

pletely neutralize the battery current, causing the letters, every now and then, to be jumbled up in a most grotesque manner, turning A's into T's, M's into L's, 9's into 5's, &c. ; so that, unless the instrument clerk is assisted a little by the context, the messages would be sent out very similar to those which have passed over the Indo-European lines.

If this difficulty exists with highly-trained English telegraphists, what must it be with badly educated foreigners, who do not understand a word of our language? Then, the lines are not sufficiently insulated, the line men not understanding the circuits, or the difference between conductors and non-conductors, so that you will frequently see the main wire tied on to an iron bracket, or, perhaps, an iron post, with a piece of galvanised binding wire, which, being a good conductor, renders the line utterly useless, all the messages being at once conveyed down the post to earth. In the early days in this Colony similar stupidity was practised, the line sometimes being tied up to a post with rope, which in wet weather would become a conductor and carry off the current to earth.

The line from Calcutta to Rangoon and Moulmein, where the Indian telegraphs at present terminate, has been liable to many interruptions, more particularly during the S.W. monsoons, the line, in my opinion, having been carried too near the coast; but I was informed by Major Murray, the Deputy Director-General of Telegraphs in India, that the Government intended making very considerable repairs to the land line, or perhaps lay a submarine cable direct from Rangoon to Calcutta, which latter would, perhaps, better meet the difficulty.

This now brings us to the first gap to be filled up, from Rangoon or Moulmein to Malacca, a distance of about 1,000 miles. This section I never considered the Australian Colonies should have anything to do with, the cost of which should be chargeable partly to the Indian Government and partly to the proposed line to China and Japan. It is a circuit we are completely shut out from by the intervening Netherlands-India telegraphs, and a work over which we can have no control.

There are two proposals, however, for this section—one by Mr. Gisborne, for a submarine cable, touching at King's Island and Penang to Singapore, forming a portion of the line to connect Saigon, Hainan, Hong Kong, Amoy, Foochoo Foo, Shanghai, and Japan (this cable will be about 1,200 knots in length, and is estimated to cost about £500,000); the other by the Telegraph Construction and Maintenance Company, who have undertaken to carry out concessions obtained by the Eastern Asia Telegraph Company, which have since been made over to them, to complete the communication between Moulmein to Penang, Malacca, and Singapore, entirely by land line, or partly by land and submarine cable, also a land line from Moulmein to Bangkok, in Siam, and a further extension to Saigon—both lines to be undertaken immediately; so that all doubts as to this section not being filled up may now be set at rest.

This leaves only a short length of cable of about 100 miles from Malacca to Siak to connect the lines in Sumatra and Java with the line down the Malay Peninsula. A provisional concession has been applied for from the Government of Netherlands-India, by Mr. Alexander Fraser, of Batavia, which, if granted, will give unbroken communication from London to Banjoewangie, on the East coast of Java.

There now remains the portion, which may be styled the Australian section, to be dealt with, and I think I shall be able to show that with a little combined action how very inexpensively this great work can be completed.

The telegraph in Queensland will, at the end of this year, be in operation to Cardwell, Rockingham Bay. The Government of that Colony, to whom great credit is due, have cautiously but persistently pushed their works northward, almost before the requisite population for its support had formed the track. The Gilbert Gold Fields will, I have no doubt, give the construction of the line towards the Gulf of Carpentaria additional impetus, and we may expect to be able to speak the Gulf of Carpentaria before the end of 1870.

The cable, which forms the last link in our chain, if taken from Normanton, will be about 1,900 miles in length, and will cost, when laid, about £500,000; and I do not think a good cable, suitable in every way for the sea in which it is to be deposited, could be successfully laid for less. The soundings, except in a few places, are good, and the coral reefs can be avoided.

From a letter received from Mr. Alexander Fraser, dated Batavia, 10th April, 1869, it appears application has been made by that gentleman to the Government of Netherlands-India, for a concession to land a cable on the East coast of Java, to connect Australia, at the head of the Gulf of Carpentaria, under a subsidy or guarantee, at the option of that Government. If this is granted, which he has every reason to believe it will be, he proposes to ask a similar guarantee, at 7 per cent. per annum, from the several Australian Governments, on the cost of construction, which, I think, may be set down at £500,000, instead of £550,000 to £600,000, as proposed by Mr. Fraser—one-half of the guarantee to fall on the Java Government, and the other half on the Colonies jointly. This would leave for the Colonies a mere nominal sum of £17,500 to be subscribed annually, which might for the first year be taken ratably on the basis of population, or in accordance with the proportions paid by each Colony for postal communication *via* Suez, until it could be ascertained to what extent the line was availed of by each community. The proportion for this Colony would be the small sum of £4,375 per annum, which I feel sure we should never be called upon to pay, as the traffic will more than cover the 7 per cent. after paying working expenses; so that we simply have to run the risk of being called upon to pay £4,375 per annum, to obtain those inestimable benefits which we have already secured to ourselves on a small scale, by our intercolonial system of telegraphs, but which will be of ten-fold importance when we are within a few hours' speaking distance with the civilized world.

We shall find, by going back a few years, that we have already promised to do even more than this. When Mr. Gisborne visited Australia, in 1860, the Legislature of this Colony and that of Victoria passed resolutions with a view of providing an annual subsidy of £22,625 for the purpose of connecting Moreton Bay with Java by a telegraph cable; but the Home Government having refused all encouragement to the scheme the proposal fell through, and owing principally to the small prospect, until lately, of the Rangoon and Singapore section being undertaken, the entire matter has been in abeyance.

Mr. Gisborne's line from Brisbane to Java was not well supported either in Victoria or South Australia, Mr. M'Gowan, the General-Superintendent of Telegraphs in the former Colony, having been