

Steamers, either on account of their sale or as part of their first cost, which would be charged against the other sections.

The total cost of each of the four Sections if carried out with the same Steamers and Staff within three and a half years, would be as follows :—

Rangoon-Singapore	...	...	...	£450,000
Singapore-Batavia	...	...	...	170,000
Java-Brisbane	...	...	...	1100,000
Singapore-Hong Kong	...	...	...	530,000
Total	...	...	...	<u>£2,250,000</u>

You will perceive that while nothing has been spared to secure a strong and efficient Cable, the utmost possible economy has been studied in the plans for carrying out the work, and the Estimates are consequently very little higher than those laid by you before the Australian Legislatures for a Cable of less than one-third the weight of that now proposed.

The cost of working and maintenance may appear high, but we are convinced by experience that it is desirable to have a very ample Staff of first class men for the superintendence of a Submarine Line; and that, moreover, it is desirable to use a very superior class of Telegraph Clerks to those employed on Land Lines.

We also consider it absolutely necessary to provide an efficient Steamer to be maintained constantly on the Line in readiness to effect any necessary repairs. Interruptions which need not have lasted more than a few days have on some lines been prolonged for months for want of such a Steamer. This boat will also visit the Stations periodically.

The Estimate for Home Management and Engineering is reasonable, and the sum put down for the Sinking Fund is small, but we believe it to be sufficient; £15,000 per annum is allowed for the repairing Steamer. This sum, with the 320 knots of spare Cable provided at the outset, will meet all the expenses of repairs during say the first fifteen years. At the end of that time, the Sinking Fund of £12,000, at four per cent. compound interest, will amount to over £240,000, which, with the Reserve of £100,000, will make an available fund of £340,000 for the complete renewal of any Section, or for the extension of the Lines.

The duration of the Cable has hitherto depended on the time during which the outer iron wires remain sound. In some seas iron decays very slowly, in others more rapidly; but it is believed that the bituminous covering will ensure the permanency of the Cable. We therefore are far from anticipating that any Section will require renewal at the end of fifteen years; but it is certainly desirable that a considerable Sinking Fund should be provided to meet emergencies.

The Malta-Alexandria Cable, only 1,300 knots long, and situated near England, cost the Imperial Government nearly £500,000. This fact alone will show that our Estimate of £1,100,000 for a stronger Cable 3,024 knots long, to be laid in Australian waters, is framed in the most economical manner. This Estimate is, however, the result of careful consideration; and we are convinced that the work can be efficiently carried out for the above sum in from two to two and a half years.

We enclose a small map of the proposed Lines.

We have, &c.,

FORDE & FLEEMING JENKIN.

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INDIA, AUSTRALIA, AND CHINA TELEGRAPH.

ABSTRACT OF SPECIFICATION FOR A CABLE BETWEEN JAVA AND BRISBANE.

Main Cable,—

7 Copper Wires in a strand, weighing per knot	150 lbs.	
3 Coverings of Gutta Percha, and 3 of Chatterton's Compound	230 lbs.	
Total weight of Core	380 lbs.	3·40 cwt.
Jute and Tar		4·20 "
10 Best selected Charcoal Iron Wires, No. 6, B.W.G.		52·40 "
Outer protection—Latimer Clark's patent		14·00 "
Total weight per knot of Main Cable		<u>74·00 cwt.</u>

Shore Ends,—

Core as above	3·40 cwt.
Jute and Tar	9·50 "
10 Best selected Charcoal Iron Wires, No. 1, B.W.G.	121·10 "
Outer protection—Latimer Clark's patent	20·00 "
Total weight per knot of Shore end	<u>154·00 cwt.</u>