In comparing, for instance, the last-mentioned cable with those now proposed by us, it will be II.—As to the found that the former had a conductor weighing 215 lbs., and a dielectric weighing 200 lbs. (altered proposed two by Mr. Deintroe's corp. procifications to 210 lbs. for the conductor and 250 lbs. for the dielectric). Cables. by Mr. Daintree's own specifications to 210 lbs. for the conductor, and 260 lbs. for the dielectric); whereas the latter have conductors weighing 86 lbs., 100 lbs., and 150 lbs., and dielectrics weighing 120 lbs., 132 lbs., and 160 lbs., respectively per nautical mile; and also that the outer protection or armour of the first mentioned cable was heavier than those of the latter.

We have partly, in this instance, been induced to propose a light construction of cable, because we have to endeavour to reduce its cost to a minimum to facilitate the raising of the capital re-

quired to carry out the undertaking.

It was for this reason, also, that we proposed, for the cable from New South Wales to New Zealand, the route indicated in red on the Admiralty Chart No. 2,483, left with you yesterday, this being by far the shortest route between the two places to be connected. If, as you suggested, it be imperative to adopt the route from a place near Sydney to a place near Cape Farewell, a longer cable will be required for this section, and to meet this emergency we beg to enclose a specification No. 3a, for a cable from Sydney to Cape Farewell, in place of the specification No. 3,

left with you yesterday.

With respect to the route of the cable to connect Singapore with Norman Mouth, we beg most strongly to recommend to your kind consideration the adoption of the one proposed by us. In the interest of the Company, as well as of the Colonial Governments concerned, we think it of importance that the permission should be granted to have a station at the Island of Java. This is the only locality between Singapore and Norman Mouth from which it may be expected that an earning will be derived, which earning would not only increase the income of the Company, and, therefore, the chances of its success, but would at the same time help to reduce the guarantee given by the Colonial Governments. As the line is intended to be kept independent from the existing line between Australia and Europe, arrangements can easily be made that such is the case, whether the new line touches at Java or not, for a similar case will arise where both lines meet at Singapore.

We see no advantage in touching at Macassar, as, after going to Java, it would not only increase the cost of the undertaking by going some distance out of the way to connect that place, but the cable required to cross the Flores Sea would probably have to be a heavy and expensive one, from the circumstance that the Southern Peninsula of Celebes, on which Macassar is situated, is subject to the calamity of earthquakes and volcanic eruptions, and we are afraid that the adjoining sea is not exempt from such disturbances. The scanty information given by existing charts appears to us to confirm fully that the bottom of the Flores Sea is irregular, and very unfavourable to the durability of

a submarine cable, and should therefore be avoided.

We shall be glad to receive, also, your approval as to the route submitted by us.

We have, &c.,

Julius Vogel, Esq. R. Daintree, Esq. Sir Daniel Cooper.

SIEMENS BROTHERS.

## No. 9.

## The AGENTS to Messrs. SIEMENS.

London, 12th March, 1875. GENTLEMEN,-We have the honor to acknowledge the receipt of your letter of 6th March.

2. In reply, we have to inform you that we have taken advice as to the specifications for the proposed cables between Singapore and Normanton, and New Zealand and Australia. The result of that advice leads us to the conclusion that the cables you propose would be in the nature of an experiment; and an experiment, moreover, which previous experience does not justify. We shall not be willing to accept cables of less strength than those indicated by alterations in red\* on the specifications returned herewith. After copying these alterations, we shall be obliged by your returning the originals, which we forward to you to save time.

3. You will allow us to observe, that the interests of the persons who find the capital are, under the proposed arrangement, similar to those of the Governments, in respect to adopting sufficiently strong cables. Indeed, their interest is, from one point of view, larger—since the guarantee is only to continue whilst the lines are in good order. Possibly, therefore, the persons supplying the capital may require stronger lines than we have indicated: in justice to themselves, we are sure they cannot

4. We should, of course, require that the specifications contain clauses specifying the quality of the materials to be used; and that the contract contain provisions to enable us to watch the progress of the work.

5. We have not verified the lengths of the several types of cable, nor the entire lengths of the lines, and express no opinion as to their correctness.

6. We will communicate with you separately on the subject of the Java deviation.

the specification which points to a route by Java we do not accept at present.
7. With respect to the landing on the Malay Peninsula, between Penang and Singapore, we must inform you that we shall stipulate, in case that line does not work satisfactorily, that we be at liberty to call upon you to lay a cable instead. We have, &c.,

> Julius Vogel. DANIEL COOPER. R. DAINTREE.

Messrs. Siemens Brothers, &c.

<sup>\*</sup> The "alterations in red" are shown by figures in brackets, in the documents as printed.