the party through the aid of a meriful Providence renched shore in safety, though much exhausted, and after a few hours of exertion we returned to the ship in the barge, which had succeegeled in landing for our relief at a point a short distance farther down the coast ; the body of the lost man was not recovered.

The wind and sea now increasing so as to preclude the possibility of excenting any of our intended work for that day, the vessel returned to Franklin Roads and anchored. On Saturday, October 2nd, the weather having abatel and the sea subsided, a landing was effected at Victoria Cove, the necessary beacons were creted, and in-shore traversing soundings obtained, when the vessel was removed to Sea Elephant Bay, in order to proceed with the survey from that point.

Monday, October 4th, the positions for the leading mafks having been fixed, the beacons erected, and the necessary soundings obtained, the line of traversing soundings was commenced early on the following morning, and terminated at a sandy bay on the north-west side of Three Hummock Island, to the southward of which we machored for the night.

On Wednesskay, October 6th, the weather being favorable, the in-shore soundings, and land work on the western side of the island were completed, but violent gales of adverse winds with thick rainy weather prevailing during the 7th and 8th prevented further progress, until the 9th when the weather having somewhat cleared although still very squally, the vessel was got under stema, and the leading marks fixed, and erected in a study lay on the east side of the island, when under stema and we have the east side of the island, when under the study of the rest of the and event hencems at West Bay, and the same at East Eay, most favorable positions for landing lawing been obtained. A traversing line of soundings was also taken between West Bay and Three Hummock Island.

On Tuesday, October 12th, the line of traversing soundings between East Bay, Circular Head, and East Beach Bay, on the east side of the month of the River Tamar, was obtained, and the vessel proceeded to anchor at George Town, in order to obtain a supply of coal and fresh water.

From the 14th, until the 19th, the weather was too boisterous and inclement, to attempt to complete the in-slore soundings at East Beach Bay, but on Wednesday, the 20th, the weather being favorable, the necessary beacons were fixed, and erected after obtaining the requisite direction, by the best course of soundings, when the course of the vessel was directed to the River Mersey. (Potr Frederick) from whence a line of running soundings was carried direct to Sea Elephant Bay, where we arrived on the evening of the 21st.

Friday, the 22nd October, presenting fine weather, advantage was at once taken to obtain a line of traversing somatings between Cape Wickham, and the Parker Inlet, near Cape Otway, which service was completed early in the afternoon of that day; and good leading beacons having been creted after ascertaining the best course carrying a fine sand bottom into deep soundings directly seaward, the submarine survey was thus terminated, and a course shaped for Hobson's Bay, where we anchored in the afternoon of the 23rd.

A chart of the survey upon an extended scale shewing every necessary particular for the guidance of the engineer in larjing the cable is now in course of preparation by G. A. Woods, Esq., Commanding Offleer, C.W.S. *Victoria*, furrough whom the survey was efficiently and satisfactorily conducted. The chart would have been forwarded colemporaneously with this report, but that the *Victoria* was despatched for Port Curtis immediately after her arrival ; it will not therefore be possible to furnish the chart until after her return, but in the absence of that document the following statement will shew generally the results of the survey.

Places.	Distances.	Averige Depth.	General nature of bottom.	Length of Cable probably re- quired.
Parker River to Victoria Cove	Miles. 49	Fathoms.	sand and	Miles, 56
Sea Elephant Bay to Three Hummock Island	50	31	sand and	60
Three Hummoek Island to West Bay, Circular Head	25	12	- fine sand.	30
Circular Head to East Beach Bay, Low Head	72	38	ooze and mud.	87
	196			233

Land sections-Three Hummock Island 5¹/₂ miles Circular Head 3 miles

81

The distance from the River Mersey to Sea Elephant Bay is one hundred and seven miles, average dopth thirty-duree fathoms, with mud, sand, and shell bottom; but as the course between those points was merely sconded for the purpose of obtaining information within might possibly be of service at some future period, and not from any present necessity. I have not considered it meesawr to include the measurement in the above table.

The nature of the bottom throughout each of the distances named is 1 consider the most favorable that could be desired for the parpose of laying a telegraph cable, being generally almost level, or presenting gentle unadutions, and shewing an entire basence of precipitous or rocky formations, the landings for the cable being in each instance composed of fine sand, and shallowing gradually to the beach.

In laying the cable in four sections, as here recommended, the principal advantage secured would be the obvious reduction of risk from loss on account of any defect or interruptions, and the increased fieldities for repair, recovery, or the renewing of any defective or injured portion of the cable, to which might be added the advantages accriming from the establishment of a software of the north-west cases of the software in the software of the software of the north-west cases of Theomismi, afferding at least a greant additional inducement for intending settlers proceeding to that part of the country.

The fact of the line crossing Three Hummock Island will not necessitate the presence of an overseer or attendant at that locality; the only protection required there being fully provided for, through the two terminal test boxes, which will be fitted with proper apparatus for preventing any possibility of injury to the cable from atmospheric disturbances.

I may be permitted to mention here as an interesting item of information that while at George Town I had the pleasure of meeting Mr. McNanghton, the gentleman who has undertaken the onerous task of providing and laying down the entire line, and that from letters of his London correspondents received by last mail, the perusal of which he kindly allowed level from the second second second second second second second exists to which the portion them completed had been subjected, had quite presenter or moved in methy of the work, and even in Eucleman The the second secon In concluding this report I beg to tender to Captain Norman and the officers of his ship, my best thanks for the zealous attention they have devoted to the recent survey, and the means afforded me for protenting every information likely to prove valuable in furthering the interest of the work upon which we have been mutually engaged.

I have the honor to be, Sir, Your obedient Servant, To the Honorable SAMUEL W. McGOWAN. The Postmaster General.