already stated, fully one-third or more of the total work. Their estimate of a year's payable work with two different types of core is as follows :—

First core (522 lb. of copper and 368 lb. of guttapercha per knot)—Forty paying letters, or five paying words, per minute, 1,620,000 words a year.

Second core (650 lb. of copper and 400 lb. of guttapercha per knot)—Forty-eight paying letters, or six paying words, per minute, 1,944,000 words a year.

The Committee estimated the cost of the lighter cable at £1,500,000, and the heavier type at £1,800,000; but, owing to the greatly advanced prices for both copper and guttapercha, the cost now (including survey, station buildings, two repairing-steamers, &c., and, say, six months' maintenance by the contractor) would probably exceed £2,000,000 for one cable, or, say, £4,000,000 for two cables, as the extra demand would still further raise the price of gutta-percha.

The cables would have to be made in accordance with a specification approved in every respect by the British Telegraph Department. If capital raised at 2½ per cent., the annual cost would be :—

One Cable.

			£	s.	d.
Interest on £2,000,000, at 2½ per cent.	...	...	5,0000	0	0
Sinking fund, say	...	...	20,500	0	0
Working-expenses	...	...	25,000	0	0
Maintenance, including two steamers, renewals, &c....	...	80,000	0	0
Total	...	£175,500	0	0
If interest 2¾ per cent.	...	£180,500	0	0

Two Cables.

			£	s.	d.
Interest on £4,000,000, at 2½ per cent.	...	...	100,000	0	0
Sinking fund ...	...	...	41,000	0	0
Working-expenses	...	...	30,000	0	0
Maintenance ...	...	...	135,000	0	0
Total	...	£306,000	0	0
If interest 2¾ per cent.	...	£316,000	0	0

The foregoing estimates are very moderate. The annual cost of maintenance, which includes all repairs and renewals of cable, is necessarily an uncertain and variable factor, as it depends on the nature and number of faults and breakages of the cable and the quantity of new cable required. A break in the deep sections of the Pacific might, and probably would, cause a prolonged and costly interruption, in which case the estimate for the year might be largely exceeded. We may anticipate that the whole of the original cable would be replaced in probably less than forty years—such is the general experience, and the life of a cable is variously estimated at from twenty-five to thirty years.

The sinking fund provides for various contingencies and for gradual replacement of capital; the working-expenses provide for six stations—Vancouver, Fanning Island, Fiji, Norfolk Island, New Zealand, and the Australian Coast—also for general management.

Coming now to probable revenue, it is, of course, impossible to say how much of the traffic would be diverted. A working arrangement would, no doubt, be arrived at by the proprietary Governments on the one side and the Eastern Extension Company on the other. Actual competition would be avoided, and the rates, as far as possible, assimilated. We may assume that practically the whole of the West and South Australian traffic would go by existing routes and the proposed cable from Africa, and about one-half of the traffic with the eastern colonies, except New Zealand. The number of words during the past three years (1896, 1897, and 1898) was as follows :—

	Words.		
	1896.	1897.	1898.
Victoria	551,894½	508,554¾	499,033½
Tasmania...	10,893	12,410	11,718½
New South Wales	481,409½	484,715	486,260
Queensland	14,135	52,012½	89,889
New Zealand	288,842	246,365	221,508½
Total east colonies	1,347,174	1,304,057¼	1,308,409½
South Australia	307,487	306,232¾	299,319
West Australia	672,323	511,926	376,091½
Total west colonies	979,810	818,158¾	672,410¼
Grand total	2,326,984	2,122,216	1,983,820