19 I.-7

North Woolwich. No. 4. From the Indiarubber, Gutta-percha, and Telegraph Works Company, 106, Cannon Street, London, and Silvertown. These tenders are based on the general conditions prescribed; they include in each case the manufacture and laying of the cable; the providing of station buildings and instruments for the use of the operating staff; likewise the maintenance and repair of the entire length of the cable for a period of three years after the whole line shall have been completed and put in operation.

The parties tendering are prepared to enter into contract for the sums placed opposite the name of the firms, in

each case, as follows:

each case, as follows:—

Route No. I.—Commencing at Vancouver Island, with mid-stations at Fanning Island, Fiji, and Norfolk Island, and with branches from Norfolk Island to New Zealand and New South Wales—complete, including maintenance for three years, in each case: No. 4. The Indiarubber, Gutta-percha, and Telegraph Works Company, £1,517,000. No. 3. W. T. Henley Telegraph Works Company, £1,826,000. No. 1. Siemens Brothers and Co., £2,170,000. No. 2. Fowler-Waring Cable Company, £2,350,000.

Route No. 2.—Commencing at Vancouver Island, with mid-stations at Necker Island, Fiji, and Norfolk Island, and with branches to New Zealand and New South Wales—complete, including maintenance for three years, in each case: No. 4. The Indiarubber, Gutta-percha, and Telegraph Works Company, £1,316,000. No. 3. W. T. Henley Telegraph Works Company, £1,743,000. No. 1. Siemens Brothers and Co., £2,140,000. No. 2. Fowler-Waring Cable Company, £2,210,000.

Company, £2,210,000.

Route No. 3.—From Vancouver Island to Bowen (Queensland), with mid-stations at Necker Island and Oncatoa Route No. 3.—From Vancouver Island to Bowen (Queensland), with mid-stations at Necker Island and Oncatoa Route No. 3.—From Vancouver Island to Bowen (Queensland), with mid-stations at Necker Island and Oncatoa Route No. 3.—From Vancouver Island to Bowen (Queensland), with mid-stations at Necker Island and Oncatoa Route No. 3.—From Vancouver Island to Bowen (Queensland), with mid-stations at Necker Island and Oncatoa Route No. 3.—From Vancouver Island to Bowen (Queensland), with mid-stations at Necker Island and Oncatoa Route No. 3.—From Vancouver Island to Bowen (Queensland), with mid-stations at Necker Island and Oncatoa Route No. 3.—From Vancouver Island to Bowen (Queensland), with mid-stations at Necker Island and Oncatoa Route No. 3.—From Vancouver Island to Bowen (Queensland), with mid-stations at Necker Island and Oncatoa Route No. 3.—From Vancouver Island to Bowen (Queensland), with mid-stations at Necker Island and Oncatoa Route No. 3.—From Vancouver Island to Bowen (Queensland), with mid-stations at Necker Island and Oncatoa Route No. 3.—From Vancouver Island to Bowen (Queensland), with mid-stations at Necker Island and Oncatoa Route No. 3.—From Vancouver Island to Bowen (Queensland), with mid-stations at Necker Island to Bowen (Queensland), with mid-s Route No. 3.—From Vancouver Island to Bowen (Queensland), with mid-stations at Necker Island and Oncatoa (Gilbert Group), branching at Oncatoa, viâ Fiji, to New Zealand, and viâ San Christoval (Solomon Group) to Bowen—complete in each case, including maintenance for three years: No. 4. The Indiarubber, Gutta-percha, and Telegraph Works Company, £1,403,000. No. 3. W. T. Henley Telegraph Works Company, £1,723,000. No. 1. Siemens Brothers and Co., £2,240,000. No. 2. The Fowler-Waring Cable Company, £2,341,000.

Route No. 4.—From Vancouver Island to Bowen (Queensland) direct, with mid-stations at Necker Island, Apamana (Gilbert Group), and San Christoval (Solomon Group)—complete, including maintenance for three years, in each case: No. 4. The Indiarubber, Gutta-percha, and Telegraph Works Company, £1,068,000. No. 3. The W. T. Henley Telegraph Works Company, £1,554,000. No. 1. Siemens Brothers and Co., £1,710,000. No. 2. The Fowler-Waring Cable Company, £2,125,000.

Route No. 5.—Vancouver Island direct to New Zealand, viâ Necker Island and the Fiji Group—complete, including maintenance for three years, in each case: No. 4. The Indiarubber, Gutta-percha, and Telegraph Works Company, £1,291,000. No. 3. W. T. Henley Telegraph Works Company, £1,658,000. No. 2. The Fowler-Waring Cable Company, £2,010,000. No. 1. Siemens Brothers and Co., £2,050,000.

Route No. 6.—Vancouver Island to Norfolk Island, with mid-stations at Honolulu and Fiji. At Norfolk Island branches to extend to New Zealand and Australia proper—complete, including maintenance for three years, in

Cable Company, £2,010,000. No. 1. Siemens Brothers and Co., £2,050,000.

Route No. 6.—Vancouver Island to Norfolk Island, with mid-stations at Honolulu and Fiji. At Norfolk Island branches to extend to New Zealand and Australia proper—complete, including maintenance for three years, in each case: No. 4. The Indiarubber, Gutta-percha, and Telegraph Works Company, £1,391,000. No. 3. The W. T. Henley Telegraph Works Company, £2,130,000. No. 1. Siemens Brothers and Co., £2,120,000. No. 2. The Fowler-Waring Cable Company, £2,130,000.

Route No. 7.—From Vancouver Island to Bowen (Queensland), with mid-stations at Honolulu, Onoatoa (Gilbert Group), and San Christoval (Solomon Group)—complete, including maintenance for three years, in each case: No. 4. The Indiarubber, Gutta-percha, and Telegraph Works Company, £1,081,000. No. 3. The W. T. Henley Telegraph Works Company, £1,589,000. No. 2. The Fowler-Waring Cable Company, £1,880,000. No. 1. The Siemens Brothers Company, £1,000,000.

Route No. 8.—From Vancouver Island direct to New Zealand, with mid-stations at Honolulu and Fiji—complete, including maintenance for three years, in each case: No. 4. The Indiarubber, Gutta-percha, and Telegraph Works Company, £1,243,000. No. 3. The W. T. Henley Telegraph Works Company, £1,655,000. No. 2. The Fowler-Waring Cable Company, £1,910,000. No. 1. The Siemens Brothers Company, £1,970,000.

The cost of maintenance is variously estimated by the several firms, the highest being that of the W. T. Henley Telegraph Works Company, who place the cost at £115,000 per annum, or £345,000 for the three years. This is subject to a reduction if the spare cable provided for the purpose be not used. The Siemens Brothers Company include in their offer for the purpose of maintenance £270,000, being at the rate of £90,000 per year; this also is subject to a reduction if the actual repairs cost less than the sum named. This mode of charging for the maintenance and repair of the cable has an obvious advantage. The Fowler-Waring Company stipulate that a

the different routes include the erection at each cable-landing place of a suitable dwellinghouse and operating-room for the working staff, with duplicate sets of all proper instruments at each station; also the use of two steamships fitted with cable-tanks and all necessary machinery for repairing the cable, and the cost of maintaining these ships, as well as the cables themselves, for three years." The contract prices for which this firm is prepared to manufacture, lay, and maintain the cable for three years on any one of the eight routes are as follows: Route No. 1, £1,517,000; Route No. 2, £1,416,000; Route No. 3, £1,303,000; Route No. 4, £1,068,000; Route No. 5, £1,291,000; Route No. 6, £1,391,000; Route No. 7, £1,031,000; Route No. 8, £1,243,000. This company states that if intrusted with the contract they will undertake to manufacture the cable at the rate of twenty miles a day, and will proceed to ship and lay it with the least possible delay. An examination of this tender and accompanying documents shows that this company propose to use an approved type of cable; the core on the long section (Route No. 1) is to have a copper conductor weighing 533 lb. per knot, insulated with gutta-percha weighing 365 lb. per knot, the sheathing to be the same as the deep-sea type of cable adopted by the Anglo-American Telegraph Company in the newest trans-Atlantic cable laid this year. The shore ends and intermediate cables to be similar in character and weight to those generally adopted under like circumstances. There is one apparent omission in this tender in connection with shore-end and shallow-water cables. I can find no special mention of a metallic protection against teredos. In the opinion of the undersigned, the core of the cable should be enveloped in a brass tape. The additional cost is not the opinion of the undersigned, the core of the cable should be enveloped in a brass tape. The additional cost is not great, and before any contract is entered into with this or any company it should be clearly stipulated that this effective means of protection against the ravages of marine life should be provided.

The Hon. Mackenzie Bowell, Minister of Trade and Commerce, Ottawa.

I have, &c., SANDFORD FLEMING.

Additional Report on Tenders.

Ottawa, 11th December, 1894. SIR, I have the honour to report on the letter addressed to you by the Indiarubber, Gutta-percha, and Telegraph Works Company, of date the 22nd November, 1894, on the subject of the tender of that firm for manufacturing, laying,

Works Company, of date the 22nd November, 1894, on the subject of the tender of that firm for manufacturing, laying, and maintaining the Pacific cable.

In my report on the tenders of date the 20th November, 1894, I mentioned in the last paragraph that in my opinion it was expedient to make provision for protecting the core of the cable, under certain conditions, from the ravages of marine life. The letter of the above-named company which you have referred to me gives the assurance that all types of cable proposed to be laid by that firm will be provided with proper protection—that, in fact, all cables laid in less than 100 fathoms are to have the core sheathed with metallic taping as a protection against the teredo. This assurance removes the objections which I raised.

In my report of the 20th November all the tenders referred to were for the supply of cables having a speed-capacity of twelve words per minute. For Route No. 1 the price of the Indiarubber, Gutta-percha, and Telegraph Works Company is, including maintenance for three years, £1,517,000. In the letter of this company of the 22nd November it is stated that higher speed cables will be furnished for this route at the following prices, viz.: A fifteen-word-per-