P.W.C. No. 4464

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

CIVIL WORKS.

Telegraph.

To 6 S.C.

Enl

Nos. 154-170 T.

Dated Simla, May 15, 1883.

Received 29-

No 1520 W dy 30th May/83

Recorded

Review of Administration Report of the Indian Telegraph Department for the year 1881-82.

Govt. Central Branch Press, Simla.—No. 47 P. W. D.—17-5-83.—150

Nos. 154-170 T.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

CIVIL WORKS.

Telegraph.

RESOLUTION.

Dated Simla, May 15, 1883.

Administration Report of the Indian Telegraph Department for the year 1881-82.

Read:—

Letter No. 596T., dated 6th January 1883, from the Director General of Telegraphs, together with its enclosure, the Administration Report of the Indian Telegraph Department for the year 1881-82.

RESOLUTION.—The year under review has been marked by several important changes, more especially in the inland telegraph tariff.

2. In July 1881, a tariff of two annas a word for each word in excess of the minimum group of six words for the rupee was introduced.

3. This was followed in January 1882, by the raising of the minimum group to eight words for the rupee; and at the same time, in order to admit of messages being dealt with as far as possible in order of urgency instead of entirely in order of receipt, an "urgent" tariff at double rates and a "deferred" tariff at half rates were introduced.

4. It was further ruled that in order to clear the lines during the busy hours of the day and to utilise the lines by night, all "State" messages should be classed as "deferred" unless specially marked "urgent" by the sender.

5. These latter changes have only taken effect during the last three months of the year under review, but it is already evident that the result has been benificial. Of the private traffic, 22·03 per cent. was tendered at the cheaper "deferred" rate, but the increase in number of messages which resulted nearly counterbalanced the reduction in tariff; in fact, the net revenue from this source is slightly in excess of that for the previous year, owing to an increase in foreign message revenue.

6. The total net revenue is, however, considerably less than that for the previous year: there was a reduction in number of State messages to the extent of 67,853, chiefly accounted for by the cessation of military operations in Afghanistan; and owing to the order above referred to, under which the State traffic is classed as deferred, the falling off in revenue is considerably greater proportionately than the reduction in numbers. But the loss is nominal not real, and, on the other hand, the gain by freeing the wires for remunerative traffic during the day time is real and substantial.

7. The Government of India has declared the policy that the Telegraph Department must be self-supporting, and the effects of these changes will be carefully noted during the present year. So far as information has reached the Government, there is a fair probability that the growth of traffic under the new conditions will be sufficient before long to warrant a further reduction in tariff, without risking a burden on the general revenues of the country.

8. The operations of the Department have increased considerably during the year; the length of lines was increased by 923 miles, and the length of wires by 3,903 miles: the number of departmental offices was increased by 38; andthe number of Railway offices under the supervision of the Department was increased by 114.

9. The importance of increasing the number of offices was dwelt upon in a previous Resolution;* and the utilisation of postal or other agency for working branch offices in places where the traffic would not warrant the employment of highly paid signallers was indicated as the best method of economically securing the extension of operations. The report under review does not show clearly to what extent it has been found practicable to employ such agency, and the Government of India desires that this point may be attended to in future reports.

* Nos. 169-90T., dated 31st May 1881.

10. During the year under review it was decided that private companies should be allowed to undertake telephone operations in cities and towns, and licences for the establishment of telephone exchanges were granted to the Oriental Telephone Company for Calcutta, Bombay, Madras and Rangoon.

11. The present report shows that the maintenance of the lines and the working of the Department have been continued in a high state of efficiency; the speed of transmission on the trunk lines has in almost every case been increased; complaints against the Department have decreased, and interruptions have been fewer both in number and duration.

12. Before the report for the current year is submitted, the present Director General, Colonel R. Murray, will have relinquished the charge of the Department which he has so ably administered, and in acknowledging the testimony borne by him to the officers of all grades and subordinates of the Department, the Government of India desires to place specially on record once more its appreciation of the value of the services rendered by Colonel Murray throughout his service, and more especially as Head of the Department during the Afghan war and the recent years of rapid progress and development.

ORDER.—Ordered, that copies of this Resolution and of the Report be forwarded to the Secretary of State and to the Local Governments and Administrations noted on the margin, and to the Government of Ceylon and the Commissioner in Sind.

* Madras, Bombay, Bengal, North-Western Provinces and Oudh, Punjab, Central Provinces, British Burma, Assam, Hydrabad, Central India and Rajputana.

Also to the Foreign Department for communication to the Resident at Mysore and Coorg.

Also, that a copy of this Resolution be forwarded to the Director General of Telegraphs for information and guidance.

Also, that a copy of this Resolution and of the Report and Appendices A, B, and F be forwarded to the Home Department of the Government of India for information, and be published in the *Gazette of India*.

By order,

W. Murray Colonel, R.E.,
Secy. to the Govt. of India.

No-154 J.
To, The Secy to the Govt of Madras,
P.W.D.

ADMINISTRATION REPORT

OF

THE INDIAN TELEGRAPH DEPARTMENT

FOR

1881-82.

ADMINISTRATION REPORT

OF

THE INDIAN TELEGRAPH DEPARTMENT

FOR

1881-82.

During the year 1881-82 the Department has continued to work at a satisfactory profit, and has yielded to the Government the net revenue of ₹6,18,568; this being the difference between the total earnings and working expenses during the year, the former amounting to ₹38,54,212, and the latter to ₹32,35,644. The above result, satisfactory as it is, shows a less profit than that of the last two years; this being accounted for by the fall of message revenue on the cessation of war in Afghanistan. Notwithstanding this, however, the net profit of 1881-82 is in excess of that of 1878-79, excluding from the latter ₹57,151, the value of free copies of Government and Press messages, which was credited to Revenue up to and including that year, but omitted from the accounts since 1880-81.

2. The number of paid messages was 1,613,375, against 1,642,777* for the previous year; but this slight decrease is more than accounted for by a falling-off in State messages to the extent of 67,853. Private messages show an increase of 38,451.

3. The length of lines was increased from 19,679 to 20,602 miles, and of wire from 54,433 to 58,336 miles. In addition to this, 1,233 miles of wire, not the property of Government, were maintained, as against 1,655 during the previous year; this decrease in the mileage of non-departmental wire being due to the transfer from the Railway to the Departmental posts of the Sind, Punjab and Delhi Railway wires between Mooltan and Lahore, subsequent to the dismantlement of that section of the Company's lines.

4. The number of Departmental Offices increased from 254 to 292, and at the close of the year 794 Railway Telegraph Offices were technically supervised by the Department, as compared with 680 during the previous year.

5. The speed of transmission on the trunk lines has been in almost every case enhanced, as will be seen from the details given in paragraph 27.

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* Excluding 13,453 sent from Ceylon.

Complaints from the public on account of non-delivery, errors and delays, show (*vide* paragraph 26) a decrease of 6·37 per cent.

6. The following Summary gives a clear idea of the annual progress made since 1871-72, and Diagrams A, B and C, attached to this Report, show respectively the number, value and speed of transmission of the messages disposed of year by year:—

Heads of Financial Results.			1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.
Total expenditure per message			3·69	3·69	3·44	3·15	3·11	2·48	2·30	2·24	1·93	1·93	2·00
Total receipts per message			2·55	2·67	2·69	2·66	2·62	2·48	2·44	2·68	2·77	2·73	2·39
Total expenditure per mile of line (including rented lines)			154·53	162·12	161·54	160·00	154·08	145 02	147·08	151·10	143·15	157·32	153·72
Total receipts per mile of line (including rented lines)			107·62	117·09	126·39	134·90	130·19	145·00	155·61	180·87	205·57	222·17	183·10
Total expenditure per mile of wire (including rented wires)			81·74	81·58	79·03	78·58	72·87	63·27	58·76	60·32	56·34	57·07	54·31
Total receipts per mile of wire (including rented wires)			56·94	58·92	61·84	66·26	61·58	63·26	62·17	72·20	80·90	82·37	64·70
Number of messages per mile of line (excluding rented lines)			43·04	44·27	47·56	52·12	55·40	65·26	77·47	76·66	86·80	97·64	90·84
Number of messages per mile of wire (excluding rented wires)			23·44	23·67	25·08	27·39	28·87	32·77	39·45	38·16	42·97	44·47	41·07
Number of messages per office (*paid* and *pro formâ*)			3,310	3,396	3,341	3,752	4,095	4,774	5,711	5,520	5,690	6,530	5,530
Message Revenue *only* per mile of wire (excluding rented wires)			58·67	63·14	65·40	68·29	71·33	75·68	89·60	90·40	107·29	107·94	84·37
Message Revenue *only* per mile of line (excluding rented lines)			107·77	118·08	124·20	129·91	136·91	150·71	170·30	181·61	216·64	237·00	187·18
Average cost to sender per message	Inland	State	3·78	3·33	3·26	3·33	3·07	3·24	3·86	3·55	4·09	4·13	2·85
		Private	1·77	1·82	1·72	1·63	1·58	1·56	1·51	1·49	1·48	1·35	1·27
	Foreign (Indian Share)	State	13·30	10·07	9·35	8·47	9·10	15·08	15·86	13·17	15·04	13·80	9·42
		Private	5·75	6·56	6·24	5·73	5·69	4·90	4·51	4·30	4·24	3·82	3·52

REVENUE AND EXPENDITURE.

7. The total net capital expenditure of the Department during the year, shewn in Diagram B, amounted to ₹13,97,110, and the capital account now stands, at the close of the year 1881-82, at ₹2,73,65,377.

8. The following is an abstract Revenue account for 1881-82, with the corresponding figures for 1880-81:—

Expenditure.	1880-81.	1881-82.	Receipts.	1880-81.	1881-82.
	₹	₹		₹	₹
Repairs of Lines	2,46,756	1,82,110	Message Revenue earned	38,71,179	32,11,001
Direction	1,79,148	1,66,082	Receipts from State Railways for interest, maintenance of lines and offices, &c.	4,08,336	4,21,177
Accounts	48,208	39,351	Receipts from Guaranteed Railways	95,096	97,714
Superintendence	6,31,314	6,83,778	Claims from Guarantors	45,090	55,202
Line Maintenance	1,37,985	1,50,880	Sales of Books, Gazettes, &c.	16,973	16,171
Check Office	44,679	45,657	Miscellaneous	18,465	9,210
Signalling	16,90,818	17,39,681	News-free and other *pro-formâ* Message Revenue	46,498	43,737
Minor Undertakings	12,032	14,680			
Non-Departmental Offices	1,51,056	1,81,776			
Telegraph Stamps	6,665	9,432			
Other Items	22,809	22,207			
Total	31,71,470	32,35,644	Total	45,01,637	38,54,212
Net Profit	13,30,167	6,18,568			

9. From the above it will be seen that the Net Profit for the year amounts to ₹6,18,568, as remarked in paragraph 1, which also explains the falling-off as compared with the previous year.

10. A summary of the financial results obtained in working the Department during the year 1881-82 is given in Appendix A, together with the results of the operations for the last five years.

TRAFFIC.

11. The percentage of Inland and Foreign messages under the sub-heads of 'State' and 'Private' was as follows:—

Class.	Inland.		Foreign.		Total.	
	No.	Value.	No.	Value.	No.	Value.
State	15·24	21·75	0·26	1·23	15·50	22·98
Private	64·16	41·02	20·34	36·00	84·50	77·02
Total	79·40	62·77	20·60	37·23	100·00	100·00

Full details are given in Appendix B. the following summary of which gives the actuals, and percentage of increase as compared with the corresponding figures for the previous year:—

Class of Messages.	Actual.																	
	Increase.									Decrease.								
	Inland.			Foreign.			Net.			Inland.			Foreign.			Net.		
	No.	Amount.		No.	Amount.		No.	Amount.		No.	Amount.		No.	Amount.		No.	Amount.	
		₹	a.		₹	a.		₹	a.		₹	a.		₹	a.		₹	a.
State	...	...	...	...	...	...	...	...	...	67,812	5,99,053	5	41	19,408	11	67,853	6,18,462	...
Private	2,427	...	...	36,024	38,442	11	38,451	...	...	...	75,131	2	...	...	...	...	36,688	7
Total	2,427	...	...	36,024	38,442	11	38,451	...	...	67,812	6,74,184	7	41	19,408	11	29,402	6,55,150	7

	Percentage.															
	Increase.						Decrease.									
	Inland.		Foreign.		Net.		Inland.		Foreign.		Net.					
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.				
State	...	...	...	...	...	...	21·62	46·16	0·95	32·53	21·34	45·56				
Private	0·23	...	12·33	3·44	2·90	...	...	15·39	...	...	...	1·46				
Total	0·23	...	12·33	3·44	2·90	...	21·62	25·07	0·95	32·53	1·78	16·94				

12. The number and value of *paid* messages, as compared with the previous year, were as follows:—

Year.	State.		Private.		Total.	
	No.	Value.	No.	Value.	No.	Value.
		₹ a.		₹ a.		₹ a.
1880-81 (excluding Ceylon, 3 months)	3,17,959	13,57,178 12	13,24,818	25,08,972 7	16,42,777	38,66,151 3
1881-82	2,50,106	7,38,716 12	13,63,269	24,72,284 0	16,13,375	32,11,000 12

It will be observed that the net falling-off is almost entirely due to a decrease of State telegrams, and that the Private message traffic shows a numerical increase. On analysing the slight falling-off in the *value* of private messages, it is found that Foreign Traffic exhibits a satisfactory increase, while the diminished value of Inland private telegrams, amounting to ₹75,131-2-0,

is fully accounted for by a decrease in Sind, the Punjab and Beluchistan, these being the Divisions most affected by the cessation of military operations in Afghanistan, and in the Indore Division where the opium trade is stated to have been unusually dull.

Inland Tariff.

13. During the year under review, important changes were sanctioned in the rules and rates for inland messages.

Local Tariff.—From the 9th April 1881, a tariff of 4 annas for every six words, with free delivery within a radius of one mile, was experimentally introduced in Calcutta, and this system was on the 4th July extended to the other Presidency towns and to all places having a central and branch telegraph offices.

Charge by the word in excess of the initial group.—From the 1st July 1881, the system of charging by groups of six words was altered in favour of a rate of 2 annas per word for any excess over the minimum charge of one rupee for the first group of six words, but Press and Indo-Ceylon messages continued to be charged by the group.

Introduction of the Urgent, Ordinary and Deferred classification of State, Private, and Press Inland messages.—With effect from the 1st January 1882, the Government of India sanctioned my proposal to enhance the carrying power of the wires by accepting, at half the ordinary rate, messages to be transmitted when the lines are unoccupied, such 'deferred' messages to be delivered on the morning following their despatch; also to give priority of transmission to telegrams paid for at a higher rate than 'ordinary' traffic. Under this system the tariff adopted was as follows:—

LOCAL messages,—*i.e.*, those tendered during the working hours of a Telegraph Office for transmission in ordinary course within a radius of six miles of a Central Government Telegraph Office.		DEFERRED messages,—*i.e.*, those tendered during the working hours of a Telegraph Office for transmission at night and to be delivered at destination early on the following morning.		ORDINARY messages,—*i.e.*, those tendered during the working hours of a Telegraph Office for transmission and delivery in ordinary course.		URGENT messages,—*i.e.*, those tendered during the working hours of a Telegraph Office for immediate transmission with precedence over ordinary messages.	
First eight words or groups of three figures.	Each additional eight words or groups of three figures.	First eight words or groups of three figures.	Each additional word or group of three figures.	First eight words or groups of three figures.	Each additional word or group of three figures.	First eight words or groups of three figures.	Each additional word or group of three figures.
R a.	*R a.*	*R a.*	*R a.*	*R a*	*R a.*	*R a.*	*R a.*
0 4	0 4	0 8	0 1	1 0	0 2	2 0	0 4

As the Ceylon Government was not prepared to introduce such differential rates, it was decided to treat Indo-Ceylon traffic as *Foreign*, and to apply to it the international system of a word charge.

During the three months of the year under review that this system was in operation, the percentage of traffic disposed of in the several classes was as follows:—

	Private.	State.	Total.
Local	0·43	0·65	0·52
Deferred	22·03	62·70	29·04
Ordinary	72·64	7·12	61·32
Urgent	4·90	29·53	9·12

The figures for the period in question show—

I.—That a numerical increase accrued in Private traffic.

II.—That the mean product per message exhibits a falling-off.

III.—That a slight increase of revenue accrued on Private messages.

IV.—That the order issued by the Government, that all State messages not classed 'Urgent' by the senders should be treated and charged as 'Deferred,' resulted in a slight decrease in the earnings on account of telegrams on the public service.

V.—That 'Urgent' messages had not been numerous enough to decrease the speed of transmission of 'Ordinary' messages.

VI.—That as the 'Urgent' and 'Deferred' systems become appreciated, there is a small but steady increase in the respective proportions of these special classes of messages.

VII.—That the 'Deferred' system has undoubtedly met a public want, and is largely resorted to, while it is an evidence of the differential tariff presenting no difficulty or complication, that this system was at once extensively resorted to by native senders.

Inland Traffic.

14. The following tabular statement shows at a glance the growth of Inland traffic, State and Private, during the last ten years:—

YEAR.	STATE.						PRIVATE.						TOTAL PAID MESSAGES.					
	Number.	Value.	PERCENTAGE OF *number* COMPARED WITH PREVIOUS YEAR.		PERCENTAGE OF *value* COMPARED WITH PREVIOUS YEAR.		Number.	Value.	PERCENTAGE OF *number*, COMPARED WITH PREVIOUS YEAR.		PERCENTAGE OF *value* COMPARED WITH PREVIOUS YEAR.		Number.	Value.	PERCENTAGE OF *number* COMPARED WITH PREVIOUS YEAR.		PERCENTAGE OF *value* COMPARED WITH PREVIOUS YEAR.	
			Increase.	Decrease.	Increase.	Decrease.			Increase.	Decrease.	Increase.	Decrease.			Increase.	Decrease.	Increase.	Decrease.
		R						*R*						*R*				
1872-73	57,448	1,91,213	9·39	...	...	3·47	548,846	9,96,150	4·93	...	7·96	...	606,294	11,87,363	5·35	...	5·94	...
1873-74	65,339	2,13,093	13·73	...	11·44	...	592,243	10,18,210	7·90	...	2·21	...	657,582	12,31,303	8·45	...	3·70	...
1874-75	77,226	2,57,315	18·19	...	20·75	...	658,522	10,73,835	11·19	...	5·46	...	735,748	13,31,150	11·89	...	8·10	...
1875-76	89,111	2,73,183	15·38	...	6·16	...	707,136	11,17,213	7·38	...	4·03	...	796,247	13,90,396	8·23	...	4·46	...
1876-77	99,003	3,21,472	11·10	...	17·68	...	874,348	13,61,173	23·64	...	21·84	...	973,351	16,82,645	22·25	...	21·02	...
1877-78	123,834	4,48,206	25·08	...	39·42	...	1,046,120	15,85,891	19·64	...	16·51	...	1,169,954	20,34,097	20·20	...	20·89	...
1878-79	209,544	7,44,177	69·21	...	66·03	...	964,307	14,34,297	...	7·82	...	9·55	1,173,851	21,78,474	0·33	...	7·10	...
1879-80	290,622	11,86,635	38·69	...	59·45	...	1,037,330	15,32,853	7·57	...	6·87	...	1,327,952	27,19,488	13·13	...	24·84	...
1880-81	314,370	12,98,222	*8·64	...	*9·59	...	1,044,107	14,08,582	*4·82	...	...	*3·64	1,358,477	27,06,804	*5·69	...	*2·32	...
1881-82	245,836	6,98,480	...	*21·62	...	*46·16	1,035,137	13,16,551	*0·23	...	...	*5·39	1,280,973	20,15,331	...	*4·86	...	*25·07

* Excluding Ceylon.

The decrease in number and value of State messages observable in the year under review is traceable to the cessation of military operations in Afghanistan, and this cause has also affected in a lesser degree the figures for Private messages (se eparagraph 12).

Foreign Tariff.

15. There was nochange in the international rules and rates during the year, so far as the correspondence between India and Europe is concerned; but the laying of an additional cable across the Atlantic in September 1881, by the new 'American Telegraph and Cable Company' at a reduced tariff of Frcs. 1·90 per word, induced the other Companies to lower their rates to Frcs. 1·25 per word.

As already mentioned, Indo-Ceylon traffic was brought under the Foreign Message Rules from the 1st January 1882, and from the 25th of the same month a revised tariff for Press messages between India and Ceylon was introduced.

16. The following is a calendar of the principal extensions of foreign lines and alterations in tariff:—

August 1881.—Tariff to North America by the Anglo-American, Direct United States, and new French-American Companies' cables, reduced from Frcs. 2·50 to 1·25 per word.

September 1881.—A new cable laid from Penzance to Nova Scotia by the American Telegraph and Cable Company, and opened for traffic at Frcs. 1·90 per word.

1st January 1882.—Foreign Telegram Rules and a charge by the word adopted for Indo-Ceylon messages, the rates being:—

From stations West of Chittagong to Ceylon, 3 annas per word.
„ East „ 4½ „

25th January 1882.—The following charges were adopted for Indo-Ceylon *Press* messages :—

	First 32 words.	Each additional four words.
	R a. p.	*R a. p.*
From stations West of Chittagong to Ceylon	1 8 0	0 3 0
„ East „ „	2 4 0	0 4 6

February 1882.—Chinese land line opened from Shanghai to Nankin and Tientsin.

March 1882.—A new cable laid by the Eastern Telegraph Company from Trieste to Corfu.

17. In the number and value of combined State and Private foreign message traffic, there has been an increase, the percentage of which, as compared with previous years, is as follows :—

Year.	Percentage of increase compared with previous years.	
	No.	Value.
1873-74	12·72	7.33
1874-75	15·75	6·24
1875-76	8·87	8·21
1876-77	22·44	5·34
1877-78	38·14	27·28
1878-79	5·28	0·42
1879-80	18·56	16·82
1880-81	29·52*	17·47*
1881-82	12·14*	1·62*

* Excluding Ceylon.

18. Appendix C shows the percentage of number of messages between India and places to the westward, by each route, since 1871-72. The comparative results for the last six years are shown in the following table :—

	1876-77.	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.
Viâ Suez	60·22	79·10	75·04	74·88	74·44	66·91
„ Teheran	37·57	17·72	23·07	22·64	23·52	31·62
„ Turkey	2·21	3·18	1·89	2·48	2·04	1·47

The decrease in the proportion *viâ* Suez, and the corresponding increase *viâ* Teheran in 1881-82, is due to the Eastern Company's cables, Bombay to Aden, having been broken in July and August 1881.

Details of the number and value of messages to, from, and through India by each route will be found in Appendix B.

19. The following return of Foreign traffic corresponds with that given in paragraph 14 for Inland traffic :—

Year.	State.						Private.						Total.					
	Number.	Indian share of charge.	Percentage of *number* compared with previous year.		Percentage of *value* compared with previous year.		Number.	Indian share of charge.	Percentage of *number* compared with previous year.		Percentage of *value* compared with previous year.		Number.	Indian share of charge.	Percentage of *number* compared with previous year.		Percentage of *value* compared with previous year.	
			Increase.	Decrease.	Increase.	Decrease.			Increase.	Decrease.	Increase.	Decrease.			Increase.	Decrease.	Increase.	Decrease.
		R						*R*						*R*				
1872-73.	1,211	12,196	...	32·46	...	48·80	76,883	5,03,919	...	0·9	16·64	...	78,094	5,16,115	...	1·65	13·22	...
1873-74.	1,203	11,251	...	0·66	...	7·75	86,683	5,40,877	12·72	...	7·33	...	87,886	5,52,128	12·54	...	6·97	...
1874-75.	1,305	11,053	8·47	...	...	1·75	100,338	5,74,875	15·75	...	6·24	...	101,643	5,85,728	15·65	...	6·09	...
1875-76.	1,875	17,076	43·67	...	54·48	...	109,247	6,21,876	8·87	...	8·21	...	111,122	6,38,952	9·32	...	9·09	...
1876-77.	1,914	28,867	2·08	...	69·06	...	133,771	6,55,074	22·44	...	5·34	...	135,685	6,83,941	22·10	...	7·05	...
1877-78.	2,259	36,927	18·02	...	24·11	...	184,801	8,33,778	38·14	...	27·28	...	187,060	8,69,605	37·86	...	27·14	...
1878-79.	3,307	43,568	21·60	...	46·39	...	194,563	8,37,345	0·42	...	5·28	...	197,870	8,80,913	5·78	...	1·30	...
1879-80.	3,272	49,232	...	1·05	13·00	...	231,287	9,79,809	18·87	...	17·01	...	234,559	10,29,041	18·56	...	16·82	...
1880-81.	4,334	59,807	34·42*	...	22·65*	...	293,419	11,22,629	29·45*	...	17·20*	...	297,753	11,82,436	29·52*	...	17·47*	...
1881-82.	4,270	40,237	...	0·95*	...	32·53*	328,132	11,55,432	12·33*	...	3·41*	...	332,402	11,95,669	12·14*	...	1·62*	...

* Excluding Ceylon.

The slight decrease in value of State Foreign messages is partially due to their diminished length on the cessation of operations in Afghanistan, and partially to the use of the *Word Code* which was in use for the three last months of the year.

20. Diagrams A and B give the number and value, respectively, of inland and foreign paid messages from year to year, as far back as the record is available.

21. Appendix D is a classified abstract of signal offices, according to the amount of traffic originating at each, for the past nine years.

22. Appendix E shows the number of offices, according to their classification, in each Division, open at the end of the year 1881-82. The following were opened and closed during this year :—

Opened.	Date.	Closed.	Date.
Ruhtollah	26th April.	Abdool Rahman	24th April.
Chiplun	26th May.	Kandahar	19th April.
Rajapur	Ditto.	Togh	1st April.
Ratnagiri	Ditto.	Kochali	13th May.
Gundikunduff	13th May.	Hangu	30th June.
Kushdil	24th May.	Chaman	18th October.
Allanmyo	1st May.	Killa Abdulla	20th October.
Meesa	1st June.	Junagad	1st January.
Hukitollah	3rd June.		
Vepery (Madras)	1st July.		
Hoshangabad	5th July.		
Rangoon (Kemendine)	1st August.		
Rangoon (Poozoondoung)	17th August.		
Dehra	7th September.		
Patna City	5th October.		
Agra City	10th October.		
Lovedale (Ootacamund)	28th October.		
Naini Tal Cantonment	24th October.		
Ranikhet Cantonment	12th October.		
Jutogh	10th October.		
Dum-Dum Cantonment	26th November.		
Rangoon Cantonment	12th November.		
Fort St. George (Madras)	1st November.		
Sharigh	4th December.		
Barsi	14th December.		
Thatone	30th December.		
St. Thomas' Mount (Madras)	1st December.		
Rayapuram (Madras)	Ditto.		
Perambur (Madras)	Ditto.		
Triplicane (Madras)	Ditto.		
Adyar (Madras)	20th December.		
Madura	27th December.		
Cotton Exchange, Colaba (Bombay)	3rd January.		
Devalla	12th January.		
Trichinopoly	17th January.		
Doom Dooma (Upper Assam)	17th February.		
Hubli	20th February.		
Segowlie	2nd February.		
Ruksoul	11th February.		
Allahabad Cantonment	14th February.		
Allahabad Fort	24th February.		
Dhar	1st February.		
Tanjore	20th February.		
Sudya	1st March.		
Beejapur	16th March.		
Tavoy	25th March.		

Number of permanent offices on 31st March 1881	254
Deduct—Number of offices closed during 1881-82 . . . 8	
Add—Number of offices opened during 1881-82 . . . 46	38
Number of permanent offices open on 31st March 1882	292

Complaints.

23. In Appendix F is given a synopsis of all the complaints received from the public during the year regarding telegrams, showing separately those affecting this Department only, and those in which Railway or Foreign Telegraph lines were alone concerned. To facilitate comparison with the results of the previous year, the figures for 1880-81 are also given in Antique type.

24. Of complaints affecting this Department only, 446 were received, 294 being admitted, and 152 rejected as groundless. The bulk of the rejected complaints were in respect of alleged non-delivery of messages, the senders erroneously supposing, in default of receiving replies, that their messages had miscarried. The number of admitted complaints during 1880-81 was 314. The year under review, therefore, shows a decrease in the cases of non-delivery, delay, errors, &c., so far as these formed the subject of complaint from the public.

25. The number of complaints received, in which Railway and Foreign Telegraph administrations were concerned, was 352 against 328 in the previous year; of the former number, 206 were admitted, 63 rejected, and 24 were still under investigation at the close of the year.

26. In Departmental complaints admitted, there is a net decrease for the year under review of 6·37 per cent.; in those chargeable to Railways and Foreign Telegraphs, there is an increase of 33·77 per cent.

Speed of Transmission.

27. The average time occupied in the transmission of messages over the long main routes during the year under review and the five previous years, was as follows :—

	1876-77.		1877-78.		1878-79.		1879-80.		1880-81.		1881-82.	
	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.
Calcutta to Kurrachee	0	47	0	41	0	55	1	10	1	22	0	55
Kurrachee to Calcutta	0	44	0	26	0	29	0	45	0	59	0	41
Calcutta to Bombay	1	13	1	14	0	57	1	13	1	6	1	1
Bombay to Calcutta	1	13	1	15	0	59	1	4	1	1	1	3
Calcutta to Madras	1	51	2	28	1	22	1	27	1	14	1	9
Madras to Calcutta	1	56	2	20	1	25	1	27	1	15	1	13
Bombay to Madras	0	46	1	16	0	33	0	40	0	45	0	44
Madras to Bombay	0	48	1	8	0	38	0	48	0	49	0	45
Bombay to Kurrachee	0	47	0	43	0	41	0	43	0	53	0	45
Kurrachee to Bombay	0	47	0	28	0	31	0	37	0	48	0	40
Rangoon to Calcutta	11	49	7	41	2	32	3	15	2	9	1	23

NOTE.—The speed of transmission for the last fifteen years is shewn in Diagram C.

News-free Messages.

28. The number and value of news-free messages, as compared with the previous year, have been as under:—

	No.	Value. *R*
1880-81	2,417	43,558
1881-82	746	42,193
Decrease	1,671	1,365

The decrease in number is due to the withdrawal from the free list of the Meteorological Reports of the Bengal Government, those of the Government of India having been similarly transferred to the paying list during the preceding year. The fact that, notwithstanding the numerical decrease, there is no appreciable diminution in value, is traceable to the fact that mail steamer reports being transmitted under the *precedence* signal have, during the last three months of the year, been valued under the "urgent" tariff.

Traffic with Railway Telegraphs.

29. Appendix G shews the number and value of messages exchanged with State and Guaranteed Railways during the past 9 years. A comparison of the figures of the period under report with those of the preceding 4 years shews the following result:—

PARTICULARS.	1877-78.			1878-79.			1879-80.			1880-81.			1881-82.		
	No.	Value.		No.	Value.		No.	Value.		No.	Value.		No.	Value.	
		R	*a.*		*R*	*a.*		*R*	*a.*		*R*	*a.*		*R*	*a.*
Total exchanged with State Railways	28,985	32,339	14½	37,783	43,322	5½	40,994	56,188	5½	72,135	77,528	15¾	107,664	1,10,934	9¼
Total exchanged with Guaranteed Railways	96,225	93,372	15	94,453	95,952	0	99,213	1,40,554	9	98,510	1,31,898	9½	78,640	83,005	4½
TOTAL TRAFFIC EXCHANGED WITH RAILWAYS	125,210	1,25,712	13½	132,236	1,39,274	5½	140,207	1,96,742	14½	170,645	2,09,427	8½	186,304	1,93,939	14½

The falling-off in 1881-82 under Guaranteed Railways is due to the transfer of the East Indian Railway to the State. There is a corresponding increase under State Railways, plus the increment due to growth of traffic.

Press Messages.

30. Appendix H is the statement of the number and value of paid News messages sent at the reduced Press rates, month by month, during the year. As compared with the previous year, there is a falling-off in number of 257, and in value of R 5,797-11-0. This decrease must be ascribed to the cessation of the military operations in Afghanistan, which, during their continuance, gave an abnormal impetus to lengthy News messages.

Undelivered Messages.

31. The number of undelivered messages during 1881-82 was 4,963, against 5,220 in the previous year. The causes of non-delivery were as follows:—

	No.
1. Not found, address insufficient	1,239
2. Not found at address given	1,539
3. Address changed in transmission	60
4. Left address given, new address unknown	336
5. Left India	105
6. Left for original station	1,048
7. Returned by Dead Letter Office	287
8. Addressee, or address given, not known	91
9. Refused	106
10. Other reasons	152
TOTAL	4,963

The percentage of undelivered messages was 0·27, against 0·28 of the previous year. It will be observed that the causes of the non-delivery in the great majority of the cases were such that the Telegraph Department could not guard against, notwithstanding the careful endeavours invariably made to trace out the addressees.

Interruptions on Departmental Lines.

32. From the following tabular statement it will be seen that there has been a decrease in the total number, average duration, and percentage of interruptions, as compared with previous years:—

	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.
Total number of interruptions	386	350	310	300	285
Aggregate duration, *hours*	5,790	4,910	3,900	3,200	2,736
Average duration, *hours*	15	14	12·6	10·7	9·6
Interruptions per every 100 miles of wire	0·92	0·80	0·59	0·54	0·51

33. The above figures include the following *interruptions due to extraordinary causes*:—

June 1881.—Between Bassein and Diamond Island, lasting 295 hours. Several trees fallen on line during heavy gales, and wire broken in many places. Impossible to get down the river by boat owing to heavy sea; a steam launch had eventually to be hired.

July 1881.—Between Sibi and Gundikunduff, lasting 96 hours. Line washed away by heavy floods, and river for some days was impassable. Two men of working party died of sunstroke.

August 1881.—Between Gundikunduff and Hurnai, lasting 184 hours. Two interruptions: many miles of line washed away. Weather during August was unprecedented.

August 1881.—Between Bassein and Diamond Island, lasting 120 hours. Heavy weather, many posts fallen on line, and wire buried in mud in several places.

August 1881.—Between Bassein and Diamond Island, lasting 157 hours. Wire connections in the Kaboungmhan Cable House maliciously changed.

August 1881.—Between Shoaygheen and Tonghoo, lasting 99 hours. Heavy weather, trees fallen on line in several places, post broken, and wire submerged in a nullah.

September 1881.—Between Ngathineyoung and Bassein, lasting 92 hours. Several trees fallen on line and wire under water in several places. River risen very high, and country on either side flooded for miles inland.

September 1881.—Between Shoaygheen and Moulmein, lasting 97 hours. Wire maliciously cut.

September 1881.—Between Bassein and Diamond Island, lasting 258 hours. Line on ground by fall of a number of large trees; also by interference with Cable Houses at Ngapootan by swarms of ants building nests in the Lightning Dischargers.

January 1882.—Between Dalhousie and Bukloh, lasting 176 hours. Line broken at large span; heavy fall of snow at Dalhousie; heavy rain all the way from Amritsar up to foot of hills; roads blocked, travelling impossible.

February 1882.—Between Dalhousie and Bukloh, lasting 120 hours. Line broken at large span owing to heavy fall of snow.

February 1882.—Between Mussooree and Chakrata, lasting 192 hours. Line broken in several places owing to heavy fall of snow.

Signalling Establishment.

34. There were 970 Departmental and 167 Military Telegraph Masters and Signallers on the strength of the establishment on the 31st March 1882, as compared with 942 and 181, respectively, on the 31st March 1881. Of the Military Telegraph Masters and Signallers, 114 were employed in Departmental and 53 in purely Military Offices. In addition, 109 soldiers were trained in telegraphy during the year, and 62 were under instruction at the close of the year.

Deaths	10
Dismissals	12
Resignations	12
Struck off strength of establishment	3
Transferred to other Departments	2
TOTAL	39

35. The casualties among Departmental Telegraph Masters and Signallers have been 39, as per margin, against 25 during the previous year, a percentage of 4·02 against 2·65.

36. It having been found that the use of the sounder instrument in training classes and signal offices had gradually resulted in a considerable deterioration in the style of signalling, and that the absence of periodical compulsory examinations in this essential qualification of a telegraph operator had led to a falling off in the rate at which a large number of the signalling staff could send and receive messages, recording instruments have been supplied to all training classes, and every Telegraph Master and Signaller is further required

to show annually that he is up to the required standard in transmitting and reading Morse symbols; failing which, stoppage of promotion or reduction in grades, according to circumstances, is ordered. Detailed instructions have also been drawn up for the guidance of instructors in telegraphy, and the steps thus taken to improve the style and speed of signalling show a very favourable result.

Electrical.

37. Mr. C. L. Schwendler was compelled by severe illness to leave India on the 2nd July 1881; from this illness—an affection of the brain—he never recovered, and he died in Germany on the 6th January 1882. Mr. Schwendler's scientific acquirements, and the valuable services he rendered to this Department for a period of nearly fourteen years, are well known to the Government. In his death the Indian Telegraph Department has sustained the loss of an officer whose abilities in his profession were perhaps second to those of no Electrician in the world.

Mr. W. P. Johnston who had previously, on several occasions, ably officiated as Electrician, and who was again acting in that post at the time of Mr. Schwendler's death, has held the appointment to the end of the year.

EXTENSIONS OF LINES AND WIRES, AND LINE MAINTENANCE.

38. Appendix I is a classified list of all Telegraph lines in India and Burmah on the 31st March 1882. The following are the total mileages of line, wire and cable, contrasted with those existing on the same date in 1881:—

	Line miles.	Wire miles.	Cable miles.
1880-81	19,679	54,318	115
1881-82	20,602*	58,219*	117·5*

39. In addition to the above, the Department maintained 448 miles of line and 1,233 miles of wire, the property of Railway Companies, particulars of which are given in Appendix J.

40. The following are the principal works which were carried out in each Division during the year 1881-82:—

Arakan Division.

41. The only new construction work done in this Division was the erection of new telephone lines for Messrs. Mohr Brothers and Bulloch Brothers at Akyab; the former in lieu of the wire previously rented to them, which was suspended on the same posts as the Rangoon main line Morse wires. The length of new line erected is 3·29 miles, and of wire 4·99 miles. The substitution of old pattern Prussian porcelain for iron-hooded insulators was effected from Rue to Tounghoop. The usual annual repairs were carried out, including the clearing of heavy tree jungle; 9 masts and 292 posts (of iron wood), were erected in place of a corresponding number which had become decayed and unserviceable.

Assam Division.

42. The line has been extended from Dibrugarh to Doom Dooma, 44·5 miles, and thence to Sudya, 20·5 miles.

A branch telephone line from Samaguting to Nichuguard and Dimapur, length 13 miles, has been constructed. Extensive repairs and additions were effected to the cable across the Brahmapootra, opposite Dhubri, having been necessitated by the serious erosion of the banks of the river during the monsoon. The erection of a wire for the Assam Railway and Trading Company on the posts of the existing departmental line from Dibrugarh to Doom Dooma, with a branch thence to Makum coal-field, was commenced, and completed along the site of the Railway to the point up to which the earthworks had progressed, *viz.*, 14 miles.

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* Including 311 miles of line, 494 miles of wire, and 1·6 miles of cable in telephone circuits.

Bellary Division.

43. The lines from Arkonam to Mysore and from Auspree to Hyderabad, were transferred during the year from the Bellary to the Madras Division. The former section includes the line from Bangalore to Mysore, the reconstruction of which along the Mysore State Railway has been finished. The construction of the line from Kolhapur to Ratnagiri, with branches to Chiplun and Rajapur, has been completed; as also that of a third wire in the section Satara to Kolhapur. The annual repairs included, besides jungle cutting and clearing, &c., reinsulation and the removal of ingot joints; the last-mentioned work has yet to be completed by the removal of the remaining ingot joints in the Bangalore-Bellary Section of No. 7 line.

Bengal Division.

44. The chief works undertaken and completed were the construction of a line from Mozufferpore to Hutwah, 124 miles in length; the addition of two Railway wires to, and the strengthening of, the departmental lines, Khana to Sahebgunge, 143·75 miles; doubling the carrying capacity of the line, by replacing single by double coupled posts, between Sealdah and Raneegunge, 119·853 miles; (56 miles of this were completed at the close of the official year); laying two cables across the River Hooghly; and erecting two wires from Calcutta to Baidyabati, 20·75 miles. A span, 1,890 feet in length, was erected across the River Gunduck, between Hajeepore and Sonepore, the iron masts for which were manufactured at the Telegraph workshops at Alipore (Calcutta). The East Indian Railway lines, besides undergoing the usual maintenance repairs, were strengthened by the addition, in each mile, of six (iron-rail) posts, from near Dumraon to Luckeeserai, 133·5 miles.* Ingot joints were cut out of all the lines between Dinapore and Allahabad, with the exception of the branch from Moghal Sarai to Benares; also between Cawnpore and Agra. An additional wire from Moghal Sarai to Allahabad, 96·5 miles, was erected; and the line from Khana to Sahebgunge, 144 miles, was dismantled. On the Calcutta and South Eastern State Railway Extension, the line from Sonarpur to Mugrah station, 15 miles, was constructed; as also a line from Durbhunga to Peepra Ghât, 24·366 miles, on the Tirhoot State Railway Eastern extension. The line from Mozufferpore to Bettiah was entirely reconstructed, being brought from the road to the Railway route, and an additional wire, 77 miles in length, was erected. The suspension of an extra wire from Calcutta to Barrackpore, 17·25 miles, in connection with that under erection in the Dacca Division (paragraph 47), was commenced, but not completed before the end of the year. Besides petty constructions of lines within towns and their suburbs, ten telephone lines were erected during the year, comprising 16·6 miles of wire.

Bombay Division.

45. The section of line from Bombay to Dadar, 7·376 miles, was completely reconstructed, double-coupled posts, (Hamilton standards), to carry all the wires connecting Bombay with the rest of India, having been erected along the route of the Bombay, Baroda and Central India Railway. Between Dadar and Kalyan, along the Great Indian Peninsula Railway, that part of the line which traverses salt-water swamps, was reconstructed with double rail-posts. A new line was constructed from Pali to Godhra, 16·971 miles of line and 18·621 of wire. The existing line was transferred from the old to the new Nerbudda bridge. All iron-hooded insulators were replaced by porcelain ones, old pattern Prussian, on the section of No. 9 line between Kalyan and Satara; and the reinsulation of Nos. 11 and 12 lines from Surat to Baroda was nearly completed. The town of Barsi was connected with Sholapur by a line of telegraph, branching off from the main route at Barsi road, 20·61 miles distant from Barsi. A new line was constructed from Hotgi to Beejapur, 59·05 miles, and

* In this and other Divisions, old rails, wherever procurable, from the Railway admiministrations, have been largely used as Telegraph posts, with success both as regards efficiency and economy.

an extra wire, 9 miles, was erected to place Beejapur in communication with Sholapur. Besides petty constructions in towns and their suburbs, additional telephone lines, amounting to 21·755 miles of line and 57·793 miles of wire, were erected.

British Burma Division.

46. The construction of the line connecting Moulmein with Tavoy, 199·75 miles, of which 69 miles of line and 109 of wire were put up in 1880-81, was completed. The construction of the Rangoon-Tonghoo line along the Sittang Valley Railway was commenced at Rangoon and completed up to Pegu, 45 miles. Amongst town line constructions and reconstructions may be mentioned the alterations of the lines in Rangoon, where telephone lines have been erected, comprising 13·294 miles of line and 65·717 of wire; the departmental main lines having been transferred to a new and direct route, and the ABC and telephone wires separated from one another. New cables were laid across the rivers Kemmendine and Irrawaddi at Rangoon and Prome respectively, and an old cable across the latter river was lengthened, and the cable house moved back in consequence of the erosion of the bank. The following lines have been insulated:—Prome to Thyetmyoo; Poungdeh to Myanoung; and Moulmein to Thyethamine. The No. 8 wire Rangoon to Prome, was reinsulated on the result of tests made by the insulator detector.

Dacca Division.

47. A single wire line from Kaunia to Kurigram, 17 miles, was constructed for the use of the Kaunia-Dhurla State Railway. A temporary line was erected between Sultanpur on the Northern Bengal State Railway and Serajgunge, 63 miles; and a similar line from Nattore on the same railway to Rampore Bauleah, 25·25 miles. A private telephone line, 1·75 miles in length, was put up on the Lizziepur Tea Estate at Kurseong. The erection of an additional wire from Barrackpore was in progress; in connection with which cables were laid across the Pudda, Dhullessary and Booragunga rivers. In addition to ordinary maintenance repairs, the alignment was altered for 8 miles of the section, Goalundo to Pangsa; 12 miles remain to be finished; and all insulators other than porcelain (old or new Prussian pattern) were removed from the two Government wires, Poradaha to Jalpaiguri, and replaced by those of the above patterns.

Ganjam Division.

48. The first local wire from Midnapore to Cuttack has been reinsulated; as also that from Madras to Bezvada. A second local wire has been erected from Raneegunge to Cuttack, 280·6 miles; and a similar wire from Madras to Bezvada, 261·604 miles. The construction of the line from Jumboo to Hukitollah, which was in progress at the end of 1880-81, was completed.

Indore Division.

49. The erection of a second wire from Morar to Indore, 300·577 miles, was commenced, and completed with the exception of 10·25 miles between Shajapur and Dewas, which section was in progress at the close of the year. An additional wire, for departmental use in connection with the above, was erected from Indore to Khandwa, 86·5 miles. A single wire line was constructed from Mhow to Dhar, 32·7 miles. The erection of a third wire from Khandwa to Nusseerabad, 381·14 miles, for the railway, was commenced, a portion of which between Rutlam and Nusseerabad remained at the end of the year to be completed. An alteration of the alignment of the railway for three miles from Khandwa necessitated the reconstruction of the telegraph lines for that distance.

Madras Division.

50. A line of two wires was constructed from Negapatam to Tanjore, 48·25 miles, and a single wire thence to Trichinopoly, 31 miles; total length, including town lines at Tanjore and Trichinopoly, 82·45 miles of line and

132·4 of wire. The old line from Shiyali to Karikal, 29 miles, was dismantled. An extra wire was erected from Shiyali to Tuticorin, 256·55 miles, necessitating an addition of 1·7 miles of line. From Ootacamund to Devalla a line of 19·32 miles and 38·8 miles of wire was constructed. The Madras Town Local Office lines, comprising 14·55 miles of line and 33·84 of wire, were constructed. The reconstruction of the line along the Mysore State Railway from Bangalore to Mysore, including the suspension of two extra wires between those places, which was in progress at the close of 1880-81, was completed. The maintenance repairs of the line from Bangalore to Vellore included the cutting-out of all ingot joints from that section.

Malabar Coast Division.

51. The reconstruction of the line from Tellicherry to Mercara, which was in progress at the close of last official year, was completed. The other works executed in this Division have been confined to maintenance repairs. The cutting-out of ingot joints between Tellicherry and Palamcotta, and the testing of the line from Cochin to Tellicherry with the insulator detector, with a view to reinsulating the line, were commenced.

Nagpur Division.

52. The extension of the line along the Nagpur and Chhattisgarh State Railway was completed up to Musra, 135·2 miles from Nagpur. Public lines (worked by telephone) were constructed at Warora and Nagpur; the former 1·25 miles of single-wire line for the Wardha Coal State Railway; the latter 1·25 miles of lines and 2·5 of wire for the Nagpur and Chhattisgarh State Railway. The insulation of the main line between Bhusaval and Seoni (*viâ* Nagpur) has been improved by the replacement of all half or whole-hooded insulators by old pattern Prussian porcelain, or perforated hood insulators; and on the local line No. 5 between Bhusaval and Nagpur, 25 per cent. of the whole-hood insulators have been replaced by porcelain ones, old pattern, Prussian.

Oudh and Rohilkhand Division.

53. Lines were constructed from Gopalpore to Nanu, 32 miles, and from Gopalpore to Jeyra, 6·3 miles, for the Irrigation Department, the latter worked by telephone. A line of 1·7 miles was constructed connecting Naini Tal with the Naini Tal Cantonment Office. At Cawnpore a telephone line was constructed for the Provincial State Railway, 2·86 miles of line and 3·14 miles of wire, and another wire was erected for the Cawnpore and Farukhabad State Railway for 1·4 miles from the Bilhaur Station to the Esun Nuddee Bridge. The maintenance repairs included the re-erection of the Kosi river span mast and the substitution of steel strand for iron wire.

Punjab Division.

54. The line from Tarnaul to Peshawar was under reconstruction along the Railway and was near completion at the close of the official year under report. A temporary line from Tarnaul to Attock, 50·64 miles, was constructed, by which Rawal Pindi, Hasan Abdal, Haji Shah and Attock were connected. 5·5 miles of wire was erected on the line from Rawal Pindi to Tarnaul. The line, Peshawar to Jamrud (10 miles of line and wire) was constructed, and the temporary line dismantled. Telephone lines connecting the several offices of the Punjab Northern State Railway staff at Rawal Pindi were constructed, comprising 2·71 miles of line and 7·22 of wire; and the Rawal Pindi Railway Station and workshops were connected by a line one mile in length. The whole of the lines in the Lahore Station were reconstructed with wires of uniform gauge (450 lbs. per mile). The line from Miani to Bhera, 8 miles, was reconstructed, and from Bhera to Lala Musa, 62·7 miles, was doubled. The line between Lahore and Mooltan, 207·44 miles, was reconstructed, and the wires of the Sind, Punjab and Delhi Railway telegraph transferred to the posts of the new line: new supports were erected, including 63·12 miles of rail posts; and the old wooden line was dismantled. The

railway line, Amritsar to Lahore, 33·28 miles, was also reconstructed, (with ¾ standards), and the old wooden posts dismantled. The old bully-line from Lahore to Ferozepore, 52 miles, and the section of Sind, Punjab and Delhi Railway line from Muzaffarabad to Sher Shah, 3 miles, were dismantled. The Guggur river was crossed by seven strand steel wire in three spans of 1,200 feet each with supports specially secured to withstand the hill torrents. A system of Government telephone lines was established at Lahore, by which ten public offices intercommunicate through the Government Telegraph Office as an exchange; in addition to which, four Police Offices are similarly connected with the District Superintendent of Police and with one another. A separate private system includes nine Sind, Punjab and Delhi Railway Offices connected for exchange and four other private telephone offices. The various telephone circuits comprise 10·102 miles of posts and 49·152 miles of wire. In Simla, His Excellency the Commander-in-Chief was placed in telephonic communication with the Quartermaster-General's Office and the Intelligence Branch by a flying line composed of 1·9 miles of wire supported on trees.

Rajputana Division.

55. A temporary single-wire line was constructed from Rewari to Dadri, 34·5 miles: a third railway wire was erected on the line from Bandikui to Delhi, 134·5 miles. On the Ajmere-Nusseerabad line, 13·4 miles, a second wire was erected; and the suspension of a third wire on the same section of line was commenced and was about to be completed at the close of the year. At Ajmere, telephone lines were constructed, one for the railway and one for the Commissioner, comprising 3·34 miles of line and 5·13 of wire. In addition to the ordinary maintenance repairs, the Morar No. 3 wire was reinsulated with porcelain insulators, old pattern, Prussian, from Syeean to Dholpur. Alterations were effected to the Morar Railway Station lines; and the Sojat Quarry line was dismantled.

Sind Division.

56. A line was constructed from Koombri to Badani, 4·4 miles of posts and 8·8 of wire. A single-wire field telegraph line (40 miles) was constructed during the Waziri expedition, which was dismantled on the retirement of the troops, its object having been fulfilled. Improvements were made in the insulation of the Jungshahi-Hyderabad departmental lines; the railway train-wire, Ruk to Sibi; and the Sind, Punjab and Delhi Railway lines, Kiamari to Kotri. The last-named section of line was also strengthened. The line over the Bagatora Hill on the Indus Valley State Railway was reconstructed: 50 miles of the section Jacobabad to Sibi was cross-stayed. Twenty-five miles of the old road line, Sukkur to Hyderabad, was dismantled.

Beluchistan Sub-Division.

57. The semi-permanent line which was last year constructed up the Hurnai route was extended from Kochali to Sharigh, a distance of 45·5 miles. A semi-permanent line was also constructed from Killa Abdulla to Kushdil Khan, 28 miles, through the heart of the Pisheen Valley. Subsequently, on our troops leaving Killa Abdulla, Kushdil Khan was connected with Gulistan by a slight alteration of the line. The semi-permanent Pir Chowkey loop was made permanent with iron standards. On the evacuation of Kandahar on the 22nd April 1881, the wire was dismantled as far as Chaman, as the troops marched stage by stage. In the following October, on the withdrawal of our troops from Chaman and Killa Abdulla, the line between those places, 15 miles, was dismantled.

STATE AND GUARANTEED RAILWAY, TELEGRAPHS.

58. A return showing the number of Telegraph Offices and the extent of line and wire maintained for State and Guaranteed Railways, together with the capital expended by this Department on behalf of each railway, is included in Appendix J of this report.

STORES AND WORKSHOPS.

59. The following are the items of expenditure under this head during the year:—

	R
Purchase of stores in India	1,95,869
London stores, including freight and landing charges	5,10,941
Workshop and Press	2,16,591
Store-keeping	77,653
Superintendence	32,029
Stationery received from the Superintendent, Government Stationery, and value of printing done by the Superintendent, Government Printing, without charge	44,010
TOTAL	10,77,093

60. The value of the outturn from workshops was R3,69,800 and from Press R35,976 against R3,01,276 and R40,921 of the previous year.

61. On the 3rd June 1881, the charge of the Store Department was relinquished by Major Eckford, R. E., who was obliged to proceed on leave in consequence of illness, which resulted in his death on the 19th August 1881.

By the death of Major Eckford, whose services, extending over a period of 13 years, were principally in connection with the Stores and Workshops, the Department has lost a most talented and energetic officer.

On the 21st June 1881, Mr. C. H. Reynolds was appointed to the charge of the Stores and Workshops, which he continued to hold throughout the year. Under his administration substantial improvements were made in the general working of this, one of the most important branches of the Department.

PERSONAL.

62. Mr. A. J. L. Cappel proceeded on furlough on the 28th March 1881, and Lieutenant-Colonel H. Mallock officiated as Deputy Director General throughout the year under report; Mr. W. R. Brooke during the same period officiated as Director, Construction Branch.

To the officers associated with me in the Direction, Lieutenant-Colonel H. Mallock, Officiating Deputy Director General; Mr. J. H. Lane, Director, Traffic Branch; and Mr. W. R. Brooke, Officiating Director, Construction Branch; also to Mr. F. G. Teale who, during the absence of Mr. Lane on privilege leave, acted as Director, Traffic Branch, my best acknowledgments are due for the loyal and able assistance I have invariably received from them, and for the efficient and zealous manner in which the important duties respectively entrusted to them have been carried out.

It also affords me much gratification to place on record my appreciation of the ability and zeal evinced by the majority of the officers of all grades; and to bear testimony to the general good conduct of the members of the subordinate establishment.

CALCUTTA,
The 25th November 1882.

R. MURRAY, *Colonel,*
Director General.

APPENDICES.

APPENDIX A.

Summary of Financial Results of the Indian Telegraph Department for the year 1881-82.

			To end of previous year.	1881-82.	To end of 1881-82.	
			Miles.		Miles.	
INDIAN TELEGRAPH.						
Capital Account.						
Mileage	Line	Departmental	12,343·21	551·92	12,895·13	
		Railway	7,421·39	314·04	7,735·43	
		Guaranteed	581·57	162·53	419·04	
		Total	20,346·17	703·43	21,049·6	
	Wire	Departmental	36,772·09	2,421·92	39,194·01	
		Railway	18,400·21	1,151·62	19,551·83	
		Guaranteed	800·87	94·85	706·02	
		Total	55,973·17	3,478·69	59,451·86	
	Cable	Departmental	109·61	1·41	111·02	
		Railway	4·88	...	4·88	
		Guaranteed	...	1·6	1·6	
		Total	114·49	3·01	117·5	
			R	*R*	*R*	
Outlay	Lines	Departmental	1,63,01,216	13,65,678	1,76,66,894	
		Railway	27,31,540	1,66,564	28,98,104	
		Guaranteed	3,55,966	9,606	3,65,572	
		Total	1,93,88,722	15,41,848	2,09,30,570	
	Buildings.	Signal Offices	29,94,255	1,45,857	31,40,112	
		Quarters for officers	12,240	...	12,240	
		Cable-houses and Tanks	27,969	...	27,969	
		Store-houses	2,93,245	1,21,096	1,72,149	
		Workshop and Press buildings	1,38,577	19,303	1,57,880	
		Total	34,66,286	44,064	35,10,350	
	Tools and Plant	First fitting of offices	*6,22,973	1,88,754	8,11,727	
		Other Tools and Plant	2,05,618	77,361	1,28,257	
		Total	8,28,591	1,11,393	9,39,984	
	Stores		21,26,692	2,43,315	18,83,377	
	Suspense heads		85,843	30,210	55,633	
	Charge for Exchange paid in England		72,133	68,398	1,40,531	
	Total present Capital		2,59,68,267	14,92,178	2,74,60,445	
	Temporary Telegraphs for Military purposes		...	95,068	95,068	Recoveries from Lines charged to Afghan War.
	Total Capital Expenditure		2,59,68,267	13,97,110	2,73,65,377	
Revenue Account.						
			No.	No.	No.	
Number of	Divisions		17	...	17	
	Signal Offices		322	3	319	
	Messages	Private	10,554,869	1,363,269	11,918,138	
		State	1,546,276	250,106	1,796,382	
		Free	127,438	1,290	128,728	
		Total	12,228,583	1,614,665	13,843,248	
			R	*R*	*R*	
Revenue	On Messages	Private	2,94,09,623	24,72,284	3,18,81,907	
		State	76,04,416	7,38,717	83,43,133	
		Free	18,70,851	43,737	19,14,588	
		Total	3,88,84,890	32,54,738	4,21,39,628	
	Railway Telegraphs		20,89,826	5,18,891	26,08,717	
	Guaranteed		2,17,225	55,202	2,72,427	
	Miscellaneous		5,68,375	25,381	5,93,756	
	Total		4,17,60,316	38,54,212	4,56,14,528	

	To end of previous year.		1881-82.	To end of 1881-82.
	Indian Telegraphs.	Ceylon Telegraphs.		
Working expenses	*5,06,68,166	2,04,711	32,35,644	5,41,08,521
Net charge (difference between Revenue and Working expenses)	89,07,850	2,04,711	6,18,568	84,93,993
Charge for interest on Capital	1,84,07,709	18,653	12,02,146	1,96,28,508
Working expenses, plus charge for interest	6,90,75,875	2,23,364	44,37,790	7,37,37,029
Net charge, plus interest on Capital	2,73,15,559	2,23,364	5,83,578	2,81,22,501
Per mile of line — Revenue	2,052·49	...	183·1	2,167·
Per mile of line — Net charge	437·81	10·06	29·38	403·52
Per mile of line — Net charge plus interest	1,342·54	10·97	27·72	1,336·01
Percentage on Capital Outlay — Revenue	160·81	...	14·08	166·68
Percentage on Capital Outlay — Net charge	34·3	·79	2·26	31·04
Percentage on Capital Outlay — Net charge plus interest	105·19	·86	2·13	102·76
Value of unused balance of stores at end of year	21,26,692	...	2,43,315	18,83,377
Total Expenditure, Capital and Revenue	7,66,36,433	2,04,711	46,32,754	8,14,73,898
Deficit on Total Expenditure	3,48,76,117	2,04,711	7,78,542	3,58,59,370

* *R* 4,72,837 for value of Instruments, Batteries, Fittings and Furniture on 31st March 1881 have been transferred from Revenue to Capital Account.

APPENDIX TO SUMMARY OF FINANCIAL RESULTS.

Review of Telegraph Accounts for the last five years.

Revenue Receipts.

Year.	Message Revenue.			Claims from State Railways.	Claims from Guaranteed Railways.	Claims from Guarantors.	Saleable Books, Forms and Maps.	Telegraph Gazette.			Miscellaneous.	Total.
	Paid Messages.	Free Messages.	Total.					Calcutta.	Rangoon.	Moulmein.		
	₹	₹	₹	₹	₹	₹	₹	₹	₹	₹	₹	₹
1877-78	28,03,967	1,41,603	29,45,570	52,503	1,68,519	27,329	3,152	11,041	2,276	...	10,492	32,20,882
1878-79	29,63,569	1,16,967	30,80,536	1,71,071	2,55,386	33,694	3,499	11,073	2,278	...	39,478	35,97,015
1879-80	36,58,725	1,13,973	37,72,698	3,14,053	99,061	35,401	2,813	10,480	2,141	...	14,799	42,51,446
1880-81	38,71,179	46,498	39,17,677	4,08,336	95,096	45,090	3,598	10,936	2,439	...	18,465	45,01,637
1881-82	32,11,001	43,737	32,54,738	4,21,177	97,714	55,202	2,432	10,883	1,956	900	9,210	38,54,212

Revenue Charges.

Year.	Line Maintenance.						Signalling.												20
	Repairs		Establishment.	Share of Direction Accounts and Superintendence.	Profit and Loss.	Total.	Repairs		Check Office.	Signal Offices.		Share of Direction Accounts and Superintendence.	Saleable Books, Forms and Maps.	Telegraph Gazette.			Telegraph Stamps.	Profit and Loss.	Total.	
	By Telegraph Department.	By Public Works Department.					By Telegraph Department.	By Public Works Department.		Departmental.	Non-Departmental.			Calcutta.	Rangoon.	Moulmein.				
	₹	₹	₹	₹	₹	₹	₹	₹	₹	₹	₹	₹	₹	₹	₹	₹	₹	₹	₹	
1877-78	2,80,248	597	1,51,771	4,62,237	875	8,95,728	3,550	31,131	36,300	15,21,995	40,257	4,62,240	5,381	4,313	762	...	5,299	2,274	21,13,502	
1878-79	2,77,414	660	1,47,174	4,26,054	197	8,51,499	1,890	51,398	37,994	15,17,693	65,168	4,26,055	5,554	4,114	1,679	...	7,563	...	21,19,108	
1879-80	1,61,385	694	1,30,975	4,12,109	90	7,05,253	1,190	30,990	41,998	16,37,324	57,623	4,12,110	8,987	4,139	1,678	...	8,570	130	22,04,739	
1880-81	2,46,784	1,595	1,48,464	4,29,335	...	8,26,178	2,700	39,962	44,679	16,58,165	1,50,910	4,29,335	6,219	4,056	1,757	...	6,665	844	23,45,292	
1881-82	1,82,148	2,575	1,63,698	4,44,605	225	7,93,251	1,716	32,336	45,667	17,11,954	1,81,776	4,44,606	10,426	2,262	1,715	277	9,432	226	24,42,393	

Result of Operations for five years.

Year.	Capital Expenditure to end of year.	Revenue Receipts.	Revenue Charges.	Profit without Interest.	Interest on Capital at 4½ per cent.	Loss with Interest.	Miles of Line.	Miles of Wire.	Number of Signal Offices.	Number of Messages.			Value of Messages.		
										Inland.	Foreign.	Total.	Inland.	Foreign.	Total.
	₹	₹	₹	₹	₹	₹	Miles.	Miles.	No.	No.	No.	No.	₹	₹	₹
1877-78	3,30,13,602	32,20,882	30,09,230	2,11,652	12,18,923	10,07,271	17,600·23	42,115·96	249	1,109,050	182,509	1,291,559	19,59,099	8,44,868	28,03,967
1878-79	3,35,61,872	35,97,015	29,70,607	6,26,408	12,44,785	6,18,377	17,971·13	43,890·63	265	1,115,642	192,710	1,308,352	21,10,182	8,53,387	29,63,569
1879-80	3,41,02,791	42,51,446	29,09,992	13,41,454	15,22,454	1,81,000	20,519·93	52,914·19	303	1,273,884	228,859	1,502,743	26,47,970	10,10,755	36,58,725
1880-81	2,59,68,267	45,01,637	31,71,470	13,30,167	11,28,611	2,01,556	20,346·17	56,087·66	310	1,346,358	296,419	16,42,777	26,92,610	11,78,569	38,71,179
1881-82	2,73,65,377	38,54,212	32,35,644	6,18,568	12,02,146	5,83,578	21,049·6	59,569·36	319	1,280,973	332,402	1,613,375	20,15,331	11,95,670	32,11,001

APPENDIX B.

***RETURN** of the Number and Value of Inland and Foreign Messages "Sent" and of Foreign Messages "Received" and "Transit" during the year 1881-82, showing also the Increase and Decrease under each head on the figures for the previous year.*

Divisions	Number of paid messages and Indian share of collections in 1881-82.												Number of paid messages and Indian share of collections in 1880-81.											
	Inland.				Foreign.				Total.				Grand Total.		Inland.				Foreign.				Total.				Grand Total.	
	State.		Private.		State.		Private.		State.		Private.				State.		Private.		State.		Private.		State.		Private.			
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
		₹ a.		₹ a.		₹ a.		₹ a.		₹ a.		₹ a.		₹ a.		₹ a.		₹ a.		₹ a.		₹ a.		₹ a.		₹ a.		₹ a.
Arakan	1,974	3,151 14	16,801	23,041 12	1	3 0	1,185	3,655 5	1,975	3,154 14	17,986	26,697 1	19,961	29,851 15	2,086	4,032 12	15,682	24,063 2	...	... ...	1,002	3,142 1	2,086	4,032 12	16,684	27,205 3	18,770	31,237 15
Assam	15,629	35,451 2	28,190	37,469 0	10	50 7	226	659 13	15,639	35,501 9	28,416	38,128 13	44,055	73,630 6	13,988	42,712 4	23,949	33,650 2	...	... ...	141	415 10	13,988	42,712 4	24,090	34,065 12	38,078	76,778 0
Bellary	5,109	8,800 6	22,268	27,460 14	1	17 8	387	737 13	5,110	8,817 14	22,655	28,198 11	27,765	37,016 9	5,255	11,052 8	23,255	28,858 4	2	12 15	371	939 9	5,257	11,065 7	23,626	29,797 13	28,883	40,863 4
Bengal	33,347	92,299 11	207,833	2,72,470 0	405	5,623 6	42,760	1,38,814 3	33,752	97,923 1	250,593	4,11,284 3	284,345	5,09,207 4	31,625	1,21,267 10	186,743	2,62,970 12	462	8,527 8	39,629	1,43,807 11	32,087	1,29,795 2	226,372	4,06,778 7	258,459	5,36,573 9
Bombay	29,894	93,665 10	216,809	2,68,469 9	989	8,668 8	118,557	4,39,164 6	30,883	1,02,334 2	335,366	7,07,633 15	366,249	8,09,968 1	36,253	1,37,941 4	211,002	2,67,210 13	1,021	9,401 6	119,468	4,75,147 5	37,274	1,47,342 10	330,470	7,42,358 2	367,744	8,89,700 12
B. Burmah	10,503	22,040 2	79,712	1,07,074 10	22	224 11	13,304	42,220 9	10,525	22,264 13	93,016	1,49,304 3	103,541	1,71,569 0	8,806	23,774 12	75,757	1,12,846 2	16	94 14	13,359	47,026 10	8,822	23,869 10	89,116	1,59,872 12	97,938	1,83,742 6
Dacca	4,535	6,881 2	19,858	24,111 11	4	33 3	110	298 4	4,539	6,914 5	19,968	24,409 15	24,507	31,324 4	4,130	6,315 4	15,527	18,935 1	1	2 9	66	289 10	4,131	6,317 13	15,593	19,224 11	19,724	25,542 8
Ganjam	5,997	6,667 10	65,867	84,840 12	3	9 0	1,588	3,816 14	6,000	6,676 10	67,455	88,657 10	73,455	95,334 4	6,090	8,591 14	61,063	84,682 5	...	... ...	1,403	2,978 13	6,090	8,591 14	62,466	87,661 2	68,556	96,253 0
Indore	6,007	15,672 7	38,114	41,890 8	1	6 8	87	278 6	6,008	15,678 15	38,201	42,168 14	44,209	57,847 13	5,494	14,834 3	59,351	64,621 14	...	... ...	60	162 0	5,494	14,834 3	59,411	64,783 14	64,905	79,618 1
Madras	8,943	17,904 15	71,310	90,556 3	1,435	3,549 14	101,077	3,25,007 13	10,378	21,454 13	172,387	4,15,564 0	182,765	4,37,018 13	7,633	18,099 4	63,926	89,003 3	939	2,187 10	84,744	2,86,049 11	8,572	20,286 14	148,670	3,75,052 14	157,242	3,95,339 12
Malabar	4,691	9,303 5	48,311	63,129 8	52	441 12	4,499	12,273 6	4,743	9,745 1	52,810	75,402 14	57,553	85,147 15	5,298	12,440 0	47,109	68,000 15	44	217 12	4,378	12,477 6	5,342	12,657 12	51,487	80,478 5	56,829	93,136 1
Nagpur	6,329	10,690 3	22,283	23,599 1	...	... ...	85	277 8	6,329	10,690 3	22,368	23,876 9	28,697	34,566 12	6,096	11,382 3	24,978	25,727 1	...	... ...	67	186 14	6,096	11,382 3	25,045	25,913 15	31,141	37,296 2
Oudh and Rohilkhand	10,469	20,936 4	40,654	45,686 3	3	17 9	447	1,419 13	10,472	20,953 13	41,101	47,106 0	51,573	68,059 13	11,272	24,826 6	37,405	43,794 0	...	... ...	321	984 13	11,272	24,826 6	37,726	44,778 13	48,998	69,605 3
Punjab	57,549	1,78,772 0	92,674	1,20,095 6	634	11,495 6	1,080	3,848 1	58,183	1,90,267 6	93,754	1,23,943 7	151,937	3,14,210 13	107,781	5,04,056 13	109,393	1,55,798 3	929	24,420 2	1,361	7,929 3	108,710	5,28,476 15	110,754	1,63,727 6	219,464	6,92,204 5
Rajputana	5,424	12,098 11	13,949	16,794 14	6	78 3	37	125 5	5,430	12,176 14	13,986	16,920 3	19,416	29,097 1	4,203	10,328 4	14,912	17,179 7	...	... ...	28	118 14	4,203	10,328 4	14,940	17,298 5	19,143	27,626 9
Sind	39,436	1,64,144 5	50,504	70,161 8	704	10,018 2	42,703	1,82,826 2	40,140	1,74,162 7	93,207	2,52,987 10	133,347	4,27,150 1	57,638	3,45,877 11	62,658	94,641 5	897	14,781 0	25,710	1,35,333 12	58,535	3,60,658 11	88,368	2,29,975 1	146,903	5,90,633 12
Total	245,836	6,98,479 11	1,035,137	13,16,851 7	4,270	40,237 1	328,132	11,55,432 9	250,106	7,38,716 12	1,363,269	24,72,284 0	1,613,375	32,11,000 12	313,648	12,97,533 0	1,032,710	13,91,982 9	4,311	59,645 12	292,108	11,16,989 14	317,959	13,57,178 12	1,324,818	25,08,972 7	1,642,777	38,66,151 3
Ceylon* 3 months only in 1880-81.										722	689 8		11,397	16,599 4					23	161 5	1,311	5,638 14	745	850 13	12,708	22,238 2	13,453	23,088 15
Total India & Ceylon										314,370	12,98,222 8		1,044,107	14,08,581 13					4,334	59,807 1	293,419	11,22,628 12	318,704	13,58,029 9	1,337,526	25,31,210 9	1,656,230	38,89,240 2

Note.—This Return includes 544 messages on the Service of French and Portuguese Government and of His Highness the Khan of Kheiat, the value of which, *viz.*, ₹1,543-9, has not been credited to Revenue.

* From the 1st July 1880 Ceylon ceased to form a part of the Indian Telegraph Administration.

Total Paid Messages.		No.	Value. ₹	Value. a.
Inland	Departmental	1,095,064	18,25,050	8
	Railway	185,909	1,90,280	10
Foreign	Departmental	332,007	11,94,969	8
	Railway	395	700	2
Total		1,613,375	32,11,000	12

Total Paid Messages.		No.	Value. ₹	Value. a.
Inland	Departmental	1,187,832	25,34,424	9
	Railway	170 645	1,72,379	12
Foreign	Departmental	297,468	11,81,893	9
	Railway	285	542	4
(a) Total		1,656,230	38,89,240	2

(a) Includes No. (13,453) and value (₹23,088-15), of Ceylon Messages for April, May and June 1880.

Appendix B—*continued.*

RETURN of the Number and Value of Inland and Foreign Messages "Sent" and of Foreign Messages "Received" and "Transit" during the year 1881-82, showing also the Increase and Decrease under each head on the figures for the previous year.

DIVISION.	INCREASE.										DECREASE.									
	Inland.				Foreign.				Totals.		Inland.				Foreign.				Totals.	
	State.		Private.		State.		Private.		State.		State.		Private.		State.		Private.		State.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
		R a.		R a.		R a.		R a.		R a.		R a.		R a.		R a.		R a.		R a.
Arakan	...	...	1,119	...	1	3 0	183	513 4	1	3 0	...	...	...	...	...	...	...	...	...	...
Assam	1,641	...	4,241	3,818 14	10	50 7	85	244 3	1,651	50 7	...	...	...	...	...	...	...	...	...	...
Bellary	...	...	...	...	...	4 9	16	...	...	4 9	...	...	...	...	...	...	...	...	...	...
Bengal	1,722	...	21,000	9,499 4	...	...	3,131	...	1,722	...	...	...	...	...	...	...	...	...	...	...
Bombay	...	...	5,807	1,258 12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B. Burmah	1,697	...	8,955	...	6	129 13	...	...	1,703	129 13	...	...	...	...	...	...	...	...	...	...
Dacca	405	503 14	4,331	5,170 10	3	39 10	44	8 10	408	506 8	...	...	...	...	...	...	...	...	...	...
Ganjam	...	...	4,804	158 7	3	9 0	185	838 1	3	9 0	...	...	...	...	...	...	...	...	...	...
Indore	513	838 4	...	...	1	6 8	27	116 6	514	844 12	...	...	...	...	...	...	...	...	...	...
Madras	1,810	...	7,384	1,553 0	406	1,362 4	16,333	38,958 2	1,806	1,362 4	...	...	...	...	...	...	...	...	...	...
Malabar	...	...	1,302	...	8	224 0	121	...	8	224 0	...	...	...	...	...	...	...	...	...	...
Nagpur	233	...	...	...	...	...	18	90 10	233	...	...	...	...	...	...	...	...	...	...	...
Oudh and Rohilkhand	...	...	3,249	1,892 3	3	17 9	126	435 0	3	17 9	...	...	...	...	...	...	...	...	...	...
Punjab	...	...	...	...	...	78 3	9	6 7	78	1,227 1,848 10	...	...	...	...	...	...	...	...	...	...
Rajputana	1,221	1,770 7	...	...	...	...	16,993	47,402 6	...	...	...	...	...	...	...	...	...	...	...	...
Sind	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL .	8,742	3,174 9	57,182	23,357 2	537	1,915 15	37,271	86,703 1	9,279	5,090 8	...	...	38,451	...	...	...	36,024	38,442 11	...	...
INCREASE AND DECREASE OTHERWISE THAN THIS YEAR.	...	...	2,427	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Appendix B—*concluded.*

Abstract of Foreign Traffic for the year 1881-82.

CLASS OF MESSAGES.	ROUTE. West. Via Teheran. No.	Indian Value. R a.	Via Turkey. No.	Indian Value. R a.	Persian Gulf. No.	Indian Value. R a.	Via Suez. No.	Indian Value. R a.	East. Via Amur. No.	Indian Value. R a.	Via Madras. No.	Indian Value. R a.	Via Rangoon. No.	Indian Value. R a.	Native Burmah. No.	Indian Value. R a.	Via Pamban. No.	Indian Value. R a.	TOTAL. No.	Indian Value. R a.
INDIAN.																				
Sent . . .	23,534	93,539 2	945	3,732 4	497	2,509 9	52,431	1,69,869 4	166	387 14	9,220	23,330 13	1,760	5,376 7	3,309	4,520 14	21,634	48,760 14	113,496	3,52,027 1
Received . .	22,462	1,15,706 7	1,183	4,348 0	682	2,387 10	44,907	1,81,820 2	259	719 2	9,433	27,950 4	2,236	7,019 15	...	... ...	21,776	34,093 13	102,938	3,74,045 5
TOTAL .	45,996	2,09,245 9	2,128	8,080 4	1,179	4,897 3	97,338	3,51,689 6	425	1,107 0	18,653	51,281 1	3,996	12,396 6	3,309	4,520 14	43,410	82,854 11	216,434	7,26,072 6
TRANSIT.																				
From East to West—																				
Vid Madras	6,788	28,147 1	11	40 8	160	452 10	45,885	1,92,904 3	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	52,844	2,21,544 6
Vid Rangoon	9	31 14	1	1 8	2	4 8	288	1,262 14	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	300	1,300 12
Vid Lainggha	...	... ...	...	... ...	...	... ...	1	6 12	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	1	6 12
Vid Pamban	802	2,773 12	8	21 7	9	59 10	4,740	14,628 9	4	11 15	...	... ...	...	... ...	...	... ...	...	... ...	5,563	17,495 5
From West to East—																				
Vid Madras	14,152	55,149 4	531	1,920 3	95	308 9	37,069	1,51,767 0	126	324 4	...	... ...	...	... ...	...	... ...	...	... ...	51,973	2,09,469 4
Vid Rangoon	8	24 12	...	... ...	...	... ...	229	864 1	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	237	888 13
Vid Lainggha	3	25 11	..	... ...	...	... ...	15	95 14	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	18	121 9
Vid Pamban	1,454	5,107 14	40	134 13	6	23 4	2,279	8,215 14	13	22 5	57	230 15	...	... ...	...	... ...	...	... ...	3,849	13,735 1
From West to West—																				
Vid Bombay and Kurrachee.	...	... ...	12	103 4	23	97 14	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	35	201 2
Vid Kurrachee and Bombay.	1	1 8	9	31 2	16	67 8	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	26	100 2
From East to East—																				
Vid Madras .	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	372	1,758 9	372	1,758 9
Vid Rangoon .	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	5	17 14	1	2 15	6	20 13
Vid Pamban .	...	... ...	...	... ...	...	... ...	...	... ...	...	... ...	722	2,885 10	22	69 2	...	... ...	...	... ...	744	2,954 12
TOTAL .	23,217	91,261 12	612	2,252 13	311	1,013 15	90,506	3,69,745 3	143	358 8	779	3,116 9	22	69 2	5	17 14	373	1,761 8	115,968	4,69,597 4
GRAND TOTAL .																			332,402	11,95,669 10

Note.—This Return does not include Collections other than those belonging to the Government of India.

Abstract of Foreign Traffic with India by the Indo-European and Red Sea Routes for the year 1881-82.

ROUTE.		Number of Messages by each Route (exclusive of Transit) To India.	From India.	Total.	Percentage of Number To India.	From India.	Total.
INDO-EUROPEAN .	*Vid* Teheran	22,462	23,534	45,996	32·44	30·40	31·37
	Vid Turkey	1,183	945	2,128	1·71	1·22	1·45
	Persian Gulf *vid* Kurrachee . .	682	497	1,179	0·99	0·64	0·80
RED SEA . .	*Vid* Suez	44,907	52,431	97,338	64·86	67·74	* 66·38
	TOTAL .	69,234	77,407	146,641	100·00	100·00	100·00

* The Red Sea Route was interrupted from 13th July to 10th August 1881.

APPENDIX C.

Year.	Via Suez.			Via Teheran.			Via Turkey.			Total.		
	Homeward.	Outward.	Total.	Homeward.	Outward.	Total.	Homeward.	Outward.	Total.	Homeward.	Outward.	Total.
1871-72	24·52	28·29	52·81	13·40	15·71	29·11	12·75	5·33	18·08	50·67	49·33	100·00
1872-73	32·82	32·23	65·05	15·85	14·35	30·20	2·73	2·02	4·75	51·40	48·60	100·00
1873-74	28·70	24·44	53·14	21·65	22·48	44·13	1·63	1·10	2·73	51·98	48·02	100·00
1874-75	26·43	24·09	50·52	24·82	23·09	47·91	0·87	0·70	1·57	52·12	47·88	100·00
1875-76	22·17	21·03	43·20	28·60	24·51	53·11	1·60	1·09	3·69	52·37	47·63	100·00
1876-77	29·90	30·32	60·22	21·43	16·14	37·57	1·04	1·17	2·21	52·37	47·63	100·00
1877-78	40·10	39·00	79·10	9·56	8·16	17·72	2·13	1·05	3·18	51·79	48·21	100·00
1879-80	39·00	35·88	74·88	12·84	9·80	22·64	1·20	0·77	1·89	53·69	46·31	100·00
1880-81	39·74	34·70	74·44	13·36	10·16	23·52	0·82	1·28	2·04	53·92	46·08	100·00
1881-82	36·04	30·87	66·91	16·18	15·44	31·62	0·59	0·88	1·47	52·81	47·19	100·00

APPENDIX D.

Number of Sent Messages per annum.	Number of Permanent and Temporary Offices (including Offices opened and closed during the year).						
	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.
Above 100,000	1	2	2	2	2	2	3	2	2
75,000 and under 100,000	1	...	...	...	...	...	...	...	...
50,000 " 75,000	...	...	...	1	1	1	1	2	2
25,000 " 50,000	...	2	3	2	...	2	3	2	5
20,000 " 25,000	2	1	...	2	4	2	2	2	2
15,000 " 20,000	1	1	2	...	...	2	3	6	6
10,000 " 15,000	1	2	2	7	3	2	3	2	2
5,000 " 10,000	2	23	25	27	10	9	12	12	13
1,000 " 5,000	18	93	109	127	29	38	33	36	37
500 " 1,000	44	44	47	39	132	123	136	125	123
100 " 500	34	34	39	34	42	39	45	61	65
under 100	4	15	13	10	28	44	37	48	42
					11	18	42	28	26
Total	200	240	242	251	262	280	317	324	319

APPENDIX E.

Number of Offices open on 31st March 1882.

Divisions.	Class.			Total.
	1st.	2nd.	3rd.	
Arakan	1	4	2	7
Assam	...	4	16	20
Bellary	...	1	12	13
Beluchistan	1	...	7	8
Bengal	2	...	24	37
Bombay	4	11	17	32
British Burmah	3	13	5	21
Dacca	1	5	13	7
Ganjam	2	1	10	16
Indore	...	4	8	16
Madras	4	4	18	26
Malabar Coast	...	6	5	11
Nagpur	1	4	7	12
Oudh and Rohilkhand	...	5	9	14
Punjab	6	5	24	35
Rajputana	1	2	2	5
Sind	1	7	4	12
Total	27	84	181	292

APPENDIX F.

Synopsis of Complaints in which this Department is concerned, for the year 1881-82.

Nature of Complaints.	Number of Complaints received.				Number disposed of.										Number of paid Messages.			Percentage of Messages which formed the subject of Complaints.			
					Admitted.				Rejected.												
									Being Groundless.			Not investigated for want of documents.			Total rejected.						
	Inland.	Railway.	Foreign.	Total received.	Inland.	Railway.	Foreign.	Total admitted.	Inland.	Railway.	Foreign.	Inland.	Railway.	Foreign.		Inland.	Railway.	Foreign.	Inland.	Railway.	Foreign.	Total.
Non-delivery	155	25	38	218	69	14	14	97	81	11	24	5	...	...	121	...	...	...	·014	·013	·011	·013
	140	37	24	201	64	23	12	99	69	15	11	7	...	...	102	...	...	...	·012	·021	·008	·012
Delay	40	10	13	63	27	7	11	45	13	3	2	...	...	...	18	1,095,064	185,909	332,402	·003	·005	·004	·004
	56	10	7	73	46	7	5	58	10	3	2	...	...	...	15	1,187,832*	170,645	297,753	·005	·006	·002	·004
Error	104	18	34	156	94	18	32	144	10	...	2	...	...	...	12	...	...	...	·010	·010	·010	·010
	121	10	35	166	105	9	32	146	15	1	3	1	...	...	20	...	...	...	·010	·006	·012	·010
Miscellaneous	2	1	6	9	2	1	5	8	...	...	1	...	...	...	1	...	...	...	·000	·001	·002	·001
	5	2	5	12	4	2	5	11	1	...	...	...	...	...	1	...	...	...	·000	·001	·002	·001
Total	301	54	91	446	192	40	62	294	104	14	29	5	...	...	152	...	...	...	·027	·029	·027	·028
	322	59	71	452	219	41	54	314	95	19	16	8	...	...	138	...	...	...	·027	·034	·024	·027

Increase of Traffic . { Railway . . . 8·94 per cent. / Foreign . . . 11·64 „ }

Decrease . . . { Departmental . . . 6·75 „ / Net . . . 1·78 „ }

Increase and decrease in number of admitted complaints—

Decrease . { Departmental . . . 12·33 per cent. / Railway . . . 2·44 „ }

Increase . Foreign . . . 14·81 „

Net decrease „ . . . 6·37 „

* This includes 13,453 Ceylon Messages for April, May and June 1880.

Synopsis of Complaints in which other Telegraph Administrations are concerned for the year 1881-82.

Nature of Complaints.	Number of Complaints received.			Transferred to other Telegraph Administrations.							Not transferred to other Telegraph Administrations.				Number of Paid Messages.			Percentage of Messages which formed the subject of Complaints.		
				Disposed of.						Transferred, not yet disposed of			Not being supported by prescribed documents.		Transfer forbidden by Convention.						
				Admitted.			Rejected.														
							Being groundless.		On technical grounds.												
	Railway.	Foreign.	Total received.	Railway.	Foreign.	Total admitted.	Railway.	Foreign.	Railway.	Foreign.	Total rejected.	Railway.	Foreign.	Railway.	Foreign.	Railway.	Foreign.	Railway.	Foreign.	Total.	Railway.	Foreign.	Total.
Non-delivery	57	89	146	36	40	76	21	24	...	1	46	...	13	...	6	...	5	...	...	...	·031	·027	·028
	74	92	166	32	44	76	39	26	1	...	66	1	10	1	7	...	5	...	...	...	·043	·031	·035
Delay	35	36	71	28	22	50	7	6	...	...	13	...	1	...	1	...	6	185,909	332,402	518,311	·019	·011	·014
	32	23	55	24	15	39	7	...	...	...	7	...	5	...	1	1	2	170,645	297,753	468,398	·019	·008	·012
Error	23	74	97	23	26	49	...	2	...	...	2	...	6	...	...	...	40	...	...	...	·012	·022	·019
	23	52	75	10	8	18	1	2	...	...	3	...	2	...	2	12	38	...	...	...	·013	·017	·016
Miscellaneous	3	35	38	3	28	31	...	2	...	...	2	...	4	...	1	...	...	...	...	...	·002	·011	·007
	4	28	32	4	17	21	...	1	...	...	1	...	10	...	...	...	...	...	...	...	·002	·009	·007
Total for the year	118	234	352	90	116	206	28	34	...	1	63	...	24	...	8	...	51	...	...	...	·064	·071	·068
	133	195	328	70	84	154	47	29	1	...	77	1	27	1	10	13	45	...	...	...	·077	·065	·070
Balance from last year.	1	28	9	1	21	22	...	4	...	...	4	...	3	...	...	...	...	...	...	...	...	...	...
	2	10	12	2	7	9	...	2	...	...	2	...	1	...	...	...	...	...	...	...	...	...	...
Total	119	262	381	91	137	228	28	38	...	1	67	...	27	...	8	...	51	...	...	...	·064	·079	·073
	135	205	340	72	91	163	47	31	1	...	79	1	28	1	10	13	45	...	...	...	·079	·069	·073

Increase in the number of admitted complaints . { Railway . 28·57 per cent. / Foreign . 38·09 „ / Net . 33·77 „ }

N. B.—The figures in Antique are those for the last year.

APPENDIX G.

Statement showing the Number and Value of Messages exchanged with Railway Telegraphs.

Years.	State.		Guaranteed.		Total.	
	No.	Value.	No.	Value.	No.	Value.
		R a.		R a.		R a.
1873-74	811	885 10	40,397	38,284 13	41,208	39,170 7
1874-75	6,001	7,693 7½	48,279	48,843 11 ½	54,280	56,537 2 ½
1875-76	12,852	14,120 6½	56,766	57,181 11¼	69,618	71,302 2¼
1876-77	21,049	30,582 7½	75,260	77,205 8¾	96,309	1,07,788 0¼
1877-78	28,985	32,389 14½	96,225	93,372 15	125,210	1,25,712 13¼
1878-79	37,783	43,322 5 1/12	94,453	95,952 0	132,236	1,39,274 5 1/12
1879-80	40,994	56,188 5⅛	99,213	1,40,554 9	140,207	1,96,742 14⅛
1880-81	72,135	77,523 15¾	98,510	1,31,898 9⅛	170,645	2,09,427 8¼
1881-82	107,664	1,10,934 9¼	78,640	83,005 4⅝	186,304	1,93,939 14 ½

APPENDIX H.

Statement of Press Messages for the year 1881-82.

Months.	No.	Value.
		R a.
April 1881	679	3,658 0
May ,, ...	690	3,939 4
June ,, ...	627	3,155 8
July ,, ...	688	3,781 8
August ,, ...	664	3,992 12
September ,, ...	683	4,145 6
October ,, ...	656	3,702 0
November ,, ...	712	3,569 10
December ,, ...	615	2,953 8
January 1882	608	2,146 7
February ,, ...	681	2,280 4
March ,, ...	738	3,651 6
Total .	7,941	40,975 9

APPENDIX I.

Classified List of Lines of Telegraph in India and British Burmah, as they stood on 31st March 1882.

No.	Sections of Lines.	Divisions.	Number of Miles of Line.			Number of Miles of Wire.		Cable.	Insulated.	Uninsulated.
			Along Road.	Along Rail.	Total.	No.	Miles.			
	MAIN LINES.									
1	Calcutta to Allahabad	Bengal . . .	295·237	798·065	1,093·302	1 Wire for 146·959 miles 2 Wires ,, 370·954 ,, 3 ,, ,, 2·7 ,, 4 ,, ,, 123·163 ,, 5 ,, ,, ·734 ,, 6 ,, ,, 306·68 ,, 7 ,, ,, 51·413 ,, 8 ,, ,, 64·234 ,, 9 ,, ,, ·5 ,, 10 ,, ,, 5·272 ,, 11 ,, ,, ·972 ,, 12 ,, ,, 14·711 ,, 13 ,, ,, 1·283 ,, 14 ,, ,, 2·435 ,, 15 ,, ,, ·24 ,, 16 ,, ,, 1·052 ,, 1,093·302 miles.	4,422·780	...	4,422·780	...
2	Allahabad to Bombay	Bengal, Nagpur, and Bombay.	13·011	821·36	834·371	2 Wires for 110·41 miles 3 ,, ,, 150·533 ,, 4 ,, ,, 74·54 ,, 5 ,, ,, 1·917 ,, 6 ,, ,, 241·338 ,, 7 ,, ,, 226·925 ,, 9 ,, ,, ·058 ,, 10 ,, ,, ·43 ,, 12 ,, ,, 28·22 ,, 834·371 miles.	4,360·135	...	4,350·18	...
3	Allahabad to Agra	Bengal . . .	1·42	277·575	278·995	4 Wires for 263·375 miles 5 ,, ,, ·15 ,, 9 ,, ,, 12·61 ,, 13 ,, ,, 1·35 ,, 14 ,, ,, 1·51 ,, 278·995 miles.	1,206·43	...	1,206·43	...

No.	Sections of Lines.	Divisions.	Number of Miles of Line.			Number of Miles of Wire.		Cable.	Insulated.	Uninsulated.
			Along Road.	Along Rail.	Total.	No.	Miles.			
	MAIN LINES—*continued.*									
4	Agra to Kurrachee	Rajputana & Sind	350·31	555·05	905·36	4 Wires for 339·3 miles 5 „ „ 450·81 „ 6 „ „ 112·51 „ 7 „ „ ·39 „ 8 „ „ ·85 „ 9 „ „ 1·5 „ 905·36 miles.	4,318·98*	...	4,318·98	...
5	Bombay to (Palanpur) Kurrachee	Bombay and Rajputana.	4·722	390·9245	395·6465	1 Wire for ·898 miles 2 Wires „ ·144 „ 4 „ „ 1·0885 „ 5 „ „ 79·75 „ 6 „ „ 301·54 „ 7 „ „ ·798 „ 8 „ „ ·113 „ 9 „ „ ·89 „ 10 „ „ 1·86 „ 11 „ „ 2·088 „ 17 „ „ ·221 „ 18 „ „ ·59 „ 19 „ „ ·601 „ 20 „ „ 3·236 „ 23 „ „ 1·829 „ 395·6465 miles	2,402·3934	...	2,402·3934	...
6	Bombay to Madras	Bombay and Madras	14·565	775·505	790·07	2 Wires for 354·25 miles 3 „ „ 195·02 „ 4 „ „ 151·73 „ 5 „ „ ·5 „ 6 „ „ 79·37 „ 7 „ „ 5·71 „ 8 „ „ 1·65 „ 9 „ „ ·79 „ 12 „ „ ·85 „ 15 „ „ ·2 „ 790·07 miles.	2,452·68	...	2,452·68	...
7	Madras to (Raneegunge) Calcutta	Ganjam	1,062·528	...	1,062·528	2 Wires for 505·211 miles 3 „ „ 539·673 „ 4 „ „ 16·523 „ 5 „ „ ·267 „ 6 „ „ ·78 „ 7 „ „ ·074 „ 1,062·528 miles.	2,696·066	6·	2,696·066	...
8	Agra (Tundla) to Lahore	Bengal and Punjab	6·37	446·55	452·92	3 Wires for 83·85 miles 4 „ „ 252·95 „ 5 „ „ 111·74 „ 7 „ „ 1·25 „ 8 „ „ ·93 „ 10 „ „ 1· „ 12 „ „ ·53 „ 13 „ „ ·67 „ 452·92 miles.	1,863·31	...	1,863·31	...
9	Calcutta (Barrackpore) to Amherst	Dacca, Arakan, and British Burmah.	941·891	295·871	1,237·762	1 Wire for 200·54 miles 2 Wires „ 787·556 „ 4 „ „ 92·354 „ 5 „ „ 113·782 „ 6 „ „ 41·17 „ 7 „ „ 2·36 „ 1,237·762 miles.	2,949·836	27·684	2,949·836	...
10	Madras to Ceylon	Madras	156·76	313·25	500·01	1 Wire for 40·34 miles 2 Wires „ 148·33 „ 4 „ „ 310·46 „ 5 „ „ ·88 „ 500·01 miles.	1,547·24	36·2	1,546·36	...
	SECONDARY LINES.									
11	Lahore to Peshawar	Punjab	31·77	250·18	281·95	3 Wires for ·37 miles 4 „ „ 26·50 „ 5 „ „ 57·43 „ 6 „ „ 124·25 „ 7 „ „ 62·43 „ 8 „ „ ·25 „ 10 „ „ 8·55 „ 11 „ „ 2·17 „ 281·95 miles.	1,688·14	...	1,688·14	...

* Includes 9·64 miles of Rajputana-Malwa State Railway Station connection wires.

No.	Sections of Lines.	Divisions.	Number of Miles of Line.			Number of Miles of Wire.		Cable.	Insulated.	Uninsulated.
			Along Road.	Along Rail.	Total.	No.	Miles.			
	SECONDARY LINES—*continued.*									
12	Lahore to (Hyderabad) Kurrachee . . .	Punjab and Sind .	16·23	708·22	724·45	1 Wire for 1·35 miles . 2 Wires „ ·61 „ 3 „ „ 1· „ 4 „ „ 697·17 „ 5 „ „ 7·17 „ 6 „ „ 1·1 „ 7 „ „ 15·75 „ 8 „ „ ·3 „ 724·45 miles.	2,946·35	3·	2,942·85	...
13	Hyderabad (Sind), (Jacobabad) to (Tarnaul) Rawalpindi.	Sind and Punjab .	551·75	68·5	620·25	1 Wire for 507·25 miles . 2 Wires „ 44·5 „ 4 „ „ 66·25 „ 5 „ „ 2·25 „ 620·25 miles.	872·5	...	398·	474·5
14	Poona to Arkonam (*By Road*)	Bombay, Bellary and Madras.	724·206	37·937	762·143	2 Wires for 600·268 miles . 3 „ „ 154·697 „ 4 „ „ 1·75 „ 5 „ „ 5·234 „ 9 „ „ ·194 „ 762·143 miles.	1,699·543	...	1,698·393	...
15	Sahebgunge (Tickreegunge) to Cachar (Silchar)	Dacca and Assam .	571·334	...	571·334	1 Wire for 549·584 miles . 2 Wires „ 21·25 „ 3 „ „ ·5 „ 571·334 miles.	581·215	12·369	581·215	...
16	Bangalore to (Madura Junction) Ceylon . .	Madras and Malabar Coast.	549·9422	173·332	723·2742*	1 Wire for 504·4187 miles . 2 Wires „ 11·2825 „ 3 „ „ 21·461 „ 4 „ „ 167·141 „ 5 „ „ 18·55 „ 6 „ „ ·08 „ 722·9332 miles.	1,354·0967*	...	1,346·6107	...
17	Jubbulpore to Bhusaval *vid* Nagpur . . .	Nagpur . . .	150·343	266·55	416·893	2 Wires for 342·413 miles . 3 „ „ 61·5 „ 4 „ „ 9·18 „ 5 „ „ 3· „ 6 „ „ ·8 „ 416·893 miles.	925·846	...	925·846	...
18	Agra to Khandwa	Rajputana and Indore.	301·315	158·7	460·015	1 Wire for 10·25 miles . 2 Wires „ 288·265 „ 3 „ „ 1·5 „ 4 „ „ 74·5 „ 6 „ „ 83·7 „ 7 „ „ 1· „ 9 „ „ ·8 „ 460·015 miles.	1,409·38†	...	1,409·38	...
19	Aligarh to Moghalsarai *Through* Fyzabad and Benares.	Oudh and Rohilkhand.	12·987	450·69	463·677	2 Wires for 9·861 miles . 3 „ „ 398·796 „ 4 „ „ 48·46 „ 5 „ „ 4·61 „ 6 „ „ 1·46 „ 7 „ „ ·49 „ 463·677 miles.	1,445·19	...	1,445·19	...
20	Indore to Ajmere *Through* Neemuch . . .	Indore . . .	3·54	304·5	308·04	2 Wires for 1·04 miles . 3 „ „ 233·7 „ 4 „ „ 48·7 „ 5 „ „ 24·6 „ 308·04 miles.	1,020·98	...	1,020·98	...
21	Belgaum to Goa	Bellary . . .	98·884	...	98·884	1	98·515	·466	97·851	...
22	Bellary (Auspree Junction) to Hyderabad . .	Madras . . .	178·586	...	178·586	1 Wire for 178·558 miles . 2 Wires „ ·028 „ 178·586 miles.	178·614	...	127·085	51·529
23	Wadi to Hyderabad	Bombay . .	1·6	116·64	118·24	2 Wires for ·6 miles . 3 „ „ 112·8 „ 4 „ „ 1·8 „ 5 „ „ 1·4 „ Station connection line . 1·64 „ 118·24 miles.	355·44	...	355·44	...

* Includes ·341 mile of line and ·936 mile of wire for station connections.

† Includes 1·42 miles of Sindia State Railway and 2·28 miles of Rajputana-Malwa State Railway station connection wires.

No.	Sections of Lines.	Divisions.	Number of Miles of Line.			Number of Miles of Wire.		Cable.	Insulated.	Uninsulated.
			Along Road.	Along Rail.	Total.	No.	Miles.			
	SECONDARY LINES—*concluded.*									
24	Dharwar (Hubli) to Kumta	Bellary	119·558	...	119·558	1 Wire for 103·558 miles 2 Wires „ 16· „ 119·558 miles.	135·558	...	135·094	...
25	Calcutta (Sealdah Junction) to Saugor Island	Bengal	89·051	...	89·051	1 Wire for 84·28 miles 2 Wires „ 4·771 „ 89·051 miles.	92·742	1·08	9·542	83·2
26	Prome (Poungdeh) to Diamond Island	British Burmah	259·82	...	259·82	1 Wire for 239·31 miles 2 Wires „ 20·51 „ 259·82 miles.	268·46	11·87	194·62	73·84
27	Moulmein (Quanlah Junction) to Tavoy	Ditto	160·	...	160·	1	160·	...	160·	...
28	Ahmedabad (Sabarmati Junction) to Bhavnagar	Bombay	39·594	184·498	224·092	1 Wire for ·084 miles 2 Wires „ 39·67 „ 3 „ „ 73·257 „ 4 „ „ 105·272 „ 6 „ „ 1·146 „ 7 „ „ ·077 „ 8 „ „ ·113 „ 9 „ „ ·89 „ 10 „ „ 1·191 „ 11 „ „ 2·392 „ 224·092 miles.	753·99	...	753·99	...
29	Umballa to Simla	Punjab	72·25	...	72·25	2 Wires for 9·75 miles 3 „ „ 62·5 „ 72·25 miles.	207·	...	207·	...
30	Meerut to Chakrata	Ditto	111·95	...	111·95	1 Wire for 111· miles 2 Wires „ ·55 „ 3 „ „ ·4 „ 111·95 miles.	113·3	...	113·3	...
31	Ruk Railway Station to Pir Chowkey Railway Terminal *Through* Sibi and Dadur.	Sind	4·	138·98	142·98	1 Wire for 7·73 miles 4 Wires „ 98·25 „ 5 „ „ 36·25 „ 6 „ „ ·25 „ 8 „ „ ·5 „ 142·98 miles.	587·48	...	579·75	7·73
32	Sibi to Quetta and Loop to Pir Chowkey	Beluchistan	97·94	...	97·94	1 Wire for 57·75 miles 2 Wires „ 40·19 „ 97·94 miles.	138·13	...	138·13	...
33	Quetta (Darwaza Junction) to Kelat	Beluchistan Sub-Division.	69·48	...	69·48	1	69·48	...	69·48	...
34	Quetta to Kushdil Khan	Ditto	75·	...	75·	1	75·	...	...	75·
35	Nagpur (Wardha Junction) to Warora	Nagpur	...	44·8	44·8	2	89·6	...	89·6	...
36	Gauhati (Belgaria Junction) to Sudya, *Through* Dibrugarh.	Assam	347·	...	347·	1 Wire for 318·5 miles 2 Wires „ 28·5 347·0 miles.	375·5	...	374·5	1·
37	Poradaha to Darjeeling	Dacca	26·71	222·95	249·66	1 Wire for ·04 miles 2 Wires „ 34·45 „ 3 „ „ 27·12 „ 4 „ „ 187·43 „ 5 „ „ ·62 „ 249·66 miles.	890·79	12·33	890·79	...
38	Lucknow to Sitapur	Oudh and Rohilkhand.	54·	...	54·	1	54·	...	6·73	47·27
	TERTIARY LINES.									
39	Manmad to Dhulia	Bombay	56·5	...	56·5	1 Wire for 32·5 miles 2 Wires „ 22·5 „ 3 „ „ 1·5 „ 56·5 miles.	82·	...	58·9	23·1
40	Cawnpore to Farukhabad	Oudh and Rohilkhand.	...	86·	86·	2 Wires for 84·516 miles 3 „ „ 1·484 „ 86· miles.	173·484	...	172·9	...
41	Cawnpore (East Indian Railway Junction) to Lucknow.	Ditto	·084	43·773	43·857	3 Wires for 40·92 miles 4 „ „ 1·527 „ 6 „ „ ·999 „ 8 „ „ ·411 „ 43·857 miles.	138·15	...	138·15	...

No.	Sections of Lines.	Divisions.	Number of Miles of Line.			Number of Miles of Wire.		Cable.	Insulated.	Uninsulated.
			Along Road.	Along Rail.	Total.	No.	Miles.			
	TERTIARY LINES— *continued.*									
42	Agra to Hathras Junction *Through* Muttra	Bengal	33·371	29·	62·371	1 Wire for 33·371 miles 2 Wires „ 28·727 „ 3 „ „ ·273 „ 62·371 miles.	91·653	...	60·079	31·574
43	Achnera (Rajputana State Railway) to Muttra	Rajputana	...	22·5	22·5	2	45·32*	...	45·	...
44	Bankipore (Mokameh Junction) to Bettiah	Bengal	22·6	129·	151·6	1 Wire for 22·6 miles 2 Wires „ 77· „ 3 „ „ 46· „ 4 „ „ 6· „ 174·6 miles.	337·192†	2·	337·192	...
45	Mozufferpore to Hutwa	Ditto	118·583	...	118·583	1 Wire for 116·333 miles 2 Wires „ 2·25 „ 118·583 miles.	120·833	...	120·833	...
46	Bankipore Tripod to Gya	Ditto	...	57·586	57·586	2 Wires for 57·067 miles 7 „ „ ·519 „ 57·586 miles.	118·355‡	...	118·355	...
47	Ajmere (Abu Road Junction) to Mount Abu	Rajputana	10·12	...	10·12	3	30·36	...	30·36	...
48	Narel to Matheran	Bombay	5·25	...	5·25	2	10·5	...	10·5	...
49	Poona (Kirkee) to Ganneshkhind	Ditto	1·25	...	1·25	2	2·5	...	2·5	...
50	Dhond to Manmad	Ditto	...	146·	146·	3 Wires for 94·5 miles 4 „ „ 51· „ Stn. connectn. line ·5 146· miles.	489·75§	...	489·75	...
51	Bezvada to Masulipatam	Ganjam	43·6	...	43·6	2	87·2	...	87·2	...
52	Bimlipatam (Mothavalsa Junction) to Vizianagram	Ditto	10·75	...	10·75	1	10·75	...	10·75	...
53	Mercara to Mangalore	Malabar Coast	78·95	...	78·95	1	78·95	...	78·73	...
54	Ghaziabad to Bandikui	Punjab and Rajputana.	·25	145·25	145·5	3 Wires for 134·23 miles 4 „ „ 11· „ 5 „ „ ·27 „ 145·5 miles.	448·04	...	448·04	...
55	Umballa to Patiala	Punjab	17·	...	17·	1	17·	...	17·	...
56	Umballa to Ferozepore	Ditto	77·6	...	77·6	1	77·6	...	...	77·6
57	Amritsar to Bukloh	Ditto	108·	...	108·	1	108·	...	108·	...
58	Prome to Lainggha	British Burmah	50·14	...	50·14	1 Wire for 34·80 miles 2 Wires „ 15·34 „ 50·14 miles.	65·48	...	65·48	...
59	Thayethamine (Junction Moulmein Line) to Tonghoo.	Ditto	102·53	...	102·53	1 Wire for 84·62 miles 2 Wires „ 17·91 „ 102·53 miles.	120·44	...	120·44	...
60	Lahore to Suketghur *Through* Sialkot	Punjab	36·25	...	36·25	1	36·25	...	...	36·25
61	Lala Musa to Bhera	Ditto	...	62·45	62·45	2	124·9	...	124·9	...
62	Rangoon to Elephant Point	British Burmah	30·1776	...	30·1776	... ...	59·3652	·99	59·3652	...
63	Satara to Mahabaleshvar	Bombay	30·	...	30·	1	30·	...	30·	...
64	Viramgam to Khara Ghora	Ditto	...	21·5	21·5	1	21·5	...	21·5	...
65	Anand to Pali	Ditto	...	49·221	49·221	1 Wire for 47·571 miles 2 Wires „ 1·65 „ 49·221 miles.	50·871	...	50·871	...
66	Rawalpindi to Murree	Punjab	38·	...	38·	1	38·	...	38·	...
67	Rawalpindi to Abbottabad	Ditto	43·	...	43·	1	43·	...	43·	...
68	Nowshera to Hoti Mardan	Ditto	15·	...	15·	1	15·	...	...	15·
69	Peshawar to Jamrud	Ditto	10·	...	10·	1	10·	...	...	10·
70	Quetta to Kach	Beluchistan Sub-Division.	28·	...	28·	1	28·	...	...	28·
71	Sibi to Sharigh	Ditto	65·5	7·	72·5	1 Wire for 65·5 miles 2 Wires „ 7· „ 72·5 miles.	79·5	...	14·	65·5
72	Jubbulpore (Kareli Junction) to Saugor	Nagpur	70·	...	70·	1	70·	...	70·	...
73	Pipariya Junction to Pachmarhi	Ditto	27·28	...	27·28	1	27·28	...	...	27·28
74	Gwalior to Morar	Indore	4·362	...	4·362	1 Wire for 2·3 miles 6 Wires „ 2·062 „ 4·362 miles.	14·672	...	14·672	...
75	Indore to Oojein	Ditto	2·	12·	14·	1 Wire for 2· miles 2 Wires „ 12· „ 14· miles.	26·	...	24·	2·
76	Chandausi Junction to Almora	Oudh and Rohilkhand.	98·27	27·2	125·47	1 Wire for 95·27 miles 2 Wires „ 3· „ 3 „ „ 25·95 „ 4 „ „ 1·25 „ 125·47 miles.	184·12	...	91·85	92·27

* Includes ·32 mile of station connection wires. † Includes ·592 mile of station connection wires. ‡ Includes ·588 mile of station connection wires of Patna-Gya State Railway. § This includes 2·25 miles of station connection wires.

No.	Sections of Lines.	Divisions.	Number of Miles of Line.			Number of Miles of Wire.		Cable.	Insulated.	Uninsulated.
			Along Road.	Along Rail.	Total.	No.	Miles.			
	TERTIARY LINES—*concluded.*									
77	Hyderabad to Secunderabad	Bombay	·7	1·7	2·4	3	7·2	...	7·2	...
78	Mysore to Ootacamund and Mettupalaiyam	Madras	95·27	...	95·27	1 Wire for 74·61 miles 2 Wires „ 20·66 „ 95·27 miles.	115·93	...	96·454	19·476
79	Calcutta (Kidderpore Budge-Budge Road Junction) to Diamond-Harbour *via* Road.	Bengal	25·063	...	25·063	1	25·063	...	...	25·063
80	Calcutta to Canning	Ditto	·195	27·91	28·105	2 Wires for 28·081 miles 3 „ „ ·024 „ 28·105 miles.	56·642*	...	56·642	...
81	Sonarpur to Mugrah	Ditto	...	15·33	15·33	2	30·66	...	30·66	...
82	Wadhwan to Rajkot	Bombay	66·5	1·	67·5	1 Wire for 66·5 miles 4 Wires „ 1· „ 67·5 miles.	70·5	...	70·5	...
83	Wadhwan (Dhola Junction) to Junagad *Through* Timbi.	Ditto	33·75	88·506	122·256	1 Wire for 33·75 miles 2 Wires „ 85·52 „ 3 „ „ 2·587 „ 4 „ „ ·335 „ 5 „ „ ·064 „ 122·256 miles.	214·211	...	214·211	...
84	Amritsar to Dhurmsala	Punjab	48·	...	48·	1	48·	...	48·	...
85	Kalka to Kasauli *By Alternate Line*	Ditto	9·	...	9·	1	9·	...	9·	...
86	Kasauli to Dagshai	Ditto	9·	...	9·	1	9·	...	9·	...
87	Roorkee to Hardwar	Ditto	19·	...	19·	1	19·	...	...	19·
88	Dera Ismail Khan to Tank	Sind	40·25	...	40·25	1	40·25	...	40·25	...
89	Garhi-Harsaru to Farukhnagar	Rajputana	...	7·5	7·5	1	7·5	...	7·5	...
90	Lainggha to Thyetmyo	British Burmah	6·95	...	6·95	1	5·62	1·33	5·62	...
91	Peshawar to Cherat	Punjab	14·	...	14·	1	14·	...	...	14·
92	Nalhati to Azimganj	Bengal	...	27·25	27·25	1	27·35†	...	·6	26·75
93	Samastipur to Peepra Ghat	Ditto	...	47·366	47·366	2	94·732	...	94·732	...
94	Chingleput Junction to Railway Telegraph Office, Conjeeveram.	Madras	...	21·4	21·4	2 Wires for 20·6 miles 3 „ „ ·8 „ 21·4 miles.	43·6	...	43·6	...
95	South Indian Railway Station Villupuram to the east bank of River Gingee.	Ditto	...	16·5	16·5	2	33·	...	33·	...
96	Shiyali to Negapatam	Ditto	46·95	...	46·95	2	93·9	...	93·9	...
97	Dehree to Arrah	Bengal	59·17	...	59·17	1	59·17	...	·188	58·982
98	Parbatipur to Kurigram *Through* Kaunia	Dacca	...	50·5	50·5	1 Wire for 17· miles 2 Wires „ 33·5 „ 50·5 miles.	84·	...	84·	...
99	Golaghat to Kohima (Naga Hills)	Assam	97·	...	97·	1	97·	...	97·	...
100	Kanhan Bridge Junction to Tumsar	Nagpur	...	41·25	41·25	2 Wires for 38·75 miles 3 „ „ 2·5 „ 41·25 miles.	85·	...	85·	...
101	Dowhali Junction to Musra	Ditto	...	83·75	83·75	2	167·5	...	167·5	...
102	Itarsi to Hoshangabad	Ditto	11·	...	11·	2	22·	...	22·	...
103	Tellicherry to Cannanore	Malabar Coast	11·7	...	11·7	1	11·7	...	11·579	...
104	Dildarnagar to Tari Ghat	Bengal	...	12·077	12·077	1 Wire for 11·996 miles 2 Wires „ ·081 „ 12·077 miles.	12·158	...	12·158	...
105	Negapatam to Karikal	Madras	10·54	...	10·54	1 Wire for 10· miles 2 Wires „ ·54 „ 10·54 miles.	11·08	...	11·08	...
106	Lucknow (Barabanki) to Bahramghat	Oudh and Rohilkhand.	21·33	...	21·33	1	21·33	...	·14	21·19
107	Segowlie Line Junction to Ruksoul	Bengal	18·2	...	18·2	1 Wire for 16·5 miles 2 Wires „ 1·7 „ 18·2 miles.	19·9	...	...	19·9
108	Koka Quarry Junction to Koka Quarry	Nagpur	...	7·5	7·5	1	7·5	...	·62	6·88
109	Kolhapur to Ratnagiri	Bellary	71·	...	71·	1 Wire for 57·49 miles 2 Wires „ 5·83 „ 3 „ „ 7·68 „ 71·00 miles.	92·19	...	92·19	...
110	Ratnagiri (Hathkhumbe Junction) to Chiplun	Ditto	45·	...	45·	1	45·	...	45·	...
111	Ratnagiri (Pali Junction) to Rajapur	Ditto	27·	...	27·	1	27·	...	27·	...
112	Hotgi Junction to Beejapur Office	Bombay	·52	58·53	59·05	1	59·05	...	59·05	...
113	Barsi Road Junction to Barsi Office	Ditto	20·61	...	20·61	1	20·61	...	20·61	...
114	Mhow Office to Dhar Office	Indore	32·7	...	32·7	1	32·7	...	32·7	...
115	Tipakadu to Devalla	Madras	19·316	...	19·316	1	19·316	...	19·316	...
116	Rewari to Dadri	Rajputana	...	34·58	34·58	1	34·58	...	...	34·58
117	Haji Shah Junction to Attock Government Office.	Punjab	·5	10·75	11·25	2	22·5	...	22·5	...

* Two wires for ·204 mile each carried on the supports of Public Office Local Lines.

† Includes ·1 mile station connection wire.

Classified List of Lines of Telegraph in India and British Burmah, &c.—continued.

No.	Sections of Lines.	Divisions.	Number of Miles of Line. Along Road.	Along Rail.	Total.	Number of Miles of Wire. No.	Miles.	Cable.	Insulated.	Uninsulated.
	LOCAL LINES.									
118	Bombay to Malabar Point	Bombay.	2·519	...	2·519	1 Wire for ·598 miles 3 Wires „ 1·921 „ 2·519 miles.	6·361	...	6·361	...
119	Bombay to Byculla	Ditto	·79	...	·79	1	·79	...	·79	...
120	Church Gate Street Railway Station to Colaba Railway Station.	Ditto	...	1·25	1·25	4	5·	...	5·	...
121	Nasik Road to Dhola Office	Ditto	4·5	...	4·5	1	4·5	...	4·5	...
122	Ahmednagar Station to Fort Office	Ditto	2·75	...	2·75	2	5·5	...	5·5	...
123	Bellary to Railway Telegraph Office	Bellary	·025	...	·025	1	·025	...	·025	...
124	Bellary Telegraph Office to Barracks	Ditto	·068	...	·068	... ...	·872	...	·872	...
125	South Indian Railway Junction to South Indian Railway Station.	Madras	...	1·25	1·25	2	2·5	...	2·5	...
126	Madras Office to Perambur Office	Ditto	·04	...	·04	... ...	5·0634*	...	5·0634	...
127	Madras Office to Rayapuram Office (*vid* Store Yard Loop.)	Ditto	·606	...	·606	... ...	2†	...	2·	...
128	Madras Office to Central Station	Ditto	Wire carried on the supports of Section Madras Office to Diversion Observatory Lines.			1	·7	...	·7	...
129	Madras to South Indian Railway Station	Ditto	ditto	ditto	ditto	1	2·	..	2·	...
130	Vepery Junction to Vepery Office Loop	Ditto	·64	...	·64	2	1·28	...	1·28	...
131	Mount Road Office to Teynampett Office	Ditto	1·69	...	1·69	1	1·69	...	1·69	...
132	Madras Office to Fort Office	Ditto	·25	...	·25	... ...	·73	...	·73	...
133	Madras Office to Triplicane Office	Ditto	Wire carried on Adyar Line supports.			1	2·67	...	2·67	...
134	Madras Office to Adyar Office (*viâ* Mylapore Loop and Office).	Ditto	7·24	...	7·24	1	7·24	...	7·24	...
135	Madras Office to South Indian Railway Junction (Old Guindy Line).	Ditto	Wire carried on the supports of the Main Line Madras to Ceylon.			1	3·	...	3·	...
136	Madras Office to Mount Road Office	Ditto	1·35	...	1·35	... ...	4·37	...	4·37	...
137	Lucknow Telegraph Office to Lucknow Cantonment.	Oudh and Rohilkhand.	1·7	...	1·7	1	1·7	...	...	1·7
138	Cawnpore Office to Provincial Light Railway Office.	Ditto	·2	...	·2	1	·2	...	...	·2
139	Benares River Office to Rajghat East Indian Railway Office.	Ditto	2·47	...	2·47	1 Wire for 2·37 miles 4 Wires „ ·1 „ 2·47 miles.	2·19	·58	2·19	...
140	Secunderabad Junction to Secretariat at Bolaram.	Bombay	2·4	4·7	7·1	1 Wire for 1· miles 3 Wires „ 5·5 „ 4 „ „ ·6 „ 7·1 miles.	19·9	...	19·9	...
141	Meerut to Railway Station	Punjab	Wire carried on Railway supports			1	·2	...	·2	...
142	Umballa to Railway Station	Ditto	Ditto	ditto	ditto	2	·8	...	·8	...
143	Lahore Railway Junction to Lahore Railway Office.	Ditto	...	·2	·2	4	·8	...	·8	...
144	Allahabad to Kuttra	Bengal	2·31	...	2·31	1 Wire for 1·35 miles 2 Wires „ ·96 „ 2·31 miles.	3·27	...	3·27	...
145	Allahabad to City	Ditto	·58	...	·58	... ...	1·54	...	1·54	...
146	Allahabad to East Indian Railway Station	Ditto	·27	...	·27	... ...	·32	...	·32	...
147	Allahabad Office to Cantonment	Ditto	1·	...	1·	1	1·	...	1·	...
148	Allahabad Office to Fort	Ditto	1·	...	1·	4	4·	...	4·	...
149	Bombay Office to Bori Bandar	Bombay	·814	...	·814	2	1·628	...	1·628	...
150	Sabarmati Bridge to Ahmedabad Camp	Ditto	1·4	...	1·4	1	1·4	...	1·4	...
151	Sabarmati Junction to Sabarmati Railway Station	Rajputana	...	1·	1·	3	3·	...	3·	...
152	Bombay to Cotton-green and Colaba Office	Bombay	·508	...	·508	... ...	1·28	...	1·28	...
153	Moombadevi to Byculla	Ditto	1·002	...	1·002	1	1·002	...	1·002	...
154	Bombay to Mandvie	Ditto	·91	...	·91	1	·91	...	·91	...
155	Bombay to Government-House, Parel	Ditto	·852	·118	·97	1	·97	...	·97	...
156	Delhi to East Indian Railway Office	Punjab	·44	...	·44	1 Wire for ·17 mile 2 Wires „ ·27 „ ·44 mile.	·71	...	·71	...
157	Delhi (East Indian Railway Junction) to Rajputana State Railway Station.	Ditto	·42	...	·42	1	·42	...	·42	...
158	Pabbi Junction to Pabbi Station	Ditto	·08	...	·08	2	·16	...	...	·16
159	Peshawar to Peshawar Station	Ditto	·2	...	·2	1	·2	...	...	·2
160	Ratial Junction to Ratial	Ditto	...	·44	·44	2	·88	...	...	·88
161	Amritsar to Railway Station	Ditto	Wire carried on Railway supports			1	·7	...	·7	...
162	Sambhar Junction (Phulera) to Nawa	Rajputana	...	19·25	19·25	1 Wire for 15· miles 2 Wires „ 4·25 „ 19·25 miles.	23·5	...	23·5	...
163	Barh to Barh Ghat	Bengal	...	2·7	2·7	... ...	9·	...	9·	...
164	Revelgunge Junction to Revelgunge	Ditto	5·75	...	5·75	1	5·75	...	5·75	...
165	Bankipore Office to Jhowgunge (Patna City)	Ditto	1·25	...	1·25	... ...	8·75	...	8·75	...
166	Bajitpur to Chumpta Ghat (Ganges Bank)	Ditto	8·	...	8·	1	8·	...	...	8·
167	Mokameh to Mokameh Railway Station	Ditto	...	·147	·147	... ...	·454	...	·454	...
168	Neemuch Junction to Neemuch Railway Station	Indore	·147	...	·147	4	2·	...	2·	...
169	The Kirk to Sealdah Junction	Bengal	...	·5	·5	3	4·56	...	4·56	...
170	Sealdah Junction to Sealdah Office	Ditto	1·52	...	1·52	4	2·786	...	2·786	...
171	Sealdah Junction to Park Street Junction	Ditto	·033	...	·033	... ...	3·639	...	3·639	...
172	Park Street Junction to Alipore Office	Ditto	·719	...	·719	... ...	4·2	...	4·2	...
173	Calcutta Office to Kidderpore Bridge	Ditto	1·19	...	1·19	... ...	12·22	...	12·22	...
174	Store Yard Junction to Store Yard Office	Ditto	2·444	...	2·444	5	·04	...	·04	...
175	Store Yard Junction to Garden Reach Office	Ditto	·04	...	·04	1	1·763	...	1·763	...
			1·294	...	1·294	... ...				

* 5·0234 miles of wire carried on the supports of Sections Madras Office to Diversion Nellore Lines and to Arkonam.
† Includes 1·394 miles of wire carried on ditto ditto ditto.

No.	Sections of Lines.	Divisions.	Number of Miles of Line.			Number of Miles of Wire.		Cable.	Insulated.	Uninsulated.
			Along Road.	Along Rail.	Total.	No.	Miles.			
	LOCAL LINES—*concluded.*									
176	Calcutta to Fort William	Bengal	1·29		1·29	1	1·29		1·29	
177	Dalhousie Square to No. 7, Wellesley Place	Ditto	·08		·08	No wires on these supports				
178	The Kirk to Howrah Government Office	Ditto	2·131		2·131					
179	East Indian Railway Junction to East Indian Railway Office, Howrah.	Ditto	·18		·18	3	10·998		10·093	
180	Hooghly Bridge Junction to Ruthtollah Branch Office.	Ditto	1·25		1·25		·54		·54	
181	Canning Street Junction to Burra Bazar Office.	Ditto	·25		·25		1·25		1·25	
182	College Street Junction to Chitpore Railway Station.	Ditto	3·06		3·06		·82		·82	
183	Chitpore Railway Junction to Tallah Junction	Ditto	1·535		1·535	1	1·535		1·535	
184	Sham Bazar Junction to Dum-Dum	Ditto	4·12		4·12	1	4·12		4·12	
185	Turner, Morrison & Co.'s to Cox's Ware-house, Cossipore.	Ditto	1·28		1·28	1	1·28*		1·28	
186	Agra Fort to Agra City	Ditto	·68		·68	1	·68		·68	
187	Agra Government Office to S. S. Railway Junction.	Rajputana	1·6		1·6	2	3·2		3·2	
188	Agra Government Office to A. S. Office	Ditto	·25		·25	1	·25		·25	
189	Indore Railway Station to City Branch	Indore	1·		1·	1	1·		…	1·
190	Kamptee to Railway Junction	Nagpur	1·25		1·25	2	2·5		2·5	
191	Bhusaval Office Junction to Railway Station	Ditto	·284		·284	1	·284		·284	
192	Bhusaval Sub-Division Junction to Khandwa Railway Station.	Indore	·11		·11	4	·44		·44	
193	Nagpur Junction to Nagpur Railway Station	Nagpur	·14		·14	3	·42		·42	
194	Damukdia Junction to Ghat Office	Dacca	·78		·78	3	2·34		2·34	
195	Sara Junction to Ghat Office	Ditto	·72		·72	3	2·16		2·16	
196	Saidpur Junction to Traffic Office	Ditto	·06		·06	2	·12		·12	
197	Saidpur Traffic Office to Locomotive Office	Ditto	…	·04	·04	… … …	1·08		1·08	
198	Rangoon Town Lines	British Burmah	2·17	6·1952	8·3652	… … …	56·0713		56·0713	
199	Bareilly Government Office to Fort	Oudh and Rohilkhand.	·54		·54	1	·54		…	·54
200	Kurrachee Office to S P. and D. Railway, Kurrachee City Station.	Sind	·4		·4	1	·4		·4	
201	Kirkee Junction to Kirkee Office	Bombay	·4		·4	1	·4		·4	
202	Tuticorin Junction Post to Tuticorin Railway Office.	Madras	…	·25	·25	3	·75		·75	
203	115¼ miles to Executive Engineer's Office, Bortalao, Nagpur, and Chhattisgarh State Railway.	Nagpur	…	·25	·25	1	·25		·25	
204	Rajghat to Narora	Oudh and Rohilkhand.	4·		4·	1	4·		4·	
205	Powder Proof Range at St. Thomas' Mount	Madras	·331		·331					
206	Narora to Gopalpore	Oudh and Rohilkhand.	57·5		57·5	1	2· 57·5		2· 57·5	
207	Gopalpore to Nanu	Ditto	32·		32·	1	32·		32·	
208	Naini Tal Depôt to Hospital	Ditto	·75		·75	1	·75		…	·75
209	Ranikhet (Kumpore) to Chubatia	Ditto	·83		·83	1	·83		…	·83
210	Naini Tal Office to Naini Tal Cantonment	Ditto	1·7		1·7	1	1·7		…	1·7
211	Bareilly Junction to Fort	Ditto	·54		·54	… … …	1·04		…	1·04
212	P. N. S. Ry. Dist. Supdt.'s Branch to Dist. Traffic Supdt.'s Office at Jhelum.	Punjab	·1		·1	… … …	·5		·5	
213	Railway District Traffic Manager's Line at Umballa.	Ditto	·14		·14	1	·14		·14	
214	Delhi Police Lines	Ditto	5·64		5·64	2 Wires for 4·78 miles. 4 „ „ ·86 „ 5·64 miles.	13·		13·	
215	Viceroy's Line Junction to Simla Office	Ditto	1·03		1·03	1	1·03		1·03	
216	Kuldanah to Burragully	Ditto	13·5		13·5	1	13·5		7·75	5·75
217	Koombri Junction (Kushmore) to Badani Office Terminal.	Sind	4·4		4·4	2	8·8		8·8	
218	Ajmere Railway Station to District Traffic Superintendent's Office.	Rajputana	1·67		1·67	… … …	2·29		·79	1·5
219	Orderly Rooms of the British Regiments H. S. Force to Chudder Ghat and Bolaram Government Office.	Bombay	3·93		3·93	… … …	15·06		15·06	
220	Bombay to Light House, Colaba	Ditto	1·728		1·728	… … …	3·175		3·175	
221	Observatory, Colaba, to Time Ball, Fort	Ditto	·87		·87	… … …	3·983		3·983	
222	Madras Office to Master Attendant's Office	Madras	·55		·55	… … …	2·24		2·24	
223	Do. to Observatory	Ditto	1·01		1·01	… … …	10·33		10·33	
224	Do. to Time Gun	Ditto	·174		·174	… … …	·38		·38	
225	Secretariat in Fort to Guindy Government House (*viâ* Madras Government House Loop).	Ditto	2·58		2·58	… … …	8·66		8·66	
226	Lines worked by A. B. C. Instuments in Calcutta	Bengal	4·251		4·251	… … …	52·569		52·569	
227	Lines worked by A. B. C. Instruments in Rangoon	British Burmah	1·5704		1·5704	… … …	1·5704		1·5704	
228	Lines worked by Special Apparatus in Calcutta	Bengal	1·212		1·212	… … …	13·693		13·693	
			9,883·2632	9,268·6497	19,151·9129	… … …	52,776·1394	115·899	51,284·4564	1,465·434
	LOCAL LINES (Private).									
229	S. P. and D. Railway District Traffic Manager's Lines at Umballa.	Punjab	Wire carried on the supports of Departmental Local Lines.			… … …	1·46		1·46	
230	Colaba Light House to Dock Master's Office, Prince's Dock.	Bombay	2·991		2·991	… … …	4·889		4·889	
231	Lucknow Railway Office to O. and R. Railway Agent's Office.	Oudh and Rohilkhand.	Wire carried on the supports of Departmental Local Lines.			1	1·81		1·81	
232	Lines worked by A. B. C. Instruments in Calcutta.	Bengal	2·33		2·33	… … …	8·6		8·6	
233	Lines worked by A. B. C. Instruments in Rangoon	British Burmah	7·3581		7·3581	… … …	31·7732		31·7732	
234	Lines worked by A. B. C. Instruments in Bassein	Ditto	5·59		5·59	… … …	7·96		7·96	
			18·2691		18·2691	… … …	56·4922		56·4922	

* Departmental wire no longer in use by the firm for whom it was put up.

No.	Sections of Lines.	Divisions.	Number of Miles of Line.			Number of Miles of Wire.		Cable.	Insulated.	Uninsulated.
			Along Road.	Along Rail.	Total.	No.	Miles.			
	TELEPHONE LINES—(Departmental).									
235	Dimapur to Samaguting (Naga Hills)	Assam	12·	...	12·	2	24·	...	19·	5·
236	Burhee to Hazaribagh	Bengal	22·926	...	22·926	1	22·926	...	0·013	22·913
237	Prince's Dock to Wadi Bunder	Bombay	·4	...	·4	Wire not yet put up.				
238	Sultanpur to Serajgunge	Dacca	63·	...	63·	1	63·	...	...	63·
239	Nattore to Rampore Bauleah	Ditto	25·25	...	25·25	1	25·25	...	...	25·25
240	Parbatipur to Dinagepore	Ditto	18·	...	18·	1	18·	...	...	18·
241	Cuttack (Simlibund) to Hukitollah (False Point)	Ganjam	74·245	...	74·245	1 Wire for 69·88 miles 2 Wires „ 4·365 „ 74·245 miles.	78·61	...	78·61	...
	TELEPHONE LINES—(Public).									
242	Import Yard to Arsenal, Fort William	Bengal	1·22	...	1·22	2	2·44	...	2·44	...
243	Government House to Loudon's Buildings	Ditto	Wires carried direct to wall brackets on the building.			2	·25	...	·25	...
244	Mahabaleshvar Office to Government House, Bella Vista.	Bombay	2·	...	2·	1	2·	...	2·	...
245	Poona Council Hall to Ganeshkhind	Ditto	4·19	...	4·19	1	4·19	...	4·19	...
246	Custom House Fort to Prince's Dock	Ditto	·111	...	·111	... ...	3·556	...	3·556	...
247	Port Trust Fort to Prince's Dock	Ditto	1·684	...	1·684	... ...	1·741	...	1·741	...
248	Port Trust Fort to Frere Road	Ditto	·029	...	·029	... ...	1·538	...	1·538	...
249	Secretariat to Government House, Parel	Ditto	6·35	...	6·35	2	12·7	...	12·7	...
250	Secretariat to Government House, Malabar Point	Ditto	3·6	...	3·6	... ...	9·4	...	9·4	...
251	Telephone Lines in Rangoon	British Burmah	·9112	...	·9112	... ...	7·1435	...	7·1435	...
252	Warora Railway Station to Assistant Manager's Office.	Nagpur	1·25	...	1·25	1	1·25	...	1·25	...
253	Nagpur and Chhattisgarh State Railway Manager's Office to Workshops and Running Shed.	Ditto	1·25	...	1·25	2	2·5	...	2·5	...
254	Gopalpore to Jeyra	Oudh and Rohilkhand.	6·3	...	6·3	1	6·3	...	6·3	...
255	Cawnpore-Farukhabad Railway Station to Manager's Office.	Ditto	2·86	...	2·86	... ...	3·14	...	3·14	...
256	Telephone Lines in Rawalpindi	Punjab	2·71	...	2·71	2 Wires for 2·26 miles 4 „ „ ·21 „ 6 „ „ ·03 „ 8 „ „ ·21 „ 2·71 miles.	7·22	...	7·22	...
257	Telephone Lines for Punjab Government Offices at Lahore.	Ditto	7·44	...	7·44	... ...	27·95	...	27·95	...
258	Military Telephone Lines at Simla	Ditto	3·34	...	3·34	... ...	3·52	...	3·52	...
259	Rajputana State Railway Manager's Office to Locomotive Superintendent's Office.	Rajputana	2·6	...	2·6	1 Wire for 1·55 miles 2 Wires „ 1·05 „ 2·6 miles.	3·65	...	3·65	...
260	Commissioner's Line at Ajmere	Ditto	·74	...	·74	2	1·48	...	1·48	...
	TELEPHONE LINES—(Private).									
261	Mohr Brothers' at Akyab	Arakan	2·27	...	2·27	1	2·27	...	2·27	...
262	Bulloch Brothers' at Akyab	Ditto	1·02	...	1·02	... ...	2·72	...	2·72	...
263	Pioneer Press to Manager's Office at Allahabad	Bengal	·043	...	·043	2	·086	...	·086	...
264	Telephone Lines in Calcutta and the Suburbs	Ditto	6·98	...	6·98	... ...	23·346	...	23·346	...
265	P. and O. Office Fort to Prince's Dock and Mazagon.	Bombay	1·389	...	1·389	... ...	6·924	...	6·924	...
266	British India Steam Navigation Co.'s Office Fort to Mazagon.	Ditto	0·059	...	0·059	... ...	5·866	...	5·866	...
267	Edward Bates & Co.'s Fort to Prince's Dock	Ditto	0·022	...	0·022	... ...	3·732	...	3·732	...
268	Graham and Co.'s Fort to Prince's Dock	Ditto	·028	...	·028	... ...	3·646	...	3·646	...
269	Treacher and Co.'s Fort to Byculla	Ditto	·4	...	·4	... ...	6·8	...	6·8	...
270	Richardson and Cruddas', Parel Road to Nesbit Road.	Ditto	·323	...	·323	... ...	·531	...	·531	...
271	Bombay Gazette Fort to Malabar Hill	Ditto	·52	...	·52	... ...	7·97	...	7·97	...
272	Telephone Lines in Rangoon	British Burmah	12·3828	...	12·3828	... ...	58·5743	...	58·5743	...
273	Ditto in Moulmein	Ditto	13·35	...	13·35	1	11·75	1·6	11·75	...
274	Telephone Line at Lizziepur	Dacca	1·75	...	1·75	1	1·75	...	1·75	...
275	Alston and Co.'s Office at Tellicherry to their Coffee-Works at Pully Coon.	Malabar Coast	1·32	...	1·32	1	1·32	...	1·32	...
276	Adjutant, 18th B. C., to Quarter-Guard at Nowshera.	Punjab	1·75	...	1·75	1	1·75	...	1·75	...
277	Telephone Lines in Lahore	Ditto	2·65	...	2·65	... ...	21·11	...	21·11	...
			310·663	...	310·663	... ...	493·8998	1·6	359·7368	134·163
			10,212·1953	9,268·6497	19,480·845	... ...	53,326·5314	117·499	51,700·6854	1,599·597
	Deduct—Miles of East Indian State Railway wires carried on posts in joint use with the Department and the Railway included in Lines Nos. 1 and 2, but shown below under head East Indian State Railway Lines.		·066	...	066	... ...	792·324	...	792·324	...
	Do. —Miles of South Indian Railway Line included in Line No. 10		...	1·25	1·25	... ...	...	...	...	...
			·066	1·25	1·316	... ...	792·324	...	792·324	...
			10,212·1293	9,267·3997	19,479·529	... ...	52,534·2074	117·499	50,908·3614	1,599·597

Classified List of Lines of Telegraph in India and British Burmah, &c.—concluded.

No.	Sections of Lines.	Divisions.	Numbers of Miles of Line.			Number of Miles of Wire.		Cable.	Insulated.	Uninsulated.
			Along Road.	Along Rail.	Total.	No.	Miles.			
	Add—EAST INDIAN STATE RAILWAY LINES.									
278	Howrah to Luckhee Serai (by Chord)	Bengal	...	259·402	259·402	... ...	1,205·48	...	1,205·48	...
279	Khana Junction to Sahebgunge (by Loop)	Ditto	On departmental supports			3	431·25	...	431·25	...
280	Sahebgunge to Dinapore	Ditto	...	190·38	190·38	... ...	608·313	...	608·313	...
281	Dinapore to Naini	Ditto	...	215·12	215·12	... ...	870·63	...	870·63	...
282	Naini to Allahabad	Ditto	...	4·5	4·5	7	31·5	...	31·5	...
283	North Bank, Jumna, Allahabad, to Delhi Line No. 2.	Ditto	...	389·888	389·888	... ...	1,574·877	...	1,574·877	...
284	Sahibgunge Railway Terminal to Luckhee Serai	Ditto	On departmental supports			1	107·5	...	107·5	...
285	Naini to Jubbulpore	Ditto	Do. do.			3	669·9	...	669·9	...
286	Moghal Sarai to Benares	Ditto	...	6·	6·	4	24·	...	24·	...
287	Branches and Spare Wires	Ditto	·066	56·947	57·013	... ...	161·214	...	161·214	...
	GRAND TOTAL		10,212·1953	10,389·6367	20,601·832	... ...	58,218·8714	117·499	56,593·0254	1,599·597
	Add—Lines the property of Railway but maintained by this Department—									
	South Indian Railway				1·25	... ...	...			
	Sind, Punjab, and Delhi Railway				446·52	... ...	1,232·99			
					447·77		1,232·99			
	GRAND TOTAL OF DEPARTMENTAL, RAILWAY AND NATIVE STATE LINES				21,049·602	... ...	59,451·8614			

APPENDIX J.

Return of Telegraph Offices and Miles of Line and Wire maintained by the Telegraph Department for State and Guaranteed Railways on 31st March 1882.

Name of Railway.	Capital expended on behalf of Railway by Telegraph Department up to 31st March 1882, not including Office fittings.	No. of Offices maintained.	Property of Telegraph Department.			Railway Property.		Total mileage of posts maintained for Railways.	Total mileage of wire maintained for Railways.	Remarks.
			Miles of posts in joint use of Department and Railways.	Miles of posts only used by Railways.	Miles of wire in use by Railways.	Miles of posts maintained by Telegraph Department.	Miles of wire maintained by Telegraph Department.			
			GUARANTEED RAILWAYS.							
Bombay, Baroda and Central India Railway.	*R* (1) 4,07,934	...	389·557	50·443	1,155·439	...	...	440·	1,155·439	(1) The capital cost is made up of the purchase-money of the Bombay, Baroda and Central India Railway lines, the cost of taking over those lines, the cost of constructing the line Anand to Pali, and 15 per cent. for establishment and tools and plant on the latter two works. The offices are not fitted nor supervised by the Government Telegraph Department.
Eastern Bengal Railway	(2) 1,062	...	...	...	1·875	...	...	...	1·875	(2) The capital cost is of the line from Chitpore to Eastern Bengal Railway junction; offices not fitted nor supervised by the Government Telegraph Department.
Oudh and Rohilkhand Railway	3,43,177	75	523·809	23·8	1,079·08	...	...	547·609	1,079·08	The offices are supervised but not fitted up by the Government Telegraph Department.
Sind, Punjab and Delhi Railway	...	71	207·22	...	414·54	446·52	1,232·99	653·74	1,647·53	Under an agreement between the Secretary of State and the Board of Directors of the Sind, Punjab and Delhi Railway, this Department took over *without payment* all the Company's plant on 1st July 1881. The line and offices of the Railway are maintained and supervised by this Department.
South Indian Railway	...	...	427·	39·4	938·07	1·25	...	467·65	938·07	No agreement yet made and capital account not yet made up.
Total Guaranteed Railways.	7,52,173	146	1,547·586	113·643	3,589·004	447·77	1,232·99	2,108·999	4,821·994	
			STATE RAILWAYS.							
Achnera-Muttra State Railway	23,883	3	...	22·5	45·32	...	...	22·5	45·32	
Amraoti State Railway	...	...	5·35	...	5·35	...	...	5·35	5·35	The cost of the wire and of its erection was paid for in full by the State Railway. Line maintained by the Government Telegraph Department, but office supervised by the Great Indian Peninsula Railway.
Bhavnagar-Gondal State Railway	1,88,764	31	103·244	91·927	427·821	...	...	195·171	427·821	Capital cost made up in the year 1882-83.
Bhopal State Railway	10,350	...	...	11·	22·9	...	...	11·	22·9	
Calcutta and South-Eastern State Railway.	...	9	...	43·386	87·253	...	...	43·386	87·253	
Cawnpore-Farukhabad Provincial Light Railway.	68,398	12	...	86·	173·484	...	...	86·	173·484	
Dhond and Manmad State Railway	1,40,097	...	51·	95·	438·75	...	...	146·	438·75	Technical management of the offices was taken over by the Great Indian Peninsula Railway on 1st October 1881.
Dildarnagar-Ghazipur State Railway.	7,475	1	...	12·077	12·158	...	...	12·077	12·158	

Return of Telegraph Offices and Miles of Line and Wire maintained by the Telegraph Department, &c.—continued.

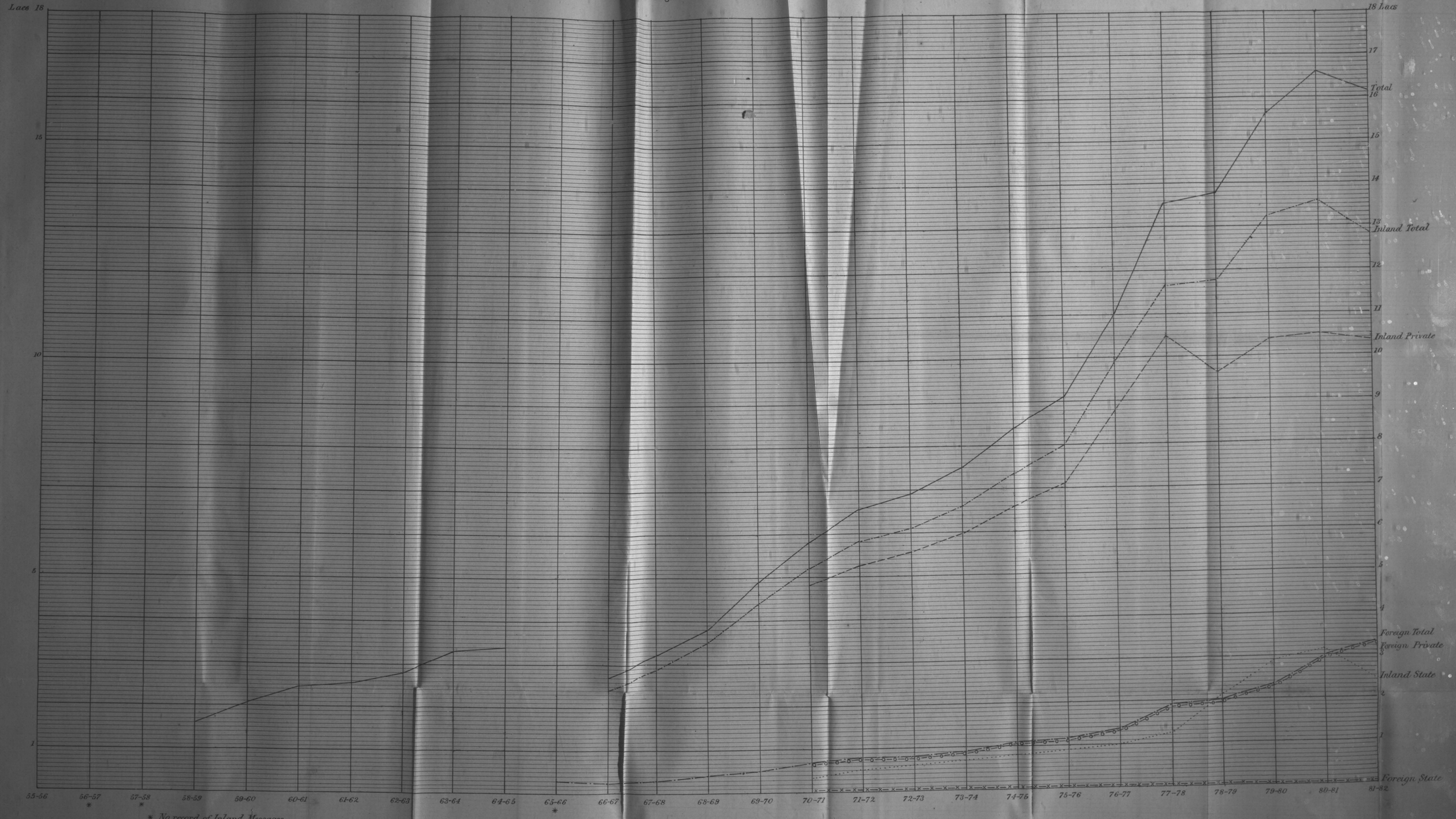
Name of Railway.	Capital expended on behalf of Railway by Telegraph Department up to 31st March 1882, not including Office fittings.	No. of Offices maintained.	Property of Telegraph Department.			Railway Property.		Total mileage of posts maintained for Railways.	Total mileage of wire maintained for Railways.	Remarks.
			Miles of posts in joint use of Department and Railways.	Miles of posts only used by Railways.	Miles of wire in use by Railways.	Miles of posts maintained by Telegraph Department.	Miles of wire maintained by Telegraph Department.			
	₹				STATE RAILWAY—*contd.*					
East Indian State Railway (Main Line).	880	166	255·218	1,122·303	5,014·77	...	...	1,377·521	5,014·77	The capital shown against Jubbulpore Line is only the cost of the extra works required on Railway account, adding three extra wires, Naini to Jubbulpore and cross staying, Naini to Jubbulpore, plus 15 per cent. for establishment. Inclusive of the share of the posts, the Railway pays interest for the Jubbulpore extension on ⅓ of ₹4,44,357-5-2. The Main line is under partial reconstruction, and all the offices are being refitted, but rent is paid on an assessment. ₹880 shown against the Main Line are the cost of the line from East Indian Railway Station Cawnpore to new goods-shed of East Indian Railway at Collectorgunge, Cawnpore.
Ditto ditto (Jubbulpore Line)	1,14,751		223·3	...	669·9	...	...	223·3	669·9	
Indus Valley State Railway .	3,68,252	53	508·25	·75	1,023·5	...	...	509·	1,023·5	
Kandahar State Railway . .	1,51,552	12	140·25	7·73	281·23	...	...	147·98	281·23	Capital cost made up in the year 1882-83.
Kaunia-Dhurla State Railway .	...	2	...	17·	17·	...	...	17·	17·	Capital cost not yet made up.
Khamgaon State Railway . .	...	...	7·45	...	7·45	...	...	7·45	7·45	The cost of the wire and of its erection was paid for in full by the State Railway. Line maintained by the Government Telegraph Department, but office supervised by the Great Indian Peninsula Railway.
Muttra-Hathras State Railway .	26,577	5	...	29·	58·273	...	...	29·	58·273	
Mysore State Railway . .	72,189	14	88·821	·341	178·578	...	...	89·162	178·578	Capital cost made up in the year 1882-83.
Nagpur and Chhattisgarh State Railway.	43,619	14	12·04	132·75	287·33	...	...	144·79	287·33	
Nizam's State Railway . .	1,04,839	13	126·1	1·64	248·24	...	...	127·74	248·24	
Northern Bengal State Railway .	1,88,015	33	214·01	53·64	516·5	...	...	267·65	516·5	
Nalhati State Railway . . .	4,112	3	...	27·25	27·35	...	...	27·25	27·35	The line belongs to the Railway. The amount is the value of posts supplied by the Government Telegraph Department for reconstructing the line.
Patna and Gya State Railway .	46,729	8	...	57·586	118·355	...	...	57·586	118·355	
Patri State Railway . . .	...	...	...	21·5	21·5	...	...	21·5	21·5	The capital cost has been transferred to Public Works Department, Bombay, under orders of the Government of India, No. 72 A. T, dated 26th August 1879.
Punjab Northern State Railway .	1,20,547	50	346·53	74·42	1,106·22	...	...	420·95	1,106·22	
Rajputana-Malwa State Railway .	6,36,274	147	533·3	162·25	2,053·12	...	...	695·55	2,053·12	
Ditto ditto (Malwa Line) .			400·81	...	948·71	...	...	400·81	948·71	
Rangoon and Irrawaddy Valley State Railway.	1,02,700	21	162·886	·679	329·099	...	...	163·565	329·099	
Rewari-Ferozepore State Railway .	...	3	...	34·58	35·12	...	...	34·58	35·12	Capital cost not yet made up.
Sindia State Railway . . .	52,510	11	75·	...	154·42	...	...	75·	154·42	
Tirhoot State Railway . .	52,976	25	125·7	61·366	299·324	...	...	187·066	299·324	
Wardha Coal State Railway .	32,947	5	...	46·05	90·85	...	...	46·05	90·85	
Total State Railways .	25,71,575	641	3,379·259	2,212·725	14,699·875	...	...	5,591·984	14,699·875	
			SUBSIDIZED RAILWAY.							
Darjeeling Himalayan Railway .	13,139	7	34·06	·39	34·84	...	...	34·45	34·84	Capital cost made up in the year 1882-83.
GRAND TOTAL .	33,23,748*	794	4,960·905	2,326·758	18,323·719	447·77	1,232·99	7,735·433	19,556·709	

* This total exceeds that shown in the Capital Account for the year by ₹ 4,25,644, the cost of Lines for which the Capital bills have been completed since that account was closed. The amount of this difference will be transferred from the head "Departmental" in the Capital Account of the year 1882-83.

Government of India Central Printing Office.—No. 32 D. G. T. D.—26-12-82. 300.

DIAGRAM A.

Shewing the Number of Inland and Foreign Messages transmitted from the year 1855-56 to 1881-82.

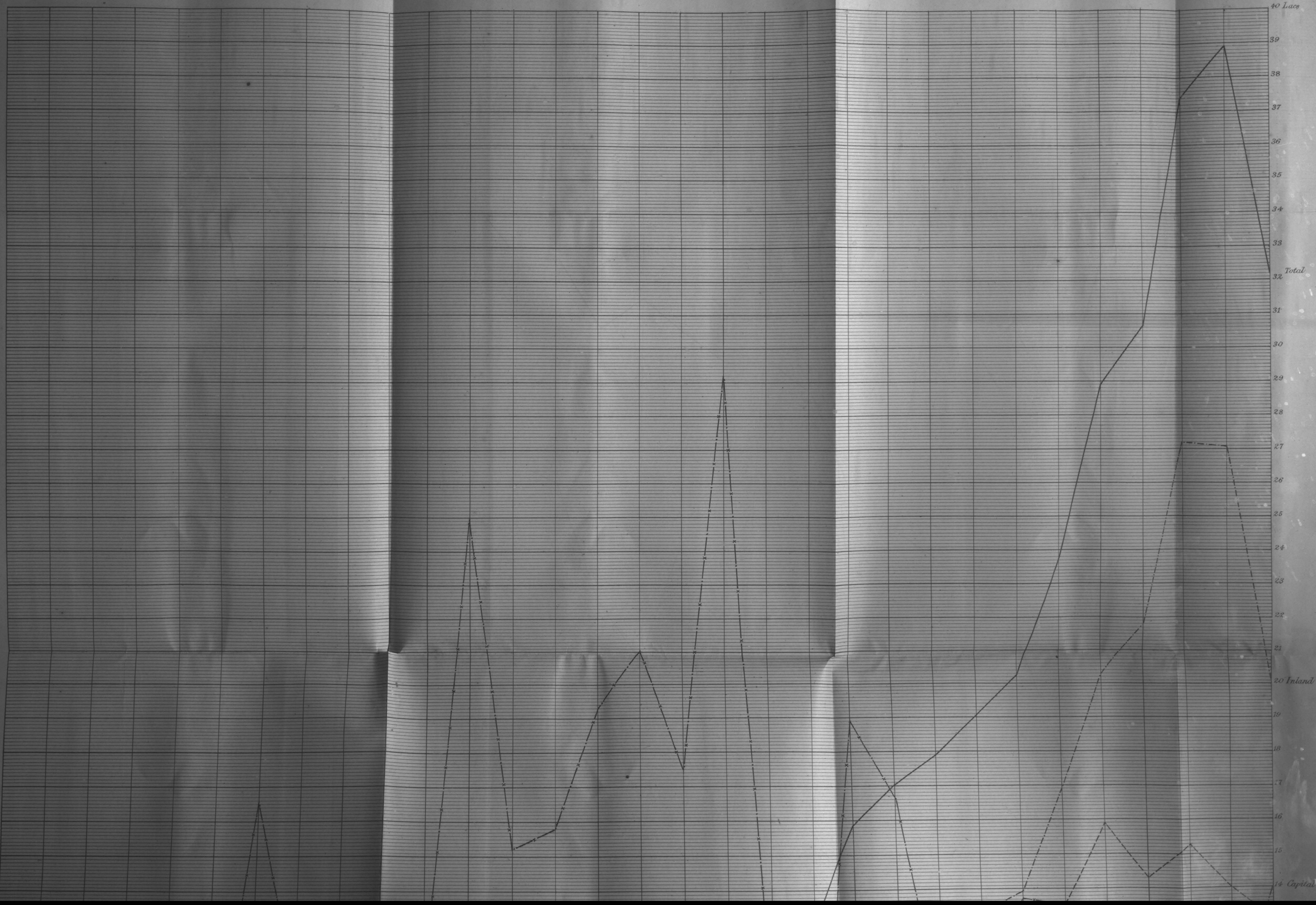


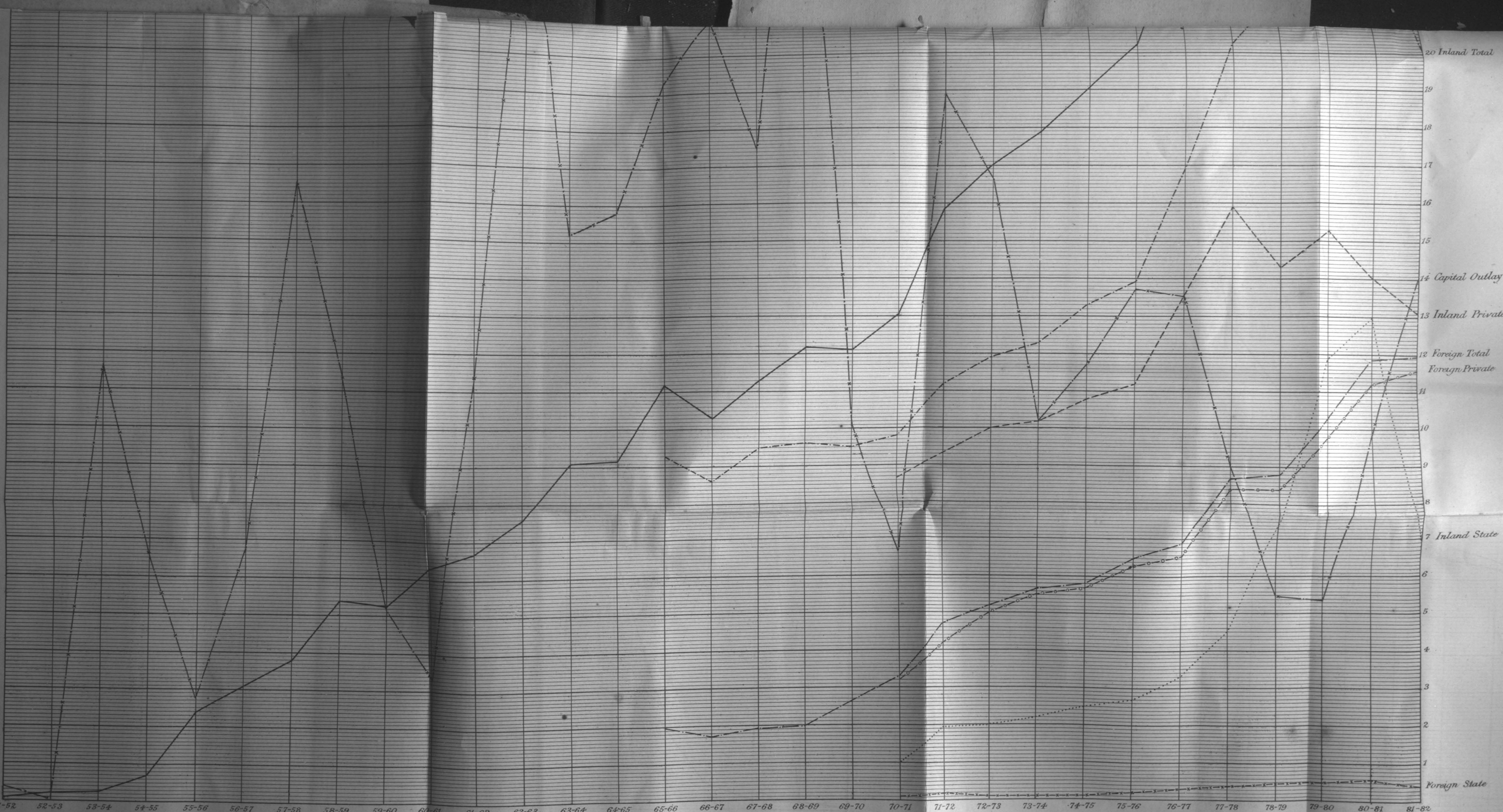
* No record of Inland Messages

Lithographed at the Surveyor General's Office, Calcutta, November 1882.

DIAGRAM B.

Shewing the Capital Outlay on Telegraph lines and the Annual Collections on Inland and Foreign Messages from the year 1851–52 to 1881–82.





Lithographed at the Surveyor General's Office, Calcutta, November 1882.

DIAGRAM C.

Shewing the Yearly Average Time of Transmission of Messages between Calcutta and Kurrachee, Calcutta and Bombay,
Calcutta and Madras, Kurrachee and Bombay, Bombay and Madras, Galle to Madras, and Total Average from the year 1867-68 to 1881-82.



N. B.—Total Average includes Galle to Madras.

Lithographed at the Surveyor General's Office, Calcutta, November 1882.

