

Last year they sent out an expedition at the cost of £100,000, and failed; they are going to send another one, and may fail again. To dangle a hook at the end of a rope three miles long to catch an object about the size of your umbrella may help you to understand the difficulty of repairing in deep water; then, when you have grappled this thing, you have to lift it three miles. It is covered with seaweed and shells, and the iron wire upon which it depends to give it its strength is deteriorated by time, and you have a difficulty of getting it up. These difficulties arise in deep sea cables, and they are so great that our experience now leads us to avoid them as much as we possibly can.

32. The long interruption in 1876 between Port Darwin and Java was from April the 24th to August the 7th. Can you explain the cause of that?—The absence of the repairing ship; she was upon the very repair that I mentioned. It was considered useless putting Australia in connection with Singapore if you could not get on to Madras and so to England; and as the Madras and Penang section was the principal section of the whole company's system, we kept the ship there waiting for an opportunity to repair it; we could have put you through any day, but there was no object in doing so if you could not get further than Singapore.

33. Except that a message in that case could have gone by Singapore *viâ* China?—That would have doubled the expense; if it had been desired, we could have done it; we acted for the best in our judgment for the general public.

34. Then, practically, in any break between Singapore and Batavia or Banjoewangie and Java there would be very little delay in picking up the cable and repairing it?—Only a few days going there and back, and three or four days repairing. I think you need never be more than a week. Of course you cannot say what may happen from different causes, but I should say not.

35. *By Mr. Mein.*—You might find these insects operating in the shallow waters of the warm seas?—We have found them only in one sea principally, that is, between Singapore and Batavia; we have found them in others, but not in numbers.

36. Do not electricians find the insulation more perfect in deep water and the liability to break less frequent?—It is impossible for any man living to tell you the liability to break.

37. You have no experience?—There are valleys and mountains at the bottom of the sea the same as on shore. Suppose we had a sea over the Australian continent, and I dropped a plumb line every hundred miles in order to get the contour, I might drop a line at one side of your Blue Mountains and the next line might come at the other side, and I might entirely avoid the Blue Mountains and be in ignorance about them, simply because my plumb line did drop upon that particular spot.

38. You are going away from the question?—It is the inequalities of the bottom that cause the difficulties we have to contend with; for when the line lies upon a ridge that you do not see, it lies till the iron wire loses its strength, and the cable accumulates animal and vegetable growth upon it, and becomes much heavier, and then suddenly parts. Last December a similar case occurred near Banjoewangie, opposite Lumbok Straits; the cable parted, hanging over a depth of 200 or 300 fathoms and going down to 1,200 or 1,300. We had much difficulty in recovering it. It had lain there for seven years and given us no anxiety till it suddenly parted; if that had parted in 2,000 or 3,000 fathoms of water, I leave you to imagine where would you have been; it would have been very likely like the American cables that are now silent. Cables in deep water may last; and if they last they last; if they do not, the difficulty of the repair may be such as to amount almost to an abandonment of the cable, or certainly to a very lengthened and protracted interruption, which does not occur in the other case. We therefore prefer 500 or 600 fathoms, where we can get at the cable, if we can get such a position, but we cannot always do so.

39. You find no difficulty in the transmission of messages after they once reach British India; you have different routes to reach Europe?—There are two, one through Russia and Persia; and the other down the Red Sea, all through British possessions. The Indo-European Company goes through Russia and Persia, and it was interrupted during the present war for, I think, a month or two, when Russia was operating in the Caucasus, and the traffic had to come entirely by the Eastern Company, which had a duplicate line the whole way down the Red Sea and across to India.

40. You made some reference to stoppages outside the colonial lines, and I interjected at the time that the stoppages occurred upon your own lines between Singapore and India; you have a line between Singapore and Madras; but if your lines had been perfected to India, those stoppages would not have affected the messages to and from this colony?—Stoppages occur sometimes on the Indo-European and Eastern lines.

41. But then you can fall back upon the Eastern Company?—Yes, we can. The Eastern Company also has been interrupted; but then we fall back upon the Indo-European line.

42. I suppose that is what has been suggested here, that as to the desirability of having two cables, that you can fall back upon either?—Yes, but you are now fortified by duplication; you were not at the time I talk of. The new duplicate that you have between Rangoon and Penang is doing away with those continued interruptions.

43. *By Mr. Todd.*—Is there any intention to duplicate the cable between Penang and Singapore?—I believe so.

44. *By Mr. Burns.*—Part of the proposition of your company is that, if the offer is accepted, to duplicate the cable; the company will duplicate between Penang and Singapore at their own cost?—I cannot make an offer to that effect. When we made that offer we wanted larger terms. Any question you put to me I can get an answer to in specific terms in a day or two; but at the time I left England we had asked for a reserve fund, and we were prepared to do this. No doubt we shall have to do it, it will come in time, as we have done between Rangoon and Singapore.

45. *By Mr. Mein.*—Any duplication of lines beyond Singapore towards India would not be solely for the benefit of the Australian colonies?—Certainly not.

46. It would facilitate your work upon the lines to China?—Just so.

47. *By Mr. Burns.*—Have you considered the different proposals made at the Conference of the colonies for duplication in respect to distance and cost?—Yes; I have a book in the other room from which I could tell you the cost of most of the duplications.

48. Your calculations of the cost are recognised by the company as the basis upon which they rest their proposals for duplication?—Yes.

Colonel Glover,
continued.
10th May 1873.