

The resolution should not, as I understand, be taken to mean that the conference favours the Sandwich Islands route. Whether that route, or the alternative one to Fanning Island, should be taken, is left open. The resolution only expresses the desire that, whatever route is adopted, the cable should be under British control throughout.

I should, however, add that Mr. Foster expressed the opinion that the cable should go to Honolulu. Mr. T. H. Davies, representing the Chamber of Commerce of Honolulu, was given permission to make a statement to the Conference, and urged that the Sandwich Islands could supply considerable business to the cable if it touched there. He stated objections to the cable running by Necker Island, and recommended that the landing should be secured within the circuit of the Hawaiian Archipelago. There would no doubt be considerable commercial advantages in this course, but the resolution that the cable should be "free from foreign control" is in strictness adverse to it, and its exclusive British character would be changed.

I believe that there is no practical difficulty in laying the cable if Necker Island or one of the Sandwich Islands be used as one of the landing places. The greatest depth is apparently about 3,300 fathoms, and the Eastern Extension Telegraph Company have a cable laid at a greater depth between Java and Port Darwin. The Senegal-Pernambuco cable, also, is laid at a depth of more than 3,000 fathoms.

The difficulty will be to repair the cable. It is a serious operation in even 2,000 fathoms; but cables have been repaired in greater depths than 2,000 fathoms, and it cannot be said that they could not be repaired in more than 3,000 fathoms, although it would certainly be difficult and might involve the abandonment of very large pieces of the cable, and the laying of corresponding new sections.

If the bottom were even and soft, the great depth would be an advantage in the sense that the cable would be less liable to disturbance than in shallow water. There are, however, unknown risks in the direction of volcanic disturbances.

If it is considered that the commercial advantages of going to or near the Sandwich Islands are outweighed by the expediency of keeping the line away from foreign territory, it becomes necessary to consider whether it would be practicable to lay a cable from Vancouver to Fanning Island. Much difficulty has been felt from the fact that this is an unprecedented span of 3,232 knots, but I am not sure that it has not been over-estimated.

The chief matter which is affected by the distance between the stages is the rapidity of transmission. The speed of a telegraphic message varies inversely with the square of the length of the line. A type of cable which for 2,000 knots would give a speed of about twenty words a minute would only give about five words for a distance of 4,000 knots. This means in practice that a very long line, in order to furnish the necessary conducting power, would have to be furnished with more copper and gutta percha than usual. The length of the span by the Fanning Island route would therefore materially affect the cost.

It is of course necessary to look forward to the question of the probable receipts and expenditure when the line is in working order, and much correspondence from opposing points of view and interest has passed. I regret that I cannot place before your Lordship a reliable statement as to the probable cost, expenses and receipts. The figures mentioned at the Confer-