

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, but one half of this cost would be borne by the first two sections, if all carried out under one Company ; this sum, with about 180 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 £10,000 per annum, at four per cent. compound interest, will amount to over £200,000, which, with the reserve of £60,000, will make an available fund of £260,000 for the complete renewal of about one half the line, or for the extension of the lines.

The duration of Cables has hitherto depended in a measure on the time during which the outer iron wires remained sound. In some seas iron decays very slowly, in others 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, 1,300 knots long, and situated near England, cost the Imperial Government nearly £500,000. This fact alone will shew that our Estimate of £725,000 for a stronger Cable, 1,830 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 in less than two years.

We enclose a small Map of the proposed lines.

F. Gisborne, Esq., London.

We have, &c.,

FORDE AND FLEEMING JENKIN.

P.S.—The difference between our present Estimate and our original Estimate of £710,000, is due to the sudden rise in the price of gutta percha.

ANGLO-AUSTRALIAN AND CHINA TELEGRAPH.

ABSTRACT OF SPECIFICATION FOR A CABLE BETWEEN JAVA AND THE SOUTH-EAST END OF GULF CARPENTARIA.

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.
Jute and Tar	3.40 cwt.
10 Best Iron Wires, No. 6, B.W.G.	4.20 "
Outer protection, Clark's patent	52.40 "
Outer protection, Clark's patent	14.00 "
Total weight per knot of Main Cable	74.00 cwt.

Shore Ends,—

Core as above	3.40 cwt.
Jute and Tar	9.50 "
10 Best Iron Wires, No. 1, B.W.G.	121.10 "
Outer protection, Clark's patent	20.00 "
Total weight per knot of Shore ends	154.00 cwt.

LENGTH OF CABLE REQUIRED.

Cape Sedano (East Java) to Coepang (Timor)	590 knots
Coepang to Port Essington	525 "
Port Essington to Cumberland Straits	285 "
Cumberland Straits to Gulf Carpentaria	430 "
Total direct distance	1,830 knots
Slack, probably used, 5 per cent. =	92 knots
Spare Cable for Subsequent Repairs—say 10 per cent. =	183 "
Total for Slack and Spare Cable	275 knots
Total Cable required	2,105 knots
Of which Main Cable	1,855 knots
Shore Ends	250 "
Total	2,105 knots