

facilitated the task of the Committee, and to all the gentlemen who have been so good as to give evidence, and whose answers range over the whole ground comprised in the reference to the Committee.

3 The Committee have carefully considered these answers, and other materials bearing on the subject which have been laid before them, and have the honour to report as follows upon the questions submitted to them.

4. The Committee consider that the most convenient course will be for them to deal with the points submitted to them in the same order as is laid down in the instrument of appointment.

1. PRACTICABILITY.

5. No one disputes the practicability of the project from a technical point of view, although the depth—probably in places over 3,000 fathoms—is as great as that in which any cable has hitherto been laid. The Committee consider that a preliminary survey is indispensable, principally for the purpose of ascertaining before the cable is laid, and of avoiding while it is being laid, any serious inequalities in the bed of the ocean which might cause “suspension,” and, in course of time, fractures, of the cable. Such a survey could, however, be made while the cable is being manufactured; it could be made by the contractors under the supervision of an officer appointed for the purpose by the owners of the cable; and the necessary provision for it, with all proper conditions, could be obtained in the contract. The present information with regard to the route is sufficient for the purpose of estimating the expense of the cable, and it may be assumed that the further survey recommended would not lead to any material variation in the tenders.

6. Further, it will be necessary that a careful examination be made of the various islands to be presently mentioned, with a view to ascertaining the best spots available for landing-stations.

2. ROUTE.

7. The Committee recommend that the route should be from Vancouver *via* Fanning or Palmyra Island, Fiji, and Norfolk Island, with branches from the last-named station to Queensland and New Zealand. No doubt there would be a decided advantage in taking the cable *via* the Hawaiian Islands instead of *via* Fanning or Palmyra Island, as the section would in that case be shorter and therefore less costly for the same speed, or faster for the same cost, and some traffic would, if no line is laid from California, be obtained from Honolulu. But this route would involve a departure from the principle of using only British territory for landing-stations, and, as this principle has been formally indorsed by the Canadian and Australasian Governments at the conferences at Ottawa and Sydney, the Committee consider that it should be adhered to, and that a departure from it would be a material change in the character of the scheme which was approved at those conferences.

8. The length of the cable over the route recommended would be, allowing 10 per cent. for “slack” actually used, about 7,986 nautical miles—*viz.*: Vancouver to Fanning Island, 3,561, or a little less from Vancouver to Palmyra Island; Fanning Island to Fiji, 2,093, or a little less from Palmyra Island to Fiji; Fiji to Norfolk Island, 961; Norfolk Island to New Zealand, 537; Norfolk Island to Queensland, 834.

9. The Pacific cable as a means of communication between Australasia and Europe would be, of course, dependent on the land-lines across America and on the trans-Atlantic cables; and it would be necessary for it to have some working arrangement with them. Such arrangements are universal in the case of submarine-cable companies, which must obviously make terms with the land-lines by which their traffic is received or forwarded. The only telegraph-line which at present runs from the eastern seaboard to Vancouver is that of the Canadian-Pacific Railway Company. This company is in connection at Canso, in Nova Scotia, with the Commercial Cable Company, which possesses three cables from Great Britain to Canso; and the nature of the arrangement between them is shown in the telegraphic correspondence contained in the appendix [not printed] to this report. The Commercial Cable Company is an American company, but all the landing-stations are on British territory. It is stated that the other trans-Atlantic cable companies, whether British or foreign, are in connection and alliance with the Western Union Telegraph Company, which is also an American company.

10. The Western Union at present effects its junction with the Canadian-Pacific Railway Company's telegraph-lines at Montreal, but it is highly probable that were a Pacific cable laid from Vancouver to Australia it would (if it does not already possess such a connection) make its own connection with Vancouver through the United States territory as far as British Columbia.

11. The effect of this position of affairs is that the choice of routes would lie between an American cable company having its stations exclusively on British soil, and in connection with a land system passing over British territory and controlled by a British company, and cable companies which, whether British or American, and which, whether possessing stations on British or American soil, are in connection with a land system controlled by an American company, and possibly passing through the greater part of its length over American territory.

3. Cost.

12. The cost of laying the cable depends mainly on the materials used in it; and, as the quality of these can be tested, the question is practically one of quantity. The outer coverings are much the same in all specifications, according to the conditions of the case, but the conductor, of copper, and the insulator, of guttapercha, vary in quantity in proportion to the speed of transmission required, and therefore the question of cost practically depends upon them, the heavier the cable in these respects the greater being the speed and the cost. With regard to all the sections, except the long one from Vancouver to Fanning Island, opinions as to the composition of the cable do not much