

£3,986 received from the Compagnie Française des Cables Télégraphiques for the charter of the " Iris " for 29½ days from the 24th February to the 26th March, 1911, for repair of the company's New Caledonia cable.

The actual cost to the Board of the expedition was £1,636, and that sum was included in the item " Ship's expenses " for the year 1910-11, in which they were incurred. The balance, £2,350, falls to the credit of the Renewal Account, in accordance with the suggestion made in paragraph 4 of last year's report, and subsequently approved by your Lordships; and the transfer appears in the account of the year under review, in the course of which the extra receipt was received.

5. Expenditure shows an increase over that of 1910-11 of £12,761, of which £7,339 falls under the head of rent of the Montreal-Bamfield land line, for which a full year's rent was payable as against a four months' rent only in 1910-11, and £2,350 is the addition to the sum carried to the Renewal Account out of the extra receipt from the French Cable Company. Increments of salaries and overtime due to increase of business amount for £2,725, and the increased charges for calls at Fanning Island for £696, while on the balance of other heads of expenditure some saving was shown.

The expenditure has exceeded the original estimate by £11,129, and the revised estimate of December last by £7,123. The principal causes of the excess as anticipated in December last (apart from the sum of £2,350 by which the charge to Renewal Account for the year has been increased) were explained in detail in my letter of the 18th of that month. But the accounts as now received show that sufficient allowance was not then made for various causes operating in the direction of increased expenditure, including the preparation of the " Iris " for sea at the end of March.

6. The preliminary forecast of revenue and expenditure for the year ending 31st March, 1913, prepared on the 18th December, 1911, was as follows:—

	£		£
Traffic revenue	157.000	Renewal Fund	30.000
		Working-expenses	86.855
		Excess	40.145
	£157.000		£157.000

7. It will be seen that the Renewal Fund stood at £286,289 on the 31st March, 1912. The balance of cash at that date to the credit of this account was £33,512. Credit is given to the Renewal Fund for all interest earned by investments on this account, and as the interest for the year has amounted to over £9,000, while the appropriation from the revenue for this purpose has been £30,000, the growth of the fund has been at the rate of over £39,000 a year. As will be seen further on, the cost of the new Australia - New Zealand cable will be met out of the Renewal Account. In addition to the cash reserve there is in hand cable, &c. of the value of £15,945.

The Cable, Instruments, &c.

8. The cable was maintained in good working-order, without interruptions, throughout the year. To the instruments in use a very important addition was made by the adoption for the sections of the cable on either side of Fanning Island of a new contrivance for magnifying the signals, the invention of Mr. E. S. Heurtley. On those sections, especially the one connecting Vancouver Island with Fanning, the signals, owing to the great distances, are necessarily feeble, and the magnification of them by means of this instrument not only tends to accuracy of transmission, but sensibly increases the speed at which messages can be sent—by as much as 25 per cent. This is a matter of great and, with the rapid growth of traffic, of increasing importance, and in consequence the Board felt justified in incurring the somewhat heavy expenses that the license to use the instrument entails. Under the contract with the patentee a royalty of £1,000 per annum is payable for the first year, increasing in subsequent years (subject to a maximum of £1,500) by £5 for every completed 10,000 words by which the total traffic over the cable in the preceding year may have exceeded 2,000,000 words.

Extension of the Cable.

9. On the 16th December last the Royal assent was given to an Act—the Pacific Cable Act, 1911—authorizing the Board to lay a submarine cable between Australia and New Zealand, and " any other extensions, connections, or rearrangements in or near the Pacific Ocean which, in the opinion of all the contributing Governments, are necessary or expedient for the improvement of the Pacific Cable Board's undertaking." To meet the cost of works thus authorized, the Board are empowered to apply such sums as may be required out of their Reserve Fund, subject to two conditions: (a) that the fund is at no time to be reduced below the sum of £100,000, and (b) that all sums drawn from the fund are to be repaid with interest at 3½ per cent. by annuities running for thirty-five years, the charges for such annuities to form part of the annual expenses of the Pacific Cable in each year.

10. The extension more immediately contemplated by the Act—viz., that of a submarine cable directly connecting Australia and New Zealand—had been the subject of correspondence with the contributing Governments for nearly two years previously, and from it the Board expect to derive very substantial advantages. In the first place, by completing the triangle Norfolk Island - Australia - New Zealand, it will practically duplicate the two southern sections of the Pacific Cable, as in the event of an interruption on either the traffic can be conveyed by the two other sides of the triangle. Next it will render practicable a considerable economy in working-expenses, estimated as in the neighbourhood of £6,000 per annum, because it is proposed to make the line Norfolk Island - New Zealand - Australia the regular route for all traffic, and this will allow of substantial reductions in the staff now maintained at Norfolk Island, and at Southport in Queensland. Lastly, it will get rid of the present circuitous route for intercolonial traffic via Norfolk Island, and by simplifying and accelerating transmission, and by avoiding the long land-line section between Southport and Sydney,