

GOVERNMENT OF INDIA
RAILWAY DEPARTMENT
(RAILWAY BOARD)

REPORT
BY THE
RAILWAY BOARD
ON
INDIAN RAILWAYS

FOR
1935-36

Volume I



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Map of India showing railways open and under construction on 31st March 1936	In the pocket of the back cover.

INTRODUCTORY NOTE.

1. For the information of foreign readers of this report, who are unaccustomed to the use of Indian currency and units, it may be mentioned that a lakh is one hundred thousand and a crore one hundred lakhs.

2. An anna is a 16th part of a rupee and a pie the 12th part of an anna.

3. The approximate value in English coinage of a rupee at the present rate of exchange is one shilling and six pence.

Note.—Indian Railway Systems have been classified under three classes for statistical purposes—

Class I—Railways with gross earnings of Rs. 50 lakhs and over a year.

„ II—Railways with gross earnings of less than Rs. 50 lakhs a year, but exceeding Rs. 10 lakhs a year.

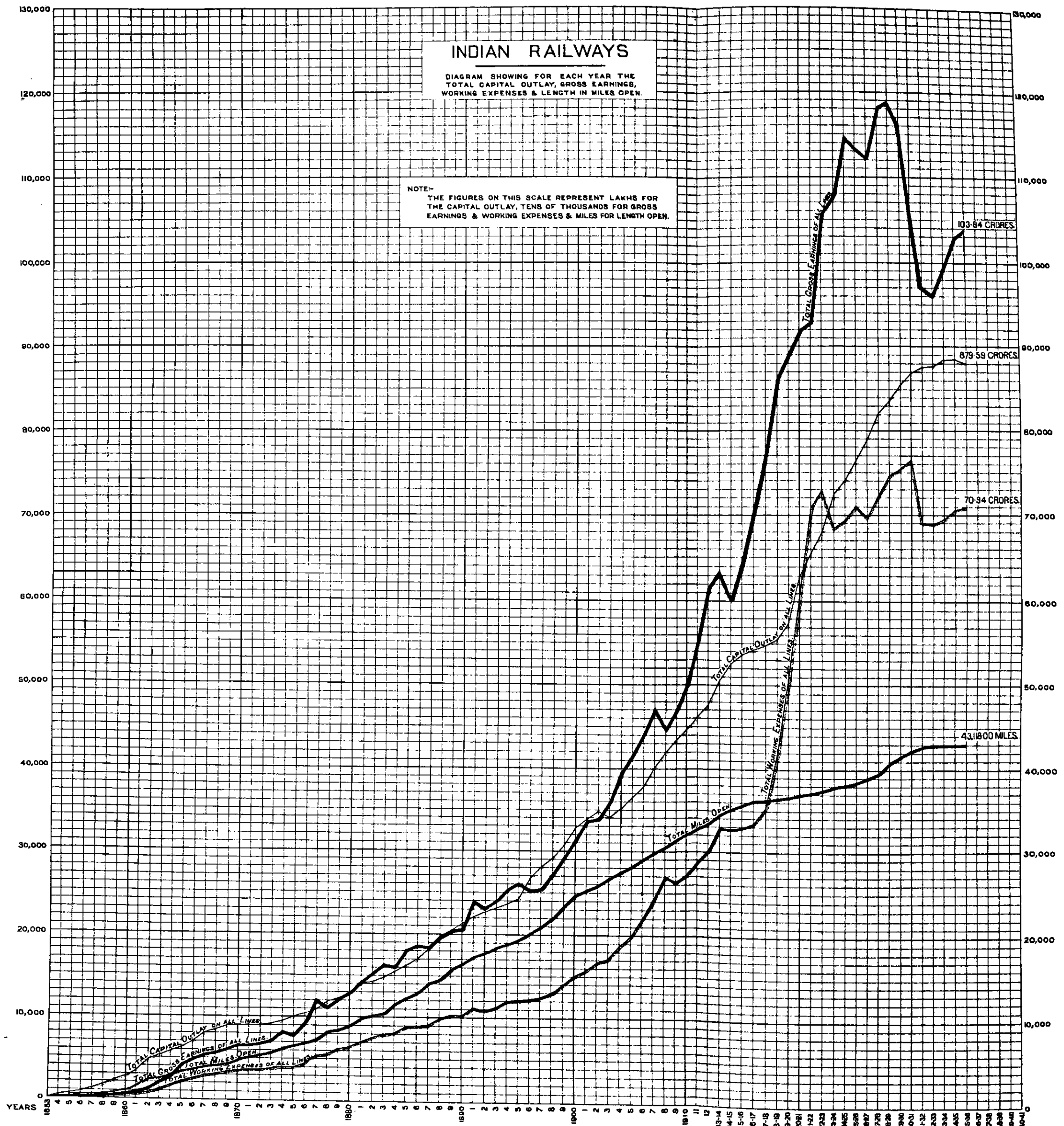
„ III—Railways with gross earnings of Rs. 10 lakhs and under a year.

A detailed list of the railways in each class will be found in Appendix A, pages 89 to 93.

INDIAN RAILWAYS

DIAGRAM SHOWING FOR EACH YEAR THE
TOTAL CAPITAL OUTLAY, GROSS EARNINGS,
WORKING EXPENSES & LENGTH IN MILES OPEN.

NOTE:-
THE FIGURES ON THIS SCALE REPRESENT LAKHS FOR
THE CAPITAL OUTLAY, TENS OF THOUSANDS FOR GROSS
EARNINGS & WORKING EXPENSES & MILES FOR LENGTH OPEN.



NORTH WESTERN RAILWAY.



Quetta Railway Station after the earthquake on 31st May 1935.

CHAPTER I.

GENERAL REVIEW.

1. Introduction.—The Railway Board's annual report on Indian Railways is published in two volumes for the period from 1st April 1935 to 31st March 1936. Volume I contains a review of the general administration and the financial results of the railways with special comments on matters of outstanding interest. It also covers references to new construction of railway lines, improvements in or additions to rolling stock, introduction of improved methods of operation, the recruitment, training and welfare of staff, and other matters having an important bearing on railway management and operation. Volume II is a compilation of financial and statistical summaries and statements covering the main heads of the capital and revenue accounts and practically the complete range of railway working.

2. Monsoon conditions and agricultural results.—India being primarily an agricultural country, the welfare and general prosperity of the people are very largely dependent on the incidence and effectiveness of the monsoon rainfall. This indirectly affects the railways, which are the main carriers of the exportable surplus of agricultural products. A few remarks on this important subject may therefore serve to call to mind the conditions obtaining during the year. During the monsoon period rainfall was generally within 10 per cent. of the normal, and was defective in some important provinces, such as Sind, Bengal, United Provinces and Punjab. During the retreating period, conditions were unusually dry over the greater part of the country. Taking the year, as a whole, the rainfall was within 20 per cent. of the normal all over the country except on the North Madras Coast where it was defective by 23 per cent.

From the agricultural point of view, the season should, on the whole, be regarded as having been fair. Compared with the previous season, the total outturn of rice recorded a decline of 8 per cent., owing chiefly to unfavourable conditions in the main rice-growing tracts, Bengal and Bihar and Orissa. In Burma, however, the crop was good and increased by 11 per cent. In the case of sugarcane, the total outturn showed an increase of 16 per cent. over the previous year, due mainly to extended cultivation. The outturn of jute declined by 25 per cent. owing to reduction of acreage brought about partly by adverse weather conditions and partly by an intensive campaign for restriction of sowings. Cotton recorded an increase of 18 per cent. mainly due to comparatively favourable seasonal conditions. The production of groundnut, sesamum and castor seed increased to the extent of 15, 13 and 16 per cent. respectively. The wheat crop of 1934-35—the commercial crop of the year under review—recorded an increase of 3 per cent. as compared with the preceding year. In the case of winter oilseeds, the outturn of rape and mustard during 1934-35 declined by about 5 per cent. but that of linseed recorded an increase of 11 per cent. as compared with the previous season.

3. The earnings of State-owned lines increased from Rs. 90·20 crores in 1934-35 to Rs. 90·65 crores in 1935-36 but the net result of the year's working was a loss of about four crores. No contribution could therefore be made to general revenues.

Goods traffic showed an appreciable improvement: the total tonnage carried having increased from 84·5 million tons in the previous year to 86·9 million tons in 1935-36, and the earnings from Rs. 64·35 crores to Rs. 64·69 crores. The net ton miles also increased from 20,352 millions to 20,554 millions. The average rate earned per ton per mile for all commodities, however, showed a slight decrease, being 6·04 pies as against 6·07 pies in 1934-35.

Passenger traffic showed a slight improvement, 7 million more passengers being carried, with a resultant rise in earnings from Rs. 30.3 to 30.6 crores.

4. Mileage.—The new mileage opened for traffic during the year was 111 of which 71 miles were state-owned; but due to realignment the net addition to the mileage of railways during the year was 98. The total route mileage at the end of the year was 43,118. In addition, there were 63 miles under construction on 31st March 1936.

5. Railways and the Legislature.—As in past years the members of the Legislative Assembly and the Council of State continued to take a keen interest in the working of railways. Out of a total number of 3,649 questions asked in both the Houses during the year 1935-36, 1,181 or 31 per cent. were answered by the Railway Department as compared with 30 per cent. during the previous year.

Three resolutions also came up for discussion—two in the Legislative Assembly and one in the Council of State, *viz*:—

(i) *Manufacture of Locomotive requirements in State Railway workshops.*—A resolution was moved on the 4th September 1935 in the Legislative Assembly recommending to the Governor-General in Council that “immediate steps be taken to equip State Railway Workshops with necessary additional plant and machinery to ensure manufacture of all locomotive requirements within the Railway workshops”.

This was opposed by Government mainly on the ground that, in view of the fluctuating nature of the demand and the probability of fewer locomotives being required for some time to come as a result of steps taken to improve the utilisation of locomotives, the expenditure involved was likely to be unremunerative; but the resolution was passed by a majority of the Assembly.

(ii) *Purchase of the Bengal and North-Western and Madras and Southern Mahratta Railways.*—On the 4th February 1936, Mr. Muhammad Azhar Ali moved the following Resolution in the Legislative Assembly:—

“That this Assembly recommends to the Governor-General in Council that immediate and necessary steps be taken to take over the control of the Bengal and North-Western Railway and the Madras and Southern Mahratta Railway from the present lessees and further not to extend the contracts which expire in the year 1937.”

The debate was continued on the 11th, when the resolution was passed without a division. The resolution was supported on the grounds that cheap money conditions prevailing at present could make purchase a financially profitable proposition and that the inconvenience suffered by the travelling public on the Bengal and North-Western and Rohilkund and Kumaon lines was giving rise to widespread discontent.

The Resolution was not opposed by Government but it was explained that the amount required at the end of 1937 for the acquisition of the three railways would be in the neighbourhood of £17 million and it would be impossible to predict the condition of the money market at the end of 1937. The date of acquisition would almost synchronise with the setting up of the Federal Railway Authority who would be faced at the very start with the heavy task connected with the transfer of these railways to State management.

(iii) *Economies in Railways.*—On the 13th March 1936, the Hon'ble Mr. Hossain Imam moved a Resolution in the Council of State regarding the exploration of further avenues of economy in the railways and the revision of the Separation Convention of 1924-25.

The second part of the Resolution namely, the revision of the Separation Convention of 1924-25 was opposed by Government on the ground that under the Government of India Act, 1935, the Federal Railway Authority or the Statutory Railway Board when set up, would have to come to a financial settlement with the Government of India and consequently there did not seem to be much use in attempting to bring about a revision of the existing convention at the present moment. This was, therefore, withdrawn by the mover.

The first part of the resolution was accepted by Government though it was made clear that Government did not agree with all the arguments advanced by the mover.

6. Railway Budget.—The Railway Budget for 1936-37 was presented to both the Houses of the Legislature on the 17th February 1936 after a previous detailed discussion in the Standing Finance Committee for railways at their meetings held on 30th and 31st January 1936 and 13th February 1936. The general discussion of the budget took place in the Legislative Assembly on the 19th February 1936 and in the Council of State on the following day. The voting on the demands for grants in the Assembly occupied four days, *viz.*, 24th to 27th February 1936.

In the course of the general discussion in the Assembly criticisms were offered on the railway budget on various points, the most important of which were increase in freights and fares, introduction of legislation for ticketless travellers, co-ordination and competition of road and rail transport, corruption among railway servants, amenities for third class passengers, imposition of cut in salaries, over-capitalisation of railways, wagon building industry in India, deficit on strategic lines and policy of amalgamation of railways.

Of the motions for reductions made in the course of debates on the voting of demands for grants the most important related to the general policy of railway administrations, grievances of third class passengers, grievances of railway workers and amalgamation of railways, and these motions were carried. The next important motions for reduction related to paucity of Muslims in railway services, and creation of a ministry or department of communications. On receipt of satisfactory replies from Government they were withdrawn by the movers. Some other questions of minor importance were also raised but the motions pertaining to them were either negatived or withdrawn and the demands for grants were voted in full by the Assembly.

7. Standing Finance Committee for Railways.—The committee met seven times during the year. They scrutinised the proposals relating to capital and revenue expenditure to be incurred during 1936-37 and examined the demands for grants for that year prior to their being placed before the Legislative Assembly. They examined also proposals for the creation of certain superior posts on railways and approved of them. The committee were apprised of the position regarding the policy of the Railway Board in the matter of stores purchase, the facilities provided to Indian students for practical training in engineering firms in Europe and the work undertaken by the Central Standards Office attached to the Railway Board. A list of the important items of standard designs prescribed by the Central Standards Office was also placed before the committee for information.

8. Purchase of the Amritsar-Patti-Kasur Railway.—The Amritsar-Patti-Kasur Railway, 54.81 miles in length, which was owned by the Amritsar Patti Railway Company and worked by the North Western Railway Administration for 45 per cent. of the gross earnings, was purchased by Government on 31st December 1935 at a cost of Rs. 43,84,288. The purchase of the line was justified on administrative and financial grounds.

9. Meetings with Agents of Railways and Local Governments.—The Railway Board held two meetings with the Agents of the principal railways, one in Simla on the 3rd October 1935 and the other in New Delhi on the 19th March 1936. Among the subjects discussed at the two meetings were :—

- (i) control of licensed coolies at station;
- (ii) advertising in railway carriages;
- (iii) future of the Central Publicity Bureau;
- (iv) passenger fares on railways;
- (v) intermediate and third class mail fares; and
- (vi) methods to be adopted for the most advantageous disposal of surplus stores on railways.

During the year under review several visits were paid by the Honourable Member for Railways, the Chief Commissioner of Railways, and the Financial Commissioner, Railways, to the headquarters of various railway administrations and Local Governments. Copies of their tour programmes were sent in advance to the Press, Local Governments and important mercantile associations in order to give the latter an opportunity of placing their views on railway problems before the Railway Board.

10. Central Advisory Council for Railways.—During the year 1935-36, meetings of the Central Advisory Council for Railways were held in New Delhi on the 1st, 3rd and 6th April 1935, in Simla on the 14th September 1935, and again in New Delhi on the 22nd February, the 21st March and the 28th March 1936. The following subjects were discussed at these meetings with the results shown side by side :—

Subject.	Result of discussion.
(i) Abolition of the quota system of recruitment for the Transportation (Traffic) and Commercial Mechanical Engineering, Transportation (Power) and Electrical Departments of State Railways.	Pandit Nilkantha Das and Mr. Vencatachalam Chetty were of opinion that provincial representation in the services was necessary. Mr. S. K. Som, was strongly opposed both to territorial and communal representation in the higher services. The other members raised no serious objection to the proposal.
(ii) Improved third class carriages	Various suggestions were put forward which were noted for consideration. Members were shown in this connection, at New Delhi station a specimen third class carriage of improved design to seat 96 persons divided into six compartments holding 16 passengers each and each compartment provided with an improved type of latrine.
(iii) Association of non-official members of the public as assessors at magisterial enquiries into serious accidents.	The opinion of the Council was that when a magistrate holds an enquiry, which he does only in serious cases, he should as a matter of course have assessors to assist him.
(iv) Representation of agriculturists and passengers' interests on Local Advisory Committees.	It was decided that the Railway Board should enquire from the Secretaries of the various Legislative Councils what the procedure actually was for electing or nominating the members of the Local Advisory Committees and to consider the subject further when this information was obtained.
(v) Provision of non-smoking compartments in railway trains.	It was decided to try the experiment of reserving one third class compartment on a train for non-smokers on certain sections of the North Western Railway and to watch the results.
(vi) Reduction in the number of classes of accommodation on Indian Railways.	Members were invited to express their views on the subject so that the matter could be further considered in consultation with the Agents.
(vii) Future educational policy on Railways.	At the meeting of the Central Advisory Council for Railways on the 14th September 1935, a Sub-committee was appointed to examine the proposals made by the Government of India relating to the policy of railways with regard to the assistance to be given to railway employees towards the education of their children. The Committee met for this purpose on the 26th September 1935 and had the assistance of Mr. Tylden Pattenson, Member, Railway Board, Diwan Bahadur Mathra Das, Director of Estab-

Subject.	Result of discussion.
(viii) Proposed legislation to combat ticketless travel.	<p>lishment and Mr. Moody, Secretary, Railway Board, in examining the question. The sub-committee's report was placed before the Council on the 22nd February 1936 and received the approval of the majority of the members.</p> <p>The discussions showed that there was considerable opposition to the proposals. The Chairman during the course of the discussions explained that so long as a passenger, who was found travelling without a proper pass or ticket, was willing to pay the excess charge and fare leviable from him, there was no intention either to prosecute him or to interrupt his journey to his destination.</p>

11. Local Railway Advisory Committees.—These committees, which enable Railway Administrations to discuss periodically with representatives of public bodies and others matters connected with the requirements of passengers and the provision of facilities for traffic generally, continued to function on all Class I Railways (except the Jodhpur Railway), and on the Barsi Light Railway. Ninety-four meetings of the various committees were held and particulars of the various subjects discussed have been embodied in pamphlets published quarterly. Some of the more important matters that were the subject of discussion are detailed below:—

- (i) Accommodation for third class passengers in trains.
- (ii) Reservation of berths.
- (iii) Improvement in carriages reserved for ladies.
- (iv) Concessions to third class passengers.
- (v) Cooly contracts.
- (vi) Design of carriages.
- (vii) Indian restaurant cars.
- (viii) Electrification of stations.
- (ix) Provision of fans in lower class carriages.
- (x) Special arrangements for festivals.
- (xi) Provision of Indian style of lavatories.
- (xii) Inspection of foodstuffs.
- (xiii) Revision of goods tariffs.
- (xiv) Construction of new lines.
- (xv) Overcrowding in trains.
- (xvi) Provision of overbridges and raised platforms.
- (xvii) Provision of waiting rooms.
- (xviii) Catering arrangements at stations.
- (xix) Introduction of complaint books at stations.
- (xx) Supply of drinking water to passengers.

12. Railway Rates Advisory Committee.—The Railway Rates Advisory Committee continued to function with Sir Zahid Suhrawardy as its President. During the year under review two cases were referred to the Committee for investigation, *viz.*:—

- (i) A complaint from Messrs. Martin and Company, Calcutta and nine other colliery owners against the East Indian Railway alleging that—
 - (a) the terminal charge on coal levied on traffic from the Ranigunj coalfields was unreasonable;
 - (b) the freight charged for coal from some collieries was also unreasonable.

- (ii) A complaint from Messrs. Jeetmal Kanaudia of Cawnpore, against the Great Indian Peninsula Railway alleging that the rates for myrabolam from Jubbulpore to Cawnpore and *via* Cawnpore were unreasonable.

In the first case, the Committee found that the levy of a terminal charge was not unjustified and as the question of the quantum of the charge was not in dispute the Committee did not feel called upon to report on its reasonableness. The second point, *i.e.*, that the freight charged for coal was unreasonable was not pressed by the applicants.

The Committee's report on this case, was received at the close of the year and was under consideration by Government.

The second case was still under enquiry by the Committee at the close of the year.

The Committee also reported on the following two cases which had been referred to them in previous years:—

- (i) Classification of Upson Board and Upson Insulating Board (a kind of patent board used for insulating or building purposes in ceilings, walls or floorings).
- (ii) Complaint from Messrs. Goculdass Hansraj, Calcutta, regarding rates for rice.

As regards (i) the Committee were of the opinion that the applicant had not made out a case that the rates were unreasonable in themselves, but held that it was incorrect to treat these articles as "Roofing, felt or patent". The Committee, therefore, recommended that a new classification heading, descriptive of these commodities should be introduced. The Government of India accepted the views of the Committee and action was taken accordingly.

As regards (ii), the Committee's finding was that the rates complained of were not unduly preferential. The Government of India agreed with this view.

The following three cases which were reported on by the Committee at the close of 1934-35, and to which reference was made in that year's Report, were taken into consideration by the Government of India:—

- (1) rates for cotton from the Punjab to Rajnandgaon;
- (2) and (3) rates for coal from the Korea coalfields.

In these cases the Government of India agreed with the Committee's view that the rates in question were not unreasonable.

Four other representations were received for a reference to be made to the Railway Rates Advisory Committee. These referred to—

- (a) alleged preferential rates quoted by the Bengal Nagpur Railway for fresh fruits;
- (b) rates for biddy leaves from certain stations to Shalimar;
- (c) rates for cotton and yarn waste from Bombay to Ahmedabad;
- (d) rate for fireclay from Chaurasi to Barakar.

These cases were not referred to the Committee as—

- (a) the preferential rates complained of were withdrawn by the Railway Administration;
- (b) a *prima facie* case for reference to the Committee had not been made out;
- (c) the matter was one for reference by the applicant direct to the Railway Administration;
- (d) the matter was under correspondence with the applicant at the close of the year.

13. Job Analysis.—It was mentioned in the last year's report that the Railway Board and Railway Administrations had already taken action in

regard to some of the recommendations made by Mr. Pope in his second report while others were under further detailed investigation. Job analysis was continued on most of the railways during the year under review and the following table shows the economies effected on each of the more important railways and the cost of the analysis organisation for the three years 1933-34, 1934-35 and 1935-36 :—

Railways.	1933-34.		1934-35.		1935-36.	
	Cost of Job analysis organisation.	Savings effected.	Cost of Job analysis organisation.	Savings effected.	Cost of Job analysis organisation.	Savings effected.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
East Indian	77,691	7,01,128	92,884	18,14,544	1,13,541	5,32,459
Great Indian Peninsula	56,880	4,15,000	64,000	2,04,246	59,574	2,04,859
North Western	32,000	12,66,749	46,006	12,37,376	56,729	7,23,208
Eastern Bengal	63,000	2,14,864	65,995	1,29,508	26,134	41,600
* Bombay, Baroda and Central India.	58,789	3,52,862	35,300	11,41,596	3,643	2,35,682
Madras and Southern Mahratta	8,750	45,220	17,692	1,14,000	4,920	2,56,000
South Indian	19,580	27,400	2,180	25,000	221	8,468
Burma	7,500	25,871	26,615	78,362	..	77,591
Assam Bengal	12,325	1,31,755	3,208	12,659	1,490	*
Bengal Nagpur . . . . .	..	..	..	..	17,575	13,68,493

* Figures not available.

14. Steps taken to improve earnings and to reduce expenses.— Railways have continued to explore the possibilities of increasing earnings and reducing working expenses. The following important steps were taken by railways during the year with a view to increasing earnings :—

- (i) Introduction of special rates and fares where necessary and greater precision in the analysis of changes in rates and fares.
- (ii) Adjustment of rates and fares to meet road competition and to attract traffic to railways. This measure is reported to have resulted in additional earnings of about Rs. 3½ lakhs on the Assam Bengal and Eastern Bengal Railways.
- (iii) Appointment of canvassers for attracting traffic to railways and special arrangements for quick and safe transport of particular goods.
- (iv) Elimination of inter-railway competition which keeps down the rates on the connected railways.
- (v) General improvement of the services offered by railways to the public to counter, as far as practicable, the facilities offered by lorries.
- (vi) Arrangements intended to secure quotation of firm rates at forwarding stations.
- (vii) Special test checks of weights and declarations of goods consignments.
- (viii) Adoption of measures to prevent road lorries overloading to reduce unfair competition.

Besides ' Job Analysis ' under which the savings effected on the more important railways are enumerated in paragraph 13, the following further steps, amongst others, were also taken by railways with a view to effecting savings :—

- (i) Examination of handling rates at stations. An estimated saving of Rs. 20,000 was effected on the Assam Bengal Railway.

- (ii) Introduction of rail cars on certain sections of the Madras and Southern Mahratta Railway, the operating cost of which is 25 per cent. of that of steam trains.
- (iii) Introduction of single control of train examinations at joint stations.
- (iv) Use of less expensive wood for carriages.
- (v) Amalgamation of certain running sheds.
- (vi) Closing down of the locomotive workshop at Bangalore (Madras and Southern Mahratta Railway).

CHAPTER I.

FINANCIAL RESULTS.

I.—Trade Review.

15. Exports.—During the year 1935-36, the total value of exports, including re-exports, amounted to Rs. 164 crores as compared with Rs. 155 crores in the previous year, an increase of Rs. 9 crores or 6 per cent. The following are the important fluctuations:—

Commodity.		QUANTITY (IN THOUSANDS).					VALUE.				
		1929-30.	1934-35.	1935-36.	1935-36 compared with 1929-30.	1935-36 compared with 1934-35.	1929-30.	1934-35.	1935-36.	1935-36 compared with 1929-30.	1935-36 compared with 1934-35.
						(Rs. in crores.)	(Rs. in crores.)	(Rs. in crores.)	(Rs. in lakhs.)	(Rs. in lakhs.)	
Raw Jute	Bales	4,518	4,214	4,318	-199	+105	27.17	10.87	13.71	-13.46	+2.80
Metals and ores	Tons	1,691	1,146	1,568	-128	+417	10.84	5.91	7.78	-2.61	+1.82
Pig iron	"	569	417	538	-31	+121	2.59	0.93	1.24	-1.35	+31
Pig lead	Cwts.	1,456	1,229	1,308	-147	+80	2.45	1.36	1.78	-0.7	+42
Manganese ore	Tons	816	460	729	-87	+269	2.29	0.81	1.38	-0.7	+51
Wolfram ore	"	2	6	8	+6	+2	0.28	1.08	1.41	+1.13	+82
Jute cloth	Yds.	1,660,626	1,068,000	1,218,000	-432,626	+155,000	29.70	10.99	12.24	-17.46	+1.25
Hides and skins	Tons	68	58	69	+1	+11	15.94	8.35	9.38	-6.61	+98
Indian raw wool	lbs.	50,866	34,000	49,000	-1,866	+15,000	4.42	1.28	3.10	-2.32	+82
Jute bags	No.	522,291	428,000	459,000	-69,291	+36,000	21.89	10.25	11.61	-10.58	+76
Food grains*	Tons	2,610	1,785	1,558	-957	-212	34.79	11.84	12.41	-22.38	+57
Wheat	"	13	11	10	-3	-1	0.21	0.11	0.10	-11	-1
Barley	"	6	14	4	-2	-10	0.07	0.09	0.02	-5	-7
Wheat flour	"	51	6	18	-33	+12	1.07	0.08	0.23	-86	+14
Rice	"	2,326	1,607	1,410	-916	-197	31.51	10.37	11.08	-20.49	+66
Paraffin wax	"	66	46	54	-12	+8	3.18	1.92	2.28	-90	+86
Coffee	Cwts.	184	141	216	+32	+75	1.45	0.73	1.09	-42	+29
Cotton manufactures including twist and yarn.	"	"	"	"	"	"	7.19	2.65	2.98	-4.26	+23
Indian cotton piecegoods	Yds.	138,426	57,700	71,200	-62,226	+13,500	4.67	1.77	2.08	-2.64	+26
Cotton twist and yarn]	lbs.	24,570	12,800	9,700	-14,870	-3,100	1.90	0.68	0.47	-1.43	-16
Wood and timber and manufactures thereof.]	"	"	"	"	"	"	1.30	1.11	1.35	-45	+24
Raw rubber	lbs.	25,673	24,000	31,000	+5,327	+7,000	1.79	0.66	0.89	-90	+23
Raw hemp	Cwts.	436	437	643	+206	+206	0.68	0.59	0.60	-5	+21
Tobacco	lbs.	27,069	27,377	29,598	+2,529	+2,221	1.06	0.82	0.92	-14	+10
Colr manufactured	Cwts.	630	626	684	+54	+58	1.04	0.80	0.88	-16	+8
Lac (chiefly shellac)	"	669	586	488	-181	-98	6.97	3.30	1.58	-5.39	-172
Raw cotton	Bales	4,070	3,490	3,395	-674	-94	65.08	34.95	33.77	-31.31	-1.18
Tea	lbs.	376,634	325,000	313,000	-63,634	-12,000	26.01	20.13	19.82	-6.19	-31
Oilseeds	Tons	1,196	875	672	-523	-203	26.46	10.64	10.32	-16.14	-22
Linseed	"	248	228	164	-84	-74	5.72	3.00	2.19	-3.53	-81
Groundnut	"	714	511	412	-301	-98	16.39	5.93	6.55	-0.74	+72
Rapeseed	"	44	37	19	-25	-18	0.92	0.42	0.26	-66	-16
Castor seed	"	106	69	60	-46	-9	2.15	0.31	0.33	-1.32	+2
Coal	"	685	300	198	-487	-111	0.72	0.29	0.17	-55	-12
Woolen carpets and rugs	lbs.	4,636	10,098	9,347	+4,711	-746	0.86	0.90	0.81	-4	-9
Opium	Cwts.	4	"	"	-4	"	1.42	0.07	"	-1.42	-7
Podder, bran and pollards	Tons	250	281	253	+8	-23	1.19	0.77	0.73	-46	-4
Animals	No.	483	168	268	-220	+100	0.37	0.12	0.09	-23	-3

* Increase in value due to high level of prices for rice and wheat flour.

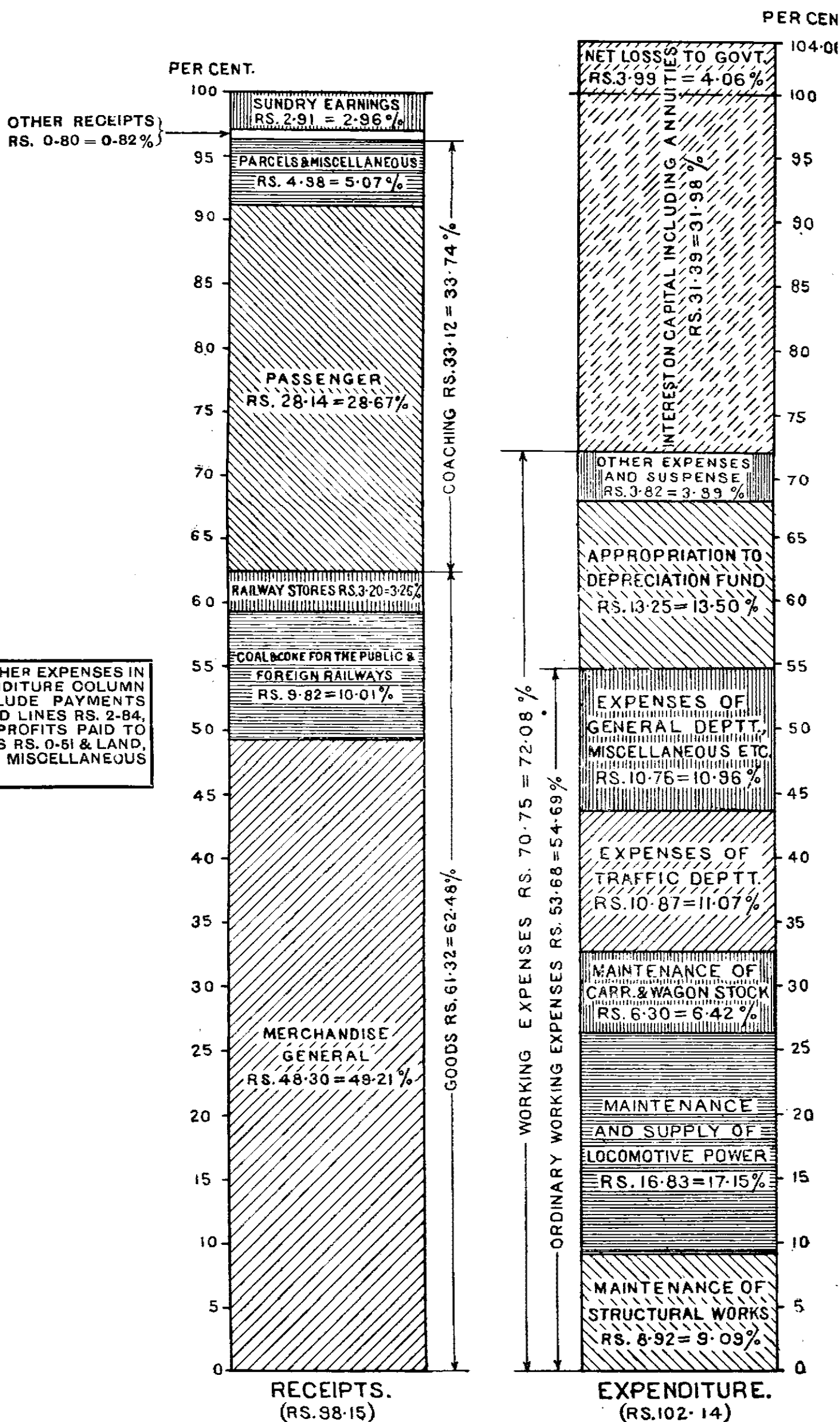
16. *Imports.*—The total value of imports of foreign merchandise into British India during 1935-36 amounted to Rs. 134 crores as compared with Rs. 132 crores in the previous year, an increase of Rs. 2 crores or 1.5 per cent. The principal variations were noticed under the following commodities:—

Commodity.		QUANTITY (IN THOUSANDS).					VALUE.				
		1929-30.	1934-35.	1935-36.	1935-36 compared with 1929-30.	1935-36 compared with 1934-35.	1929-30.	1934-35.	1935-36.	1935-36 compared with 1929-30.	1935-36 compared with 1934-35.
							(Rs. in crores.)	(Rs. in crores.)	(Rs. in crores.)	(Rs. in lakhs.)	(Rs. in lakhs.)
Raw cotton	Tons	24	61	77	+53	+16	3.42	5.28	6.75	+3.33	+1.47
Machinery and millwork	"	"	"	"	"	"	18.22	12.84	13.89	-4.53	+1.05
Jute machinery	"	"	"	"	"	"	1.44	0.54	1.16	-23	+62
Electrical machinery	"	"	"	"	"	"	2.41	1.89	2.05	-36	+36
Boilers	"	"	"	"	"	"	1.09	0.44	0.77	-32	+33
Metals and ores	Tons	1,034	456	534	-500	+78	23.62	11.38	12.84	-11.58	+66
Iron and steel	"	973	370	449	-524	+79	17.21	6.38	7.32	-9.89	+64
Metals other than iron and steel and manufactures thereof.	"	55	86	84	+29	-2	6.39	4.99	4.52	-1.58	-19
Coal tar dyce	lbs.	10,136	19,356	20,453	+1,316	+1,096	1.97	2.74	3.04	+1.07	+30
Electrical instruments	"	"	"	"	"	"	3.61	2.31	3.09	-52	+38
Paper and paste-board	Cwts.	2,740	2,931	3,333	+593	+398	3.72	2.73	3.99	-73	+26
Provisions	"	"	"	"	"	"	5.64	2.89	3.12	-2.52	+23
Hardware	"	"	"	"	"	"	5.97	3.06	3.27	-1.80	+21
Chemicals	"	"	"	"	"	"	2.79	2.92	3.12	+33	+20
Wheat	Tons	357	7	13	-344	+6	4.98	0.06	0.10	-4.88	+4
Dried fruit	"	70	34	33	+18	+4	1.49	0.98	1.00	-49	+2
Rubber manufactures	"	"	"	"	"	"	3.30	2.06	2.07	-1.23	+1
Textile group	"	"	"	"	"	"	72.56	33.50	36.60	-41.96	-2.90
Cotton piecegoods*	yds.	1,919,346	944,000	947,000	-972,346	+3,000	50.25	16.93	15.73	-34.47	-1.15
Cotton twist and yarn	lbs.	43,832	34,000	45,000	+1,118	+11,000	6.00	3.10	3.71	-2.29	+61
Wool and woollen goods	"	"	"	"	"	"	4.28	3.87	3.79	-1.48	-1.08
Artificial silk	"	"	"	"	"	"	4.32	3.59	3.16	-1.16	-43
Silk piecegoods	"	"	"	"	"	"	2.23	1.25	0.90	-1.33	-35
Rice (not in husk)	Tons	6	283	90	+84	-193	0.03	1.38	0.67	+59	-1.21
Soap	Cwts.	448	207	60	-388	-147	1.67	0.93	0.34	-1.33	-29
Sugar	Tons	1,011	223	301	-810	-22	15.78	2.11	1.91	-13.87	-20
Motor vehicles	No.	19	13	16	-5	-1	7.52	4.66	4.49	-3.03	-17
Motor omnibuses	"	15	10	8	-7	-2					
Mineral oils	Gal.	252,768	201,000	223,000	-24,768	+22,000	11.04	5.97	5.27	-5.07	-10
Kerosene oil	"	104,457	69,000	66,000	-40,457	-3,000	5.39	2.61	2.22	-3.67	-39
Fuel oil	"	110,308	111,000	133,000	+23,797	+25,000	2.10	1.93	2.21	+11	+28
Cotton hosiery	"	"	"	"	"	"	1.44	0.58	0.50	-94	-3
Haberdashery and millinery	"	"	"	"	"	"	1.04	0.67	0.59	-45	-3
Boots and shoes	Pairs	6,761	4,256	2,903	-3,855	-1,350	0.82	0.35	0.29	-59	-6
Precious stones and pearls, unset.	"	"	"	"	"	"	1.10	0.50	0.43	-62	-2

* Decrease in value in spite of increase in quantity was due to the lower level of prices.

RECEIPTS AND EXPENDITURE OF STATE OWNED RAILWAYS IN INDIA INCLUDING WORKED LINES, 1935-36.

FIGURES IN CRORES.



17. *Balance of trade.*—The visible balance of trade in merchandise and treasure for the year 1935-36 was in favour of India to the extent of Rs. 67 crores as compared with Rs. 76 crores in the preceding year.

II.—*Financial Results of State Railways.*

18. *Financial results of working.*—For the greater part of 1935-36, railway earnings were steadily less than during the previous year, but in the last 5 or 6 weeks there was a considerable improvement which brought up the total for the year to a slightly higher level than 1934-35. The total traffic receipts in 1935-36 amounted to 90.65 crores as against 90.20 crores in the previous year. The increase of 45 lakhs is largely due to the fact that 1936 was a leap year and there was an extra day in February 1936.

Ordinary working expenses, excluding depreciation, amounted to 50.87 crores or 60 lakhs more than in the previous year. This increase is explained by the withdrawal of the cut in pay from April 1935 which resulted in an addition to working expenses of about 100 lakhs. Apart from this there was a decrease of nearly 40 lakhs in working expenses as compared with the previous year.

A simplified method of calculating the contribution to the depreciation reserve was adopted in 1935-36. According to this, the contribution for any year is 1/60 of the total capital at charge at the end of the previous year. The amount to be set apart for depreciation in 1935-36 under this method was 13½ crores and happened to be 47 lakhs less than in the previous year. Including depreciation, the total working expenses amounted to 64.12 crores or 13 lakhs higher than in 1934-35.

Miscellaneous transactions resulted in a net addition of 87 lakhs as against 53 lakhs in the previous year. A decrease of 10 lakhs in the surplus profits payable to companies, and an increase of 20 lakhs in the credits to revenue from material released from works of replacement or renewal mostly accounted for this improvement.

The net revenue available for meeting interest charges was 27.40 crores whereas the total interest payable was 31.39 crores. The deficit of 3.99 crores (which is 107 lakhs less than in the previous year) was met by a loan from the Railway Depreciation Reserve Fund.

The appropriation to the depreciation fund was in excess of withdrawals by 4.09 crores. After a withdrawal of 3.99 crores to meet the deficit of the year, the actual balance at the Fund was increased by ten lakhs to 9.60 crores. The nominal balance amounted to 41.19 crores.

The total works expenditure during the year amounted to 11.74 crores, of which 2.58 crores was charged to capital and the balance to the Depreciation Fund. Of the total capital expenditure of 2.58 crores, 29 lakhs was for new construction and 44 lakhs for the purchase of a small line (the Amritsar-Patti-Kasur Railway) which was being worked by the North Western Railway already. Stores balances at the end of the year amounted to 9.40 crores, practically the same as at the end of the previous year.

At the end of 1935-36, the liabilities of railways to be met in subsequent prosperous years amounted to 57½ crores, of which 31½ crores is the amount borrowed from the depreciation fund. The balance of 26 crores represents the contributions due to general revenues but unpaid from 1931-32 to 1935-36. The details are as follows:—

		(In crores of rupees.)	
		Loans from Depreciation Fund.	Unpaid contributions to general revenues.
1931-32	.	4.25	5.36
1932-33	.	10.23	5.23
1933-34	.	7.96	5.21
1934-35	.	5.06	5.04
1935-36	.	3.99	4.99
Total		31.49	25.83

The following statement gives the financial statistics of Indian State-owned railways from 1924-25 to 1935-36:—

(Figures in lakhs of rupees.)

	1924-25.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Mileage	26,985	27,000	27,824	28,086	29,111	30,878	31,197	31,640	31,649	31,644	31,836	31,788
Capital at charge at end of year. (in crores)	685	654	681	714	789	770	788	790	789	787	787	789
Gross traffic receipts	1,00,13	98,94	98,42	1,03,48	1,03,73	1,02,70	95,10	86,63	84,43	86,68	90,20	90,63
Operating expenses	51,65	52,99	52,89	53,06	54,22	55,59	54,89	49,81	49,08	49,50	50,27	50,87
Depreciation Fund	10,85	10,67	10,89	11,38	12,00	12,59	13,07	13,46	13,77	13,56	13,72	13,25
Net Traffic receipts	38,13	35,28	34,64	38,99	37,51	34,52	27,64	23,36	21,58	23,57	26,21	26,53
Net Miscellaneous receipts after deducting miscellaneous charges and surplus profits payable to companies.	-1,07	-1,19	-1,27	-37	-37	-2	-11	1	1,10	1,05	58	67
Net revenue	37,06	34,09	33,37	38,12	37,14	34,50	27,53	23,37	22,68	24,62	26,74	27,40
Interest charges	29,90	24,81	25,97	27,27	29,32	30,46	32,72	33,07	32,91	32,58	31,80	31,39
Surplus	18,16	9,28	7,40	10,85	7,81	4,04	-5,19	-9,20	-10,23	-7,96	-5,06	-3,99
Paid as contribution to general revenues	5,78	5,49	6,01	6,28	5,23	6,12	5,74	..	..	..	..	..
Transferred to railway reserve	6,38	3,79	1,49	4,57	2,58	-2,08	-10,93	-4,95	..	..	..	..
Ratio of working expenses (excluding Depreciation Fund) to Gross Traffic Receipts.	51.6%	53.8%	53.7%	51.3%	52.3%	54.1%	57.2%	56.9%	58.7%	55.8%	54.7%	54.9%
Ratio of working expenses (including Depreciation Fund) to Gross Traffic Receipts.	61.9%	64.3%	64.8%	62.3%	63.8%	66.4%	70.9%	72.5%	73.0%	71.4%	69.9%	69.5%
Ratio of Net Traffic Receipts to capital at charge.	6.0%	5.4%	5.1%	5.5%	5.1%	4.5%	3.5%	3.0%	2.7%	3.0%	3.3%	3.4%

NOTE 1.—Credits for materials released from works not charged to revenue were taken in reduction of operating expenses up to 1931-32. Since then they have been added to receipts and are included in the above table under net miscellaneous receipts. The amounts involved are as follows: in 1932-33 and 1933-34, 119 lakhs, in 1934-35, 90 lakhs and 110 lakhs in 1935-36.

NOTE 2.—For purposes of proper comparison with past years the ratios in the last three lines of the statement with respect to 1932-33, 1933-34, 1934-35 and 1935-36 have been worked out as if the above sums of 119, 119, 90 and 110 lakhs were deducted from operating expenses.

NOTE 3.—Working expenses were reduced in 1930-31 by 186 lakhs by a credit from the Depreciation Fund for correction of past accounting adjustments and in 1924-25 by 179 lakhs by certain abnormal refunds of expenditure in previous years.

Though these statistics show the trend of receipts and expenditure fairly clearly they do not lend themselves directly to close comparison owing to changes of accounting during the period and certain other special features, the more important of which are mentioned below:—

- (a) In the years prior to 1932-33, credits on account of material released from works whether in the nature of repairs or renewals or replacements were taken as reducing the working expenses but since that year only credits in connection with repairs and maintenance operations are so taken. For comparison with earlier years, the following sums should be deducted from the working expenses of the years 1932-33 and thereafter:—

(In lakhs of rupees.)

1932-33	119
1933-34	119
1934-35	90
1935-36	110

- (b) In 1924-25, working expenses were reduced by a refund of customs duty paid in earlier years on stores imported for Company-managed railways amounting to 141 lakhs and by a transfer from reserves of 38 lakhs representing the cost of writing down stores. A sum of 179 lakhs should be added to the working expenses of that year.

(c) In 1930-31, working expenses were reduced by 166 lakhs by a credit from the depreciation fund for correction of past erroneous adjustments.

(d) the emergency deductions made from the pay of the staff reduced the working expenses in certain years, namely:—

	(In lakhs of rupees.)
1931-32	44
1932-33	1,91
1933-34	1,14
1934-35	1,00
1935-36	8

Making allowance for these factors, the comparable figures of traffic receipts and working expenses from 1924-25 are as follows:—

(In crores of rupees.)

Year.	Traffic Receipts.	Ordinary working expenses including out in pay.	Ordinary working expenses excluding out in pay.
1924-25	100.13	53.44	53.44
1925-26	98.94	52.99	52.99
1926-27	98.42	52.89	52.89
1927-28	103.43	53.06	53.06
1928-29	103.73	54.22	54.22
1929-30	102.70	55.59	55.59
1930-31	95.10	56.05	56.05
1931-32	86.63	49.31	49.75
1932-33	84.43	47.89	49.80
1933-34	86.63	48.31	49.45
1934-35	90.20	49.37	50.37
1935-36	90.65	49.77	49.85

The figures show that the steady improvement that started in 1933-34 was still continuing in 1935-36 though at a less rapid rate. The statement below gives the net revenue and the interest charges as an average of the capital at charge by the end of the year:—

(In lakhs of rupees.)

Year.	Net revenue.	Percentage of net revenue to capital at charge.	Interest charges.	Percentage of interest charges to capital at charge.	Surplus or Deficit.
1924-25	37,06	5.8	23,90	3.8	13,16
1925-26	34,09	5.2	24,81	3.9	9,28
1926-27	33,37	4.9	25,87	3.8	7,50
1927-28	38,12	5.3	27,27	3.8	10,85
1928-29	37,14	5.0	29,33	4.0	7,81
1929-30	34,50	4.5	30,46	4.0	4,04
1930-31	27,53	3.5	32,72	4.2	-5,19
1931-32	23,87	3.0	33,07	4.2	-9,20
1932-33	22,68	2.9	32,91	4.2	-10,23
1933-34	24,62	3.1	32,58	4.1	-7,96
1934-35	26,74	3.4	31,80	4.0	-5,06
1935-36	27,40	3.5	31,39	4.0	-3,99

The operating ratio of all State-owned railways, *i.e.*, the ratio of working expenses to gross traffic receipts amounted to practically the same as in the previous year, namely 55 per cent. excluding depreciation and 70 per cent. including depreciation. In the table below, the ratios of earlier years are given for purposes of comparison:—

Year.	Percentage, excluding depreciation.	Percentage, including depreciation.
Average of 5 years, 1924-25 to 1928-29	52.5	63.5
1929-30	54	66
1930-31	59	73
1931-32	57	73
1932-33	57	73
1933-34	56	71
1934-35	55	70
1935-36	55	70

For purposes of comparison certain statistics available for some foreign railways are given below.

The gross receipts of the 4 amalgamated British railways in 1935 amounted to £175 million, an increase of £3 million (less than 2 per cent.) over the previous year, but £32½ million (16 per cent.) less than in 1929. Their working expenses amounted to £144 million or £1 million more than in the previous year and £24 million (14 per cent.) less than in 1929. The operating ratio was 82.65 per cent. as against 83 per cent. in the previous year and 81 per cent. in 1929.

The Canadian Pacific Railway earned 130 million dollars in 1935, 5 million dollars (4 per cent.) more than in the previous year, and 80 million dollars (38 per cent.) less than in 1929. Their working expenses were 107 million dollars—6 million dollars (6 per cent.) more than in 1934 and 60 million dollars (36 per cent.) less than in 1929. The operating ratio, which was 79½ per cent. in 1929 and 80½ per cent. in 1934, stood at 82¼ per cent. in 1935.

The Canadian National Railways realised 173 million dollars in 1935, 8 million dollars (5 per cent.) more than in 1934 and 95 million dollars (35 per cent.) less than in 1929. Their working expenses rose to 159 million dollars, which was higher by 7 million dollars (4.6 per cent.) than in 1934 but 62 million dollars (28 per cent.) below that of 1929. The operating ratio of 92 per cent. is the same as in the previous year but 9½ per cent. higher than in 1929.

The receipts of the principal railways of the United States were 3,450 million dollars in 1935, which was about 6 per cent. more than in 1934, but 35 per cent. less than in 1930. The working expenses, which were 2,591 million dollars, were 6 per cent. more than in the previous year but 34 per cent. less than in 1930. The operating ratio in 1935 was 75.11 per cent. against 75 per cent. in 1934 and 74.4 per cent. in 1930.

The gross receipts of the German State Railways for 1935 were Reichmarks 3,586 million, which showed an increase of Reichmarks 260 million (8 per cent.) over the previous year and of Reichmarks 666 million (23 per cent.) as compared with 1933. Their working expenses came to Reichmarks

3,434 million or Reichmarks 132 million (4 per cent.) more than in the previous year and Reichmarks 377 million (12 per cent.) than in 1933. The operating ratio was 95.75 per cent. against 99.28 per cent. in 1934 and 104.66 per cent. in 1933.

19. *Traffic Receipts.*—The following table compares the traffic receipts in detail with the previous years :—

(Crores of rupees.)

	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Passenger earnings	35.34	35.75	31.68	28.96	28.94	27.65	27.92	28.08
Other coaching earnings	6.17	5.81	5.40	5.27	5.03	4.92	4.92	5.05
Goods earnings	67.78	65.25	60.69	55.41	53.76	58.20	61.05	61.43
Sundry earnings	2.11	2.21	1.97	1.82	1.63	1.59	1.62	1.83
Suspense	—25	.30	.46	.35	.04	—49	.09	—23
TOTAL	111.15	109.32	100.20	91.81	89.40	91.87	95.60	96.16
<i>Less—</i>								
Refunds . . . . .	.15	.15	.11	.11	.11	.11	.12	.14
Earnings of worked lines	7.27	6.47	4.99	5.07	4.86	5.13	5.28	5.37
NET	103.73	102.70	95.10	86.63	84.43	86.63	90.20	90.65

There has been an improvement as compared with the previous year under all the various items included in earnings. Goods earnings are better than during any year since 1930-1931 when the depression started. On the other hand the improvement in passenger earnings is very slow indeed.

The statement below gives the details of passenger earnings on all Class I Railways from 1929-30 onwards. Figures are not available separately for State-owned railways alone, but the figures for Class I Railways can be taken as sufficiently representative though the figures show a slight and steady improvement in the two years 1934-35 and 1935-36, the improvement is infinitesimal.

Passenger earnings for Class I Railways.

(In lakhs of rupees.)

Classes.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
First class	1.02	.92	.82	.77	.75	.76	.77
Second class	1.77	1.65	1.49	1.43	1.37	1.37	1.41
Inter class	1.56	1.39	1.21	1.13	1.10	1.10	1.10
Third class	32.46	28.72	26.35	26.50	25.29	25.53	25.67
TOTAL	36.81	32.68	29.87	29.83	28.51	28.76	28.95

The statement below gives details of the various commodities which have contributed to the goods earnings of all Class I railways and compares them with similar figures for the past few years.

(Figures in lakhs.)

—	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Cotton, raw	4,50	3,99	2,42	2,77	3,58	3,42	3,76
2. Cotton manufactured	2,41	2,32	2,34	2,42	2,38	2,45	2,52
3. Coal for public	6,75	6,19	5,98	5,93	6,54	7,09	6,93
4. Coal for foreign railways and home line construction.	2,77	2,63	2,15	2,24	2,28	2,49	2,45
5. Metallic ores	1,47	93	58	45	64	95	1,30
6. Rice	4,17	3,67	3,71	3,45	3,89	4,19	3,78
7. Wheat	2,03	2,69	2,16	1,84	1,85	2,10	2,12
8. Gram, pulse and other grains	3,53	3,42	3,58	3,09	2,91	3,36	3,08
9. Iron and steel	2,46	2,07	1,81	2,09	2,21	2,34	2,57
10. Kerosene	1,69	1,50	1,62	1,38	1,46	1,52	1,49
11. Jute	1,47	1,36	99	1,12	1,29	1,24	95
12. Oil seeds	3,95	4,01	3,52	2,88	3,64	2,99	2,78
13. Sugar	2,03	2,03	1,51	1,30	1,67	1,57	1,59
14. Gur, jaggree and molasses	94	98	1,27	1,39	1,21	1,21	1,28

The most noticeable improvements in 1935-36 are in cotton raw and pressed (34 lakhs), in metallic ores (35 lakhs) and iron and steel (23 lakhs). The most serious decreases are in coal where there is a fall of 20 lakhs due mainly to the reduction in surcharge which was given effect to from the 1st April 1935, in rice (41 lakhs) where there had been heavy imports of Burma rice in the previous year, and in oil seeds (21 lakhs) owing to restricted cultivation due to fall in prices.

The statement below compares the receipts of individual railways in 1935-36 with the previous years:—

(Figures in lakhs.)

Railways.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Assam Bengal	2,05	1,96	1,84	1,56	1,60	1,80	1,60
Bengal Nagpur	9,31	8,17	7,24	6,91	7,39	7,94	8,64
Bombay, Baroda and Central India	11,52	10,90	10,30	10,17	10,61	11,06	11,08
Burma	4,87	4,28	3,74	3,33	3,57	3,72	3,61
Eastern Bengal	6,73	5,86	5,05	4,91	5,07	5,42	5,26
East Indian	19,85	18,24	17,36	17,27	17,63	18,71	18,62
Great Indian Peninsula	14,58	13,33	11,92	11,94	12,21	12,17	12,40
Madras and Southern Mahratta	8,98	7,98	7,15	6,66	6,84	6,72	6,55
North Western (Commercial)	14,39	14,98	13,34	12,74	13,23	13,87	14,16
North Western (Strategic)	1,59	1,48	1,31	1,23	1,23	1,23	1,26
South Indian	6,33	5,80	5,30	5,51	5,14	5,25	5,00
Other Railways	2,50	2,12	2,08	2,20	2,11	2,31	2,47

The largest improvement is on the Bengal Nagpur Railway where goods earnings have passed even the earnings of 1929-30. The increase of 70 lakhs is due in large part to a sensational increase in manganese exports but there has begun a general revival in traffic due to an expansion of the iron industry, manifested in increased earnings from iron ore, limestone and iron and steel wrought, as well as in rice. Of the other railways which have done better, the Great Indian Peninsula and the North Western Railways with an increase of about a quarter of a crore each are the most important. On the other hand a few railways showed a marked deterioration. There was a fall of 20 lakhs on the Assam Bengal Railway as compared with the previous year when it had a heavy traffic in Burma rice; on the Eastern Bengal Railway of 17 lakhs mainly owing to the fall in the jute traffic; on the Madras and Southern Mahratta Railway of 17 lakhs as a result of the loss of groundnut traffic; and on the South Indian Railway of 25 lakhs mainly in passenger earnings as a result of bus competition and the economic depression resulting *inter alia* in a fall in labour traffic to Ceylon and elsewhere.

20. *Ordinary Working Expenses.*—A comparison of working expenses (excluding depreciation) of all railways by Abstracts is given below. It will be seen that the only considerable increase was in the maintenance of carriage and wagon stock:—

(In lakhs of rupees.)

Abstracts.	1933-34.	1934-35.	1935-36.
Maintenance of Structural Works	8,78	9,05	8,94
Maintenance and supply of Locomotive Power	16,89	17,13	16,82
Maintenance of Carriage and Wagon stock	5,79	6,08	6,32
Maintenance of ferry steamers and harbours	31	32	29
Expenses of Traffic Department	10,79	10,92	10,86
Expenses of General Department	4,85	4,89	4,88
Miscellaneous Expenses	4,51	4,40	4,38
Electric Service Department	1,20	1,22	1,18
Suspense	—1	—8	—4
Emergency deductions from pay	—1,14	—1,00	—8
TOTAL	51,97	52,93	53,55
Deduct—Recoveries from worked lines	2,60	2,66	2,68
Net Total for State-owned Railways	49,37	50,27	50,87

A comparison of the working expenses (excluding depreciation) of each railway with the previous years will be found below:—

(Figures in lakhs.)

	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Assam Bengal	1,13	1,12	1,09	1,02	1,07	1,16	1,12
Bengal Nagpur	5,51	5,36	4,83	4,77	4,62	5,06	5,42
Bombay, Baroda and Central India	6,07	6,14	5,47	5,38	5,26	5,44	5,33
Burma	2,57	2,61	2,33	2,04	2,18	2,25	2,25
Eastern Bengal	3,84	3,74	3,29	3,16	3,33	3,41	3,63
East Indian	10,21	9,95	9,02	8,88	8,78	9,19	9,24
Great Indian Peninsula	8,37	8,57	7,13	7,06	6,99	6,78	6,76
Madras and Southern Mahratta	3,95	3,88	3,33	3,24	3,30	3,40	3,41
North Western (Commercial)	8,47	9,03	7,74	7,23	7,57	7,61	7,50
North Western (Strategic)	1,68	1,76	1,39	1,42	1,39	1,43	1,42
South Indian	2,79	2,87	2,63	2,76	2,97	2,73	2,74
Other Railways	1,00	1,02	98	92	95	1,06	1,12

The expenditure on every railway has been increased to a greater or smaller extent by the withdrawal of the cut in pay from April 1935; but on some railways, this has been more than compensated by savings in other directions. The largest net increase is on the Bengal Nagpur Railway and is equivalent to half the increase in its traffic receipts. Both on the Bengal Nagpur Railway and on the Eastern Bengal Railway which shows the next largest increase, there has been heavy expenditure on repairs during the year.

21. *Losses and gains.*—The statement below gives the net gain or loss of the various railways for every year from 1924-25 to 1935-36. For the purpose of calculating these gains or losses, the figures shown in the Companies' accounts have been recast to accord with the Government accounting procedure, *i.e.*, the working expenses including the appropriation to the Depreciation Fund and not the actual expenditure on renewals and replacements which are taken into account in the Companies own accounts.

(In lakhs of rupees.)

	1924-25.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	TOTAL.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<i>State-managed railways.</i>													
Burma	42	81	24	61	4	4	-44	-74	-75	-71	-56	-69	-1,72
Eastern Bengal	16	10	70	80	54	16	-80	-1,28	-1,28	-1,25	-98	-1,18	-4,21
East Indian	2,89	2,80	2,67	3,19	2,44	1,61	-18	-24	-13	37	1,14	1,04	17,60
Great Indian Peninsula	2,42	47	71	1,41	1,03	8	-1,72	-1,78	-1,68	-1,24	-1,04	-87	-1,06
North Western (Commercial)	2,87	1,76	1,21	1,28	9	-64	-1,16	-1,58	-1,78	-1,86	-70	25	19
North Western (Strategic)	-1,59	-1,47	-1,65	-1,68	-1,74	-1,90	-2,18	-1,99	-2,09	-2,08	-2,08	-2,10	-22,45
<i>Company-managed railways.</i>													
Assam Bengal	-31	-18	-11	4	-6	-24	-39	-52	-74	-78	-60	-84	-4,63
Bengal Nagpur	-12	-47	-40	-20	-47	-66	-1,09	-2,48	-2,80	-2,27	-1,86	-1,85	-15,10
Bombay, Baroda and Central India	2,92	2,20	1,42	1,58	1,64	1,25	48	45	41	99	1,28	1,56	16,18
Madras and Southern Mahratta	1,11	85	68	1,04	1,38	89	1	14	-27	-4	-26	-38	5,16
South Indian	97	1,13	1,20	1,25	81	1,19	31	1	6	-21	-10	-32	6,30
Lucknow Bareilly	9	9	4	10	6	5	6	4	5	5	8	8	79
Tirhoot	62	60	68	56	66	68	24	29	34	25	32	35	5,59

The only railways which show a profit during 1935-36 are Bombay, Baroda and Central India ($1\frac{1}{2}$ crores), the East Indian (1 crore), the Bengal and North-Western Railway (Tirhoot) ($\frac{1}{3}$ crore) and the Commercial Section of the North Western ($\frac{1}{4}$ crore). Though small in magnitude the last is really the most remarkable as this is the first year for many years in which it has made a profit.

It is interesting to notice that during the 12 years of which the first half were years of prosperity, the State has received large profits from 5 railways: $17\frac{1}{2}$ crores from the East Indian, 16 crores from the Bombay, Baroda and Central India, 5 crores from the Madras and Southern Mahratta, $6\frac{1}{3}$ crores from the South Indian Railway, and $5\frac{1}{2}$ crores from the Tirhut Railway. In addition, it has obtained nearly a crore from the minor railways (Lucknow-Bareilly and Jodhpur Railways). On the other hand, it has had to bear large losses on six railways. The largest is $22\frac{1}{2}$ crores on the strategic section of the North Western Railway and the next largest 15 crores on the Bengal Nagpur. The Assam Bengal Railway is responsible for $4\frac{1}{2}$ crores. None of these three railways have produced a profit in any of these years. The Eastern Bengal, the Great Indian Peninsula and the Burma Railways showed a profit in the first six years, but taking the 12 year period as a whole, the result is a loss of $4\frac{1}{4}$, 2 and $1\frac{1}{4}$ crores respectively. By its recovery in the current year, the commercial section of the North Western Railway managed to have a small profit for the period as a whole.

22. *Capital at charge.*—The statement below shows how the capital at charge on all railways in which the State has financial interest has been

NORTH WESTERN RAILWAY.



Earthquake-proof Building at Quetta after the earthquake on 31st May 1935.

growing. For purposes of comparison sterling liabilities included in the capital at charge have been converted into rupees at the statutory rate of exchange :—

		(Crores of rupees.)			(Crores of rupees.)
		Capital at charge at the end of the year.			Capital at charge at the end of the year.
1923-24	.	621	1930-31	.	783
1924-25	.	635	1931-32	.	790
1925-26	.	654	1932-33	.	789
1926-27	.	681	1933-34	.	787
1927-28	.	714	1934-35	.	787
1928-29	.	739	1935-36	.	789
1929-30	.	770			

It will be noticed that the capital at charge has increased in 12 years by 168 crores, but the increase has not been uniform. During the first six prosperous years, the average increase was 25 crores per annum. During the next six years, it is barely 3 crores per annum.

Though the total increase in the capital at charge is 168 crores, the real expenditure during these 12 years is 181 crores since stores balances have been reduced by 13 crores in the period. Of this total, the construction of new lines accounts for 48 crores. 12 crores is due to the acquisition of lines already in existence, but owned by private companies, the most important of which are the Delhi-Ambala-Kalka, Amritsar-Patti-Kasur and the Southern Punjab Railways. The balance of 121 crores represents the expenditure charged to capital on additions to and improvements of the open line such as rebuilding of bridges, relaying of track, improvement of traffic facilities, *e.g.*, expansion of station yards, purchasing of improved rolling stock, reconstruction and modernising of workshops and so on. At the same time 108 crores have been spent from the depreciation fund during the period for the improvement of the open line.

23. Works Expenditure.—The statement below gives the total expenditure on works year by year from 1924-25 and shows separately the expenditure on new constructions, open line works, and amounts spent on the purchase of railways.

(In lakhs of rupees.)

Years.	New constructions.	Open line works.	Purchase of railways and branch line shares.	Total capital.	Depreciation Fund.	Total works expenditure.
1924-25	3.12	10.26	..	13.38	7.29	20.67
1925-26	4.32	15.31	..	19.63	7.98	27.61
1926-27	6.77	16.13	4.33	27.23	8.06	35.28
1927-28	10.26	22.19	3	32.48	10.95	43.43
1928-29	9.26	15.79	4.30	29.35	9.60	38.95
1929-30	6.65	16.47	7.06	30.18	11.76	41.94
1930-31	4.25	8.95	1	13.21	11.39*	24.60*
1931-32	2.79	3.90	..	6.69	8.26	14.95
1932-33	57	—50	..	7	6.35	6.42
1933-34	22	—2.28	..	—2.06	8.08	6.02
1934-35	18	27	—20	25	8.66	8.91
1935-36	29	1.65	44	2.58	9.16	11.74
TOTAL	48.68	108.34	15.97	172.99	107.53	280.52

* Includes a debit of 166 lakhs for correction of past erroneous adjustments.

The expenditure on new construction includes expenditure on completion of the Jhudo-Pithoro Railway in Sind and the Agastiyampalli-Point Calimere Railway in Southern India and on the starting of the Meghna Bridge on the Assam Bengal Railway. An amount of 44 lakhs has been spent on the purchase of the Amritsar-Patti-Kasur Railway. The total expenditure on open line works was about 11 crores and was higher than the expenditure during the last three years. Of the total 3½ crores was on rolling stock, 4 crores on renewal of track, and 3¼ crores on general engineering works including about half a crore on account of expenditure on earthquake damages and Hardinge bridge protection works.

24. *Stores Balances.*—The total stores balance at the end of 1935-36 was practically the same as during the previous year and $7\frac{1}{2}$ crores lower than six years ago.

The table below gives the figures for a number of years :—

	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Assam Bengal	25	32	18	12	9	13	13	15	18	22	21	15	14	13	1
Bengal Nagpur	1,40	1,62	1,48	1,50	1,28	1,17	1,08	1,33	1,36	1,21	1,07	1,02	97	1,01	1,0
Bombay, Baroda and Central India	2,77	2,72	2,33	1,77	1,63	1,46	1,67	1,62	1,61	1,65	1,46	1,30	1,09	1,02	9
Burma	67	85	99	85	75	45	59	61	65	58	51	43	40	42	4
Eastern Bengal	2,52	1,76	1,53	1,22	1,12	84	84	80	77	76	69	55	40	43	5
East Indian (including Oudh and Rohilkund).	3,92	4,39	4,11	3,14	2,81	2,48	2,99	3,15	3,04	2,48	2,27	2,09	1,60	1,38	1,4
Great Indian Peninsula	4,66	3,88	3,98	2,90	2,39	2,23	2,58	2,42	2,62	2,52	2,18	1,80	1,51	1,27	1,1
Madras and Southern Mahratta	1,51	1,66	1,51	1,03	84	77	94	83	88	79	76	72	63	50	5
North Western (Commercial)	3,94	3,93	3,80	2,73	2,44	2,36	3,32	3,70	3,48	2,60	2,27	1,85	1,63	1,46	1,5
North Western (Strategic)	53	53	72	63	83	84	92	90	92	94	91	1,02	93	82	7
South Indian	1,14	1,39	99	77	1,13	1,07	1,24	1,14	1,06	94	80	70	56	47	4
Other Railways	31	41	42	43	37	39	47	44	53	57	52	47	43	43	4
TOTAL	23,67	23,51	22,09	17,09	15,68	14,69	17,32	17,09	16,95	15,21	13,65	12,10	10,22	9,34	9,40

25. *Depreciation Fund.*—The amount appropriated to the depreciation fund by debit to the working expenses of State-owned railways and the amount drawn from the fund to meet the expenditure incurred on replacements and renewals actually carried out on those railways during 1935-36 are given in the statement below :—

Account of Depreciation Fund for 1935-36

(Figures in lakhs.)

Railways.	Opening Balance.	Credits to Depreciation Fund in 1935-36.	Amount spent on Replacements and Renewals, etc., and charged to Depreciation Fund in 1935-36.	Closing Balance.
1	2	3	4	5
<i>State Lines managed by State.</i>				
North Western	Rs. 9,24	Rs. 2,45	Rs. 1,95	Rs. 9,74
Eastern Bengal	2,77	85	1,27	2,35
East Indian (including Tatanagar workshops).	5,94	2,41	1,85	6,50
Great Indian Peninsula	4,94	2,02	1,13	5,83
Burma	1,02	58	27	1,33
<i>State Lines managed by Companies.</i>				
Bengal Nagpur	4,23	1,29	57	4,95
Bombay, Baroda and Central India	3,49	1,27	80	3,96
Madras and Southern Mahratta	1,52	92	57	1,87
South Indian	1,32	76	42	1,66
Other Railways and Miscellaneous	2,63	71	34	3,00
TOTAL	37,10	13,26	9,17	41,19
Withdrawal from Depreciation Fund to meet the loss on the working of Railways	—27,51	..	3,99	—31,50
Loans to Branch Line Companies	—9	..	..	—9
Net	9,50	13,26	13,16	9,60

26. An analysis of the financial results of the working of the railways owned by the State is given in the following statement, for the last three years, by each railway :—

(Figures in thousands of rupees.)

Railways.	Year.	(b) Capital at charge.	Deduct amount of capital contri- buted by Companies and Indian States.	Net Government Capital at charge.	Receipts.	Working Expenses including Deprecia- tion.	Payment to worked lines.	Net Receipts.	Per- centage of Net Receipts on Capi- tal at charge.	CHARGE AGAINST NET REVENUE RECEIPTS.		Gain.	Loss.
										Payment on account of share of Surplus Profits.	Interest, Annuity and Sinking Fund charges.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<i>State Lines managed by State.</i>													
North Western	1933-34	1,47,87,12	..	1,47,87,12	14,63,88	11,85,48	..	2,78,40	1.9	..	6,17,73	..	3,39,33
	1934-35	1,46,84,32	..	1,46,84,32	15,90,81	12,33,70	28,81	3,28,30	2.2	..	6,01,27	..	2,72,97
	1935-36	1,46,92,92	..	1,46,92,92	16,35,12	11,99,28	29,82	4,06,02	2.8	..	5,91,27	..	1,85,25
Eastern Bengal	1933-34	50,99,88	..	50,99,88	5,09,60	4,32,92	..	76,68	1.5	..	2,01,77	..	1,25,09
	1934-35	51,10,05	..	51,10,05	5,59,27	4,46,95	7,72	1,04,60	2.0	..	1,97,87	..	93,27
	1935-36	51,59,89	..	51,59,89	5,43,89	4,56,56	8,45	78,88	1.5	..	1,96,92	..	1,18,04
East Indian	1933-34	1,43,85,83	1,12,14	1,42,73,49	18,06,93	11,60,94	..	6,45,99	4.5	..	6,08,69	37,30	..
	1934-35	1,44,50,72	1,12,14	1,43,38,58	18,93,70	11,75,26	7,83	7,10,61	4.9	..	5,96,66	1,13,95	..
	1935-36	1,47,26,41	1,12,14	1,46,14,27	18,86,33	11,80,64	7,74	6,97,95	4.7	..	5,94,39	1,03,56	..
Great Indian Peninsula	1933-34	1,21,72,88	..	1,21,72,88	12,35,42	9,07,06	..	3,28,36	2.7	..	4,52,50	..	1,24,14
	1934-35	1,21,31,12	..	1,21,31,12	12,77,85	9,16,55	25,59	3,35,71	2.8	..	4,39,92	..	1,04,21
	1935-36	1,15,03,02	..	1,15,03,02	13,09,86	9,19,39	28,28	3,62,19	3.1	..	4,29,13	..	66,94
Burma	1933-34	35,19,96	..	35,19,96	3,66,22	2,82,29	..	83,93	2.4	..	1,54,53	..	70,60
	1934-35	35,02,69	..	35,02,69	3,78,20	2,83,71	..	94,49	2.7	..	1,50,22	..	55,73
	1935-36	34,91,32	..	34,91,32	3,62,33	2,84,08	..	78,25	2.2	..	1,46,72	..	68,47
<i>State Lines managed by Companies.</i>													
Bengal Nagpur	1933-34	77,13,70	10,12,20	67,01,50	7,51,31	6,32,33	..	1,18,98	1.5	..	3,45,93	..	2,26,95
	1934-35	77,45,42	10,12,20	67,33,22	8,07,80	6,56,87	1,29	1,49,64	1.9	..	3,35,69	..	1,86,05
	1935-36	77,75,05	10,12,20	67,62,85	8,76,09	6,52,01	1,67	1,92,41	2.5	..	3,30,80	..	1,38,39

(Figures in thousands of rupees.)

Railways.	Year.	(b) Capital at charge.	Deduct amount of capital contributed by Companies and Indian States.	Net Government Capital at charge.	Receipts.	Working Expenses including Depreciation.	Payment to worked lines.	Net Receipts.	Percentage of Net Receipts on Capital at charge.	CHARGE AGAINST NET REVENUE RECEIPTS.		Gain.	Loss.
										Payment on account of share of Surplus Profits.	Interest, Annuity and Sinking Fund charges.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<i>State Lines managed by Companies—consolid.</i>													
Bombay, Baroda and Central India	1933-34	75,75,05	5,50,85†	70,24,20	10,65,13	6,68,37	..	3,96,76	5.2	13,64‡	2,85,24	97,88	..
	1934-35	75,95,88	5,49,00	70,46,88	11,78,93	7,27,01	27,93	4,23,99	5.6	15,61‡	2,80,51	1,27,87	..
	1935-36	73,74,05	5,49,00	68,25,05	11,85,51	7,07,10	29,81	4,48,60	6.1	14,79‡	2,78,22	1,55,59	..
Madras and Southern Mahratta	1933-34	55,06,92	10,68,25	44,38,67	6,93,31	4,24,48	..	2,68,83	4.9	31,45	2,36,74	64	..
	1934-35	55,20,23	10,68,25	44,51,98	7,48,93	4,73,97	29,79	2,45,17	4.4	36,31	2,32,13	..	23,27
	1935-36	53,26,73	10,68,25	42,58,48	7,30,45	4,81,50	27,34	2,21,61	4.2	26,77	2,29,01	..	34,17
South Indian	1933-34	44,92,94	6,35,81||	38,57,13	5,16,93	3,48,04	..	1,68,89	3.8	7,26‡	1,82,41	..	20,78
	1934-35	45,25,00	6,35,81||	38,89,19	5,50,82	3,67,79	8,97	1,74,06	3.8	6,22‡	1,77,47	..	9,63
	1935-36	45,46,66	6,35,81||	39,10,85	5,28,42	3,70,76	7,11	1,50,55	3.3	6,62‡	1,75,55	..	31,62
Other railways	1933-34	42,53,19	6,33,04	36,20,15	3,72,75	2,60,65	..	1,12,10	2.6	4,30	1,72,43	..	64,63
	1934-35	42,64,12	5,89,46	36,74,66	6,52,22	3,80,31	1,39,06	1,32,85	3.1	2,98	1,68,32	..	38,45
	1935-36	43,05,98	5,20,91	37,85,07	6,53,58	3,95,58	1,44,45	1,13,55	2.6	2,77	1,66,99	..	56,21
Suspense	1933-34	..	..	..	..	..	..	..	..	..	..	..	..
	1934-35	..	..	..	..	4	..	-4	..	..	..	..	4
	1935-36	..	..	..	..	-6	..	6	..	..	..	6	..

Adjustments :-													
1. Net result of adjustment of credits on account of released materials and expenditure on non-wasting assets of company-managed railways under Repairs and Maintenance.	1933-34	..	..	..	..	3,10	..	-3,10	..	..	..	..	3,10
	1934-35	..	..	..	..	3,16	..	-3,16	..	..	..	..	3,16
	1935-36	..	..	..	..	3,43	..	-3,43	..	..	..	..	3,43
2. Write-back of Renewal and Replacement Expenditure of the Company's Sections of the Bengal and North-Western and Rohilkhand and Kumaon Railways for the years 1924-25 to 1929-30.	..	..	..	..	..	..	..	..	..	..	..	..	..
	1933-34	..	..	..	57,21	..	..	57,21	..	..	..	57,21	..
	1934-35	..	..	..	48,15	..	..	48,15	..	..	..	48,15	..
Interest on Depreciation and Reserve Fund balances.	1933-34	..	..	..	47,97	..	..	47,97	..	..	..	47,97	..
	1934-35	..	..	..	..	..	..	..	..	..	..	..	..
	1935-36	..	..	..	..	..	..	..	..	..	..	..	..
Net Miscellaneous Receipts and Charges not attributable to any one Railway.	1933-34	..	..	..	..	..	..	..	..	..	..	..	14,74*
	1934-35	..	..	..	..	..	..	..	..	..	..	..	9,44*
	1935-36	..	..	..	..	..	..	..	..	..	..	..	4,06*
Total (Central)	1933-34	7,95,06,27	40,12,29	7,54,93,98	88,38,69	63,05,66	..	25,33,03	3-2	56,65	32,57,97	..	7,95,33
	1934-35	7,95,22,55	39,66,86	7,55,62,89	96,86,88	66,65,32	2,76,99	27,44,37	3-5	61,12	31,80,06	..	5,06,25
	1935-36	7,89,02,03	38,98,31	7,50,03,72	97,59,55	66,80,27	2,84,67	27,94,61	3-5	50,95	31,39,00	..	3,99,40
Provincial Railways	1933-34	14,61	..	14,61	(a)1,57	..	..	1,57	..	..	46	1,11	..
	1934-35	14,61	..	14,61	(a)1,14	..	..	1,14	..	..	51	63	..
	1935-36	14,61	..	14,61	(a)1,23	..	..	..	..	..	51	72	..
Grand Total (Central and Provincial)	1933-34	7,95,20,88	40,12,29	7,55,08,59	88,40,28	63,05,66	..	25,34,60	3-2	56,65	32,58,43	..	7,95,22
	1934-35	7,95,44,16	39,66,86	7,55,77,30	96,87,82	66,65,32	2,76,99	27,45,51	3-5	61,12	31,80,57	..	5,06,62
	1935-36	7,89,16,64	38,98,31	7,50,18,33	97,60,78	66,80,27	2,84,67	27,95,84	3-5	50,95	31,39,51	..	3,98,68
North Western (Commercial)	1933-34	1,13,63,56	..	1,13,63,56	13,37,69	10,00,46	..	3,37,23	3-0	..	4,73,57	..	1,36,34
	1934-35	1,12,77,78	..	1,22,77,78	14,64,11	10,43,91	28,81	3,91,39	3-5	..	4,61,04	..	69,65
	1935-36	1,12,92,24	..	1,12,92,24	15,00,43	9,92,46	29,82	4,78,15	4-2	..	4,53,75	24,40	..
Non-Commercial (Strategic) (North Western and Aden Railways).	1933-34	34,23,56	..	34,23,56	1,26,20	1,85,03	..	-58,83	-1-7	..	1,44,16	..	2,02,99
	1934-35	34,06,54	..	34,06,54	1,26,70	1,89,79	..	-63,09	-1-9	..	1,40,23	..	2,03,32
	1935-36	34,00,68	..	34,00,68	1,34,69	(c)2,08,88	..	(c)-74,19	-2-2	..	1,37,52	..	2,11,71

† Includes Capital provided by the Palampur Durbar.
‡ Includes payments to Durbars—

	1933-34.	1934-35.	1935-36.
Jaipur Durbar	6,88	6,72	6,70
Palampur Durbar	20	10	..
Travancore Durbar	17	69	..
* Includes recoveries from Travancore Durbar	70	10	38

|| Includes capital expenditure on Tinnevely Quilon (Indian State Section).

(a) Represent figures on account of subsidized Companies.

(b) Figures of Capital at charge at end of 1933-34 and 1934-35 include sterling liabilities involved in the purchase of Railways converted at the average rate of the year in which the liabilities were originally incurred and those at end of 1935-36 at 1s. 6d. to the rupee.

(c) Includes Aden Railway :-

Column 7	..	..	..	..	..	..	..	..	..	..	..	..	..	2,06
" 9	..	..	..	..	..	..	..	..	..	..	..	..	..	-2,06

NOTE.—The receipts and working expenses for 1934-35 and 1935-36 in columns 6 and 7 include the figures of worked lines.

III.—General results of working of all Indian Railways.

27. Traffic and mileage.—The more important statistical figures of traffic on all Indian Railways are summarised in the table below:—

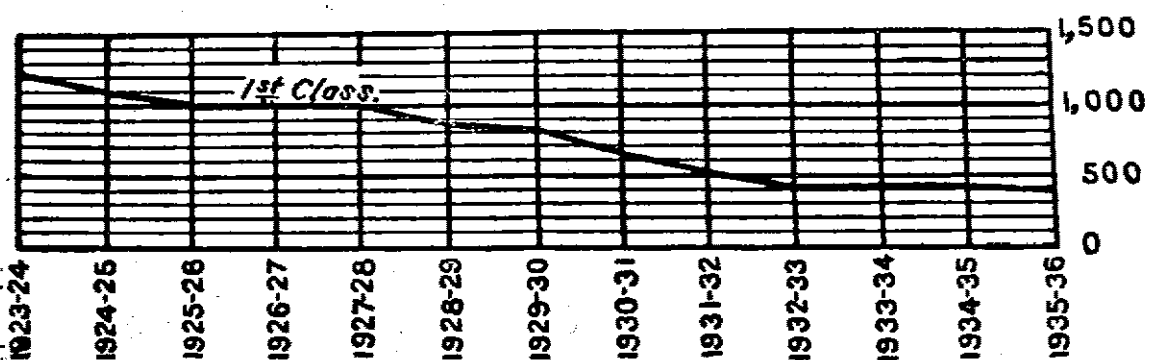
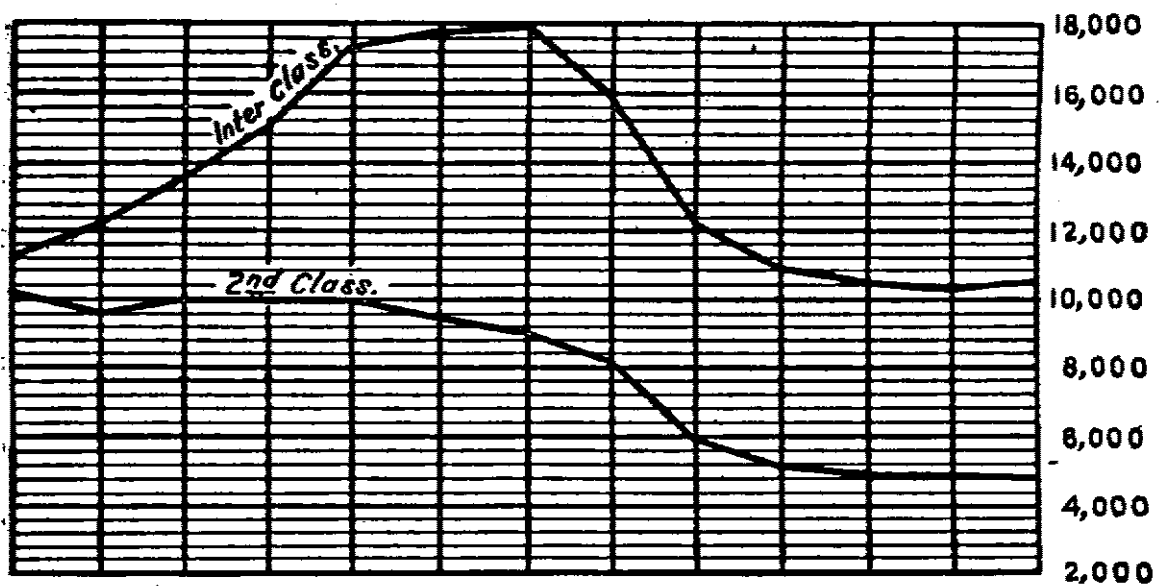
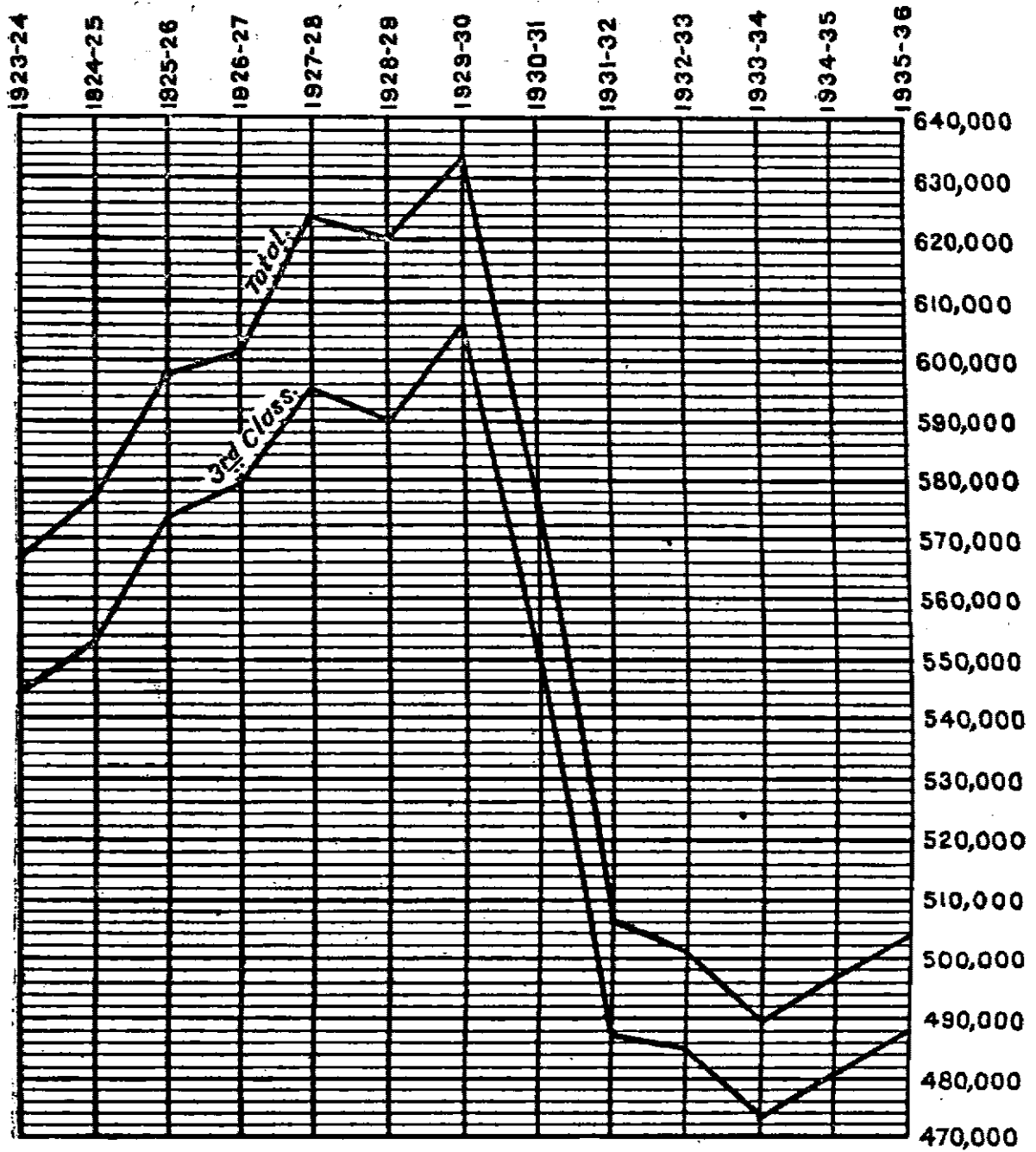
Particulars.	Year.	Class I Railways.	Other Railways.	Total of all Railways.
(i) Total route mileage.	1931-32	38,460	4,353	42,813
	1932-33	38,550	4,394	42,944
	1933-34	38,298	4,655	42,953
	1934-35	38,294	4,727	43,021
	1935-36	38,367	4,751	43,118
(ii) Number of passengers originating (in thousands).	1931-32	475,513	30,323	505,836
	1932-33	471,689	30,206	501,895
	1933-34	456,618	32,995	489,613
	1934-35	463,011	33,580	496,591
	1935-36	469,424	34,267	503,691
(iii) Number of passenger miles (in thousands).	1931-32	17,339,974	716,844	18,056,818
	1932-33	16,890,772	715,682	17,606,454
	1933-34	16,384,713	765,667	17,150,380
	1934-35	16,987,135	777,754	17,764,889
	1935-36	17,353,294	800,824	18,154,118
(iv) Tons originating (in thousands).	1931-32	71,064	3,511	74,575
	1932-33	67,163	3,438	70,601
	1933-34	72,951	3,562	76,513
	1934-35	80,649	3,854	84,503
	1935-36	82,737	4,195	86,932
(v) Number of ton miles (in thousands).	1931-32	18,106,542	240,223	18,346,765
	1932-33	16,978,015	224,526	17,202,541
	1933-34	18,459,656	247,161	18,706,817
	1934-35	20,090,588	†261,047	†20,351,635
	1935-36	20,295,579	258,105	20,553,684

† Revised figures.

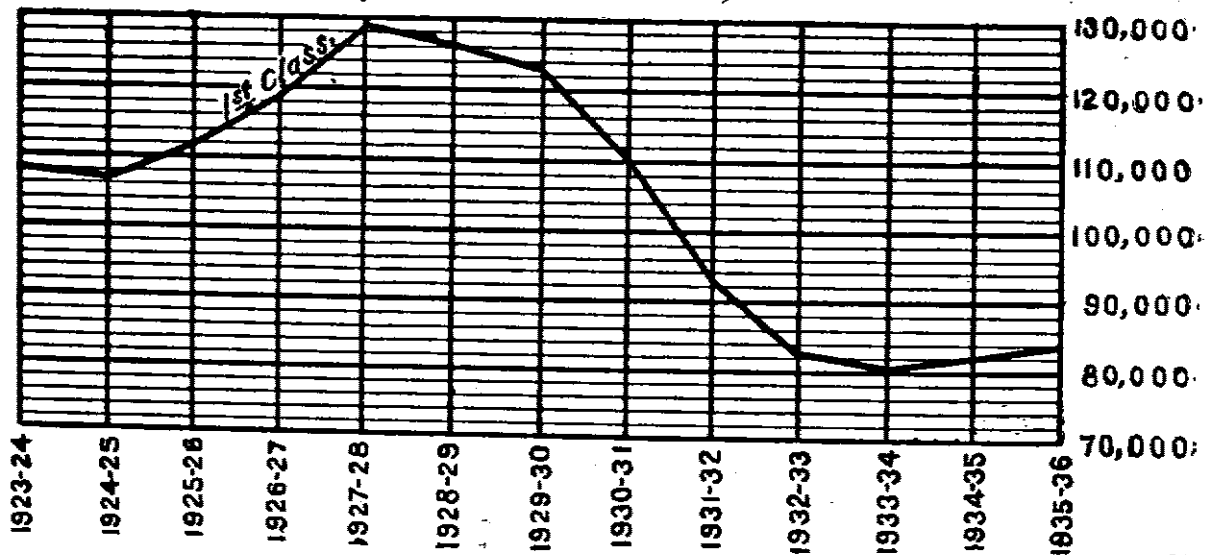
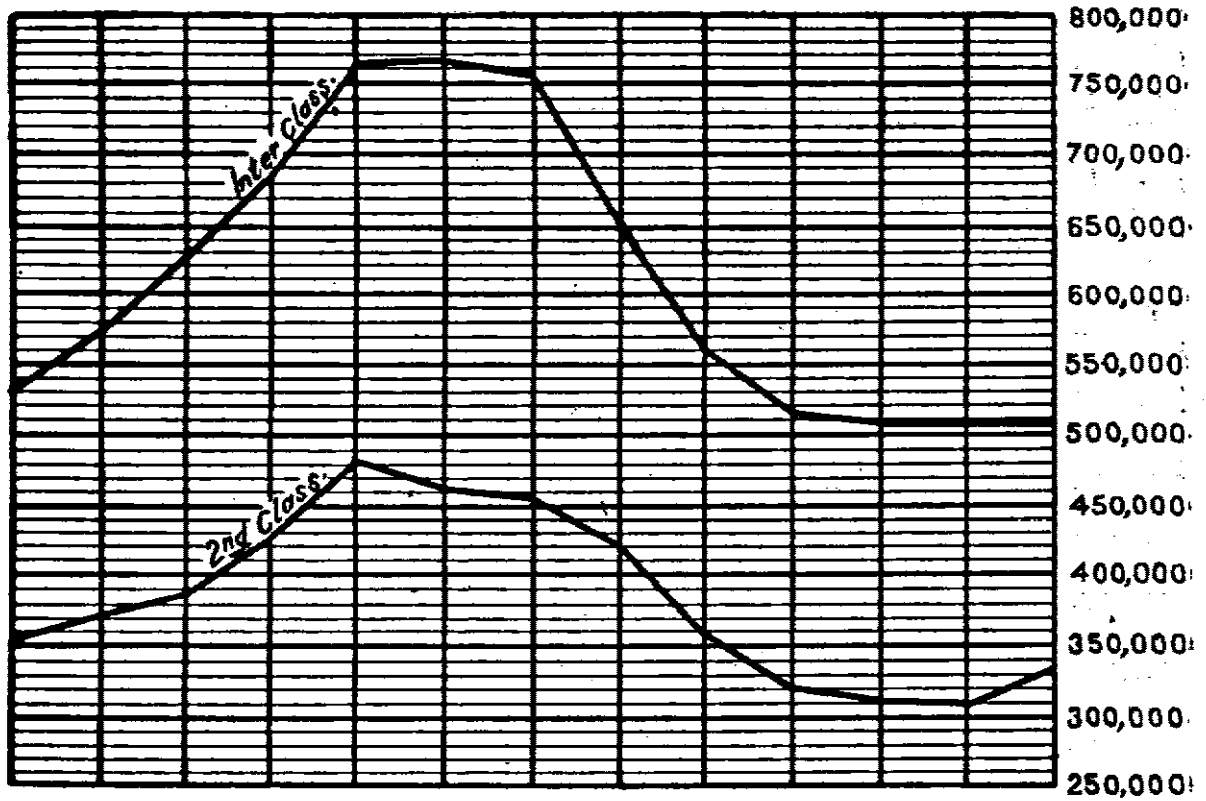
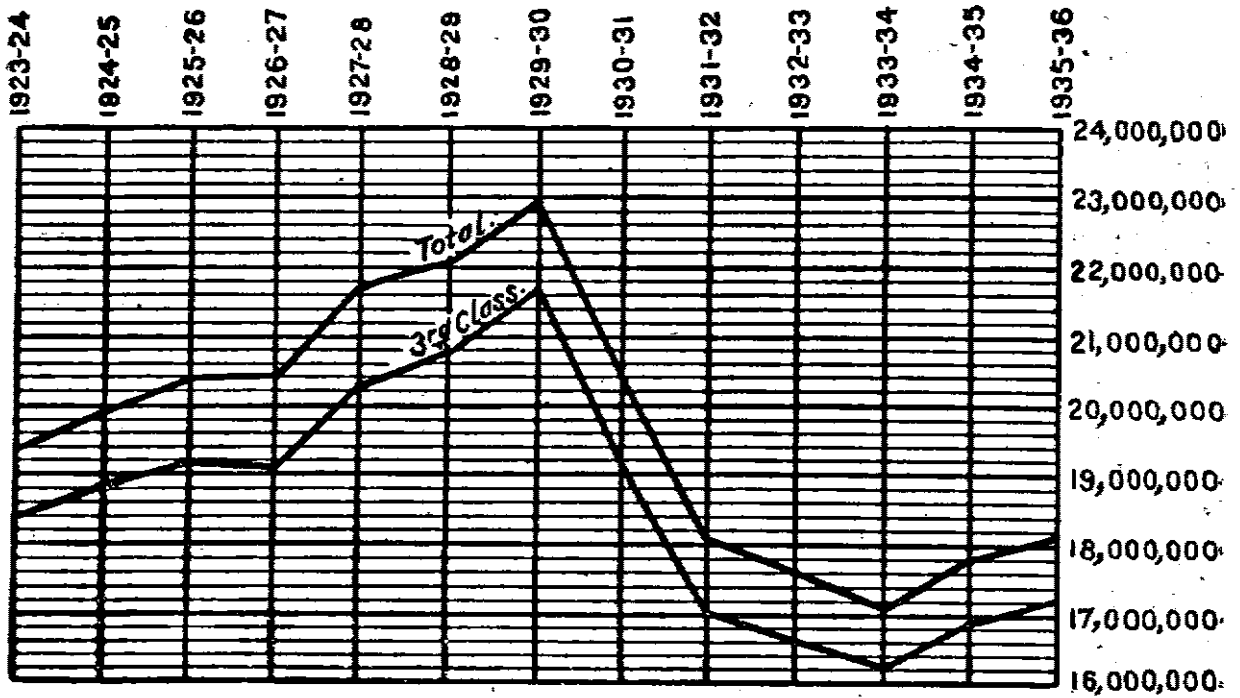
28. Analysis of earnings.—The total earnings of all railways, including those with which the Government of India are not directly concerned, amounted to Rs. 103.84 crores, of which Rs. 64.69 crores or 62.3 per cent. were from goods traffic, Rs. 30.56 crores or 29.4 per cent. from passenger traffic and Rs. 8.59 crores or 8.3 per cent. from parcels, luggage and other miscellaneous items.

29. Passenger earnings.—Passenger earnings showed an increase of about 1 per cent. from Rs. 30.35 to 30.56 crores. The following table shows

NUMBER OF PASSENGERS CARRIED ON INDIAN RAILWAYS (IN THOUSANDS)



PASSENGER MILES INDIAN RAILWAYS (IN THOUSANDS)



the numbers of and earnings from passengers separately for each class for the four years previous to the war and for the last seven years. Graphs are also inserted showing the number of passengers carried and of passenger miles by classes from 1923-24 :—

Year.	NO. OF PASSENGERS CARRIED (IN THOUSANDS).						EARNINGS FROM PASSENGERS (IN THOUSANDS OF RUPEES).					
	1st class.	2nd class.	Inter class.	3rd class.	Season and Vendor's tickets.	Total.	1st class.	2nd class.	Inter class.	3rd class.	Season and Vendor's tickets.	Total.
1910	685	2,784	10,702	315,839	24,341	354,351	58,82	77,23	94,99	14,65,16	15,85	17,12,05
1911	703	2,947	11,409	331,055	25,687	371,801	66,38	83,83	1,08,88	15,73,15	16,85	18,49,09
1912	700	3,030	11,508	356,789	26,810	397,837	62,90	83,31	91,37	17,01,35	17,55	19,56,48
1913-14	715	3,253	12,000	390,412	30,114	436,494	68,94	88,70	1,03,49	18,37,03	19,36	21,17,51
1929-30	804	9,125	17,900	606,468	*	634,297	1,04,45	1,83,56	1,58,96	34,11,36	*	38,58,33
1930-31	670	8,089	16,189	550,879	*	575,827	94,06	1,70,20	1,41,34	30,24,16	*	34,29,75
1931-32	508	5,937	12,354	487,037	*	505,836	83,34	1,53,71	1,22,98	27,75,41	*	31,35,44
1932-33	429	5,278	10,871	485,317	*	501,895	77,95	1,47,44	1,15,14	27,91,67†	*	31,32,20
1933-34	421	5,050	10,557	473,585	*	489,613	76,07	1,42,24	1,11,54	26,79,09	*	30,10,90‡
1934-35	406	4,818	10,316	481,051	*	496,591	76,83	1,41,48	1,11,92	27,04,74	*	30,34,97
1935-36	384	4,763	10,469	488,075	*	503,691	77,98	1,45,80	1,11,35	27,20,57	*	30,55,68

* The number of season and vendor's tickets and their earnings included under the respective classes; the former at the rate of 50 single journeys per month.

NOTE.—In pre-war reports the sum of the numbers of passengers carried on each separate railway was shown as the total number of passengers carried on all railways. Passengers travelling over two or more railways or two or more gauges of the same railway were thus counted as two or more passengers. The actual number of passengers carried on all railways is in fact the same as the number of passengers originating and this figure has been adopted for "number of passengers carried" in the reports from 1923-24 onwards. As the number of passengers originating is not available prior to 1923-24 the figures of pre-war years have been modified.

† Revised figures.

‡ Includes credit of 1,94 received from the East Indian Railway on account of passengers carried over the Delhi Ghaziabad section for the period April 1925 to May 1931: details under different classes are not available.

During 1935-36, 5 million more passengers were carried on Class I Railways than in 1934-35 and passenger earnings increased by Rs. 19 lakhs. The following statement shows the variations over the various railways :—

Railway system.	Variations in the number of passengers carried as compared with 1934-35.	
	No.	Rs.
Assam Bengal	+ 784,000	+ 3,11,000
Bengal and North-Western	+ 2,309,100	+ 10,06,000
Bengal Nagpur	+ 464,400	+ 2,02,000
Bombay, Baroda and Central India	+ 2,131,600	+ 5,25,000
Burma	- 176,900	+ 3,14,000
Eastern Bengal	+ 2,789,700	+ 4,23,000
East Indian	+ 445,000	+ 64,000
Great Indian Peninsula	+ 1,391,100	+ 12,80,000
Jodhpur	+ 657,200	+ 3,86,000
Madras and Southern Mahratta	+ 1,03,700	- 4,59,000
H. E. H. the Nizam's State	- 145,100	+ 1,57,000
North Western	- 553,000	+ 1,64,000
Rohilkund and Kumaon	+ 4,300	- 13,000
South Indian	- 5,403,600	- 24,61,000
Total	+ 4,801,500	+ 18,99,000

30. *Goods earnings.*—The earnings from goods traffic on all railways increased by 32 lakhs, chiefly under cotton, raw and manufactured, metallic ores and iron and steel wrought; but was offset by a considerable fall under rice, jute raw, gram and pulse including jowar and bajra and other grains and oilseeds.

The tonnage of, and earnings from the principal commodities carried by Class I Railways during 1935-36 as compared with the preceding year, are shown in the statement below. Apart from the main increases, mentioned above, there were increases under fruits and vegetables, fresh, marble and stone and railway materials.

Commodity.	1934-35.		1935-36.		Increase + Decrease— in earnings. Rs. (in lakhs).
	No. of tons originating (in millions).	Rs. (in crores).	No. of tons originating (in millions).	Rs. (in crores).	
<i>Increases.</i>					
Cotton raw and manu- factured.	1.75	5.87	1.84	6.28	+41
Metallic ores	2.99	0.95	3.66	1.30	+35
Iron and Steel, wrought	1.34	2.34	1.43	2.57	+23
Fruits and Vegetables, fresh.	3.75	1.36	4.29	1.49	+13
Marble and stone	2.64	0.82	2.93	0.92	+10
Railway materials	5.07	0.53	5.40	0.61	+8
Gur, Jaggree, Molasses	0.83	1.21	0.88	1.28	+7
Petrol	0.24	0.89	0.25	0.92	+3
Wheat	1.65	2.10	1.72	2.12	+2
Sugar refined and un- refined.	0.80	1.57	0.87	1.59	+2
Live stock	0.16	0.50	0.16	0.52	+2
Military traffic	0.31	0.27	0.28	0.28	+1
Manures	0.19	0.13	0.22	0.14	+1
Other commodities	8.91	10.41	9.55	10.95	+54
Salt	1.30	1.76	1.33	1.76	..
Wood, unwrought	1.24	0.88	1.35	0.88	..
<i>Decreases.</i>					
Rice	4.80	4.19	4.28	3.78	-41
Jute, raw	0.99	1.24	0.85	0.95	-29
Gram and pulse and other grains.	2.51	3.36	2.50	3.08	-28
Fuel for public and foreign Railways.	20.15	10.34	20.13	10.13	-21
Oilseeds	2.27	2.99	2.12	2.78	-21
Materials and stores on revenue account.	13.39	2.75	13.55	2.66	-9
Provisions	1.20	3.04	1.19	2.96	-8
Kerosene Oil	0.82	1.52	0.76	1.49	-3
Fodder	0.95	0.56	0.90	0.54	-2
Tobacco	0.10	0.82	0.30	0.81	-1
TOTAL	80.65	62.40	82.74	62.79	+39

31. Alterations in rates and fares.—Passenger fares.—The following are some of the more important changes that were made during the year:—

(i) *East Indian Railway.*—The fares for week-end return tickets were revised with effect from 1st July 1935 as follows:—

<i>Previous.</i>	<i>Revised.</i>
<i>1st, 2nd and Inter-classes—</i>	
1½ single fare.	16 to 30 miles, 1½ single fare. + 31 miles and over, 1½ single fare.
<i>3rd class—</i>	
16 to 30 miles, 1½ single fare. + 31 miles and over, 1½ single fare.	16 to 30 miles, 1½ single fare. + 31 miles and over, 1½ single fare.

(ii) *North Western Railway.*—The bases of third class fares were altered from 1st January 1936 as follows:—

<i>Previous.</i>	<i>Revised.</i>
Per mile.	Per mile.
1 to 50 miles 3 pies.	1 to 300 miles 3 pies.
+ 51 to 300 „ 2½ „	+ 301 miles and over 2½ „
+ 130 miles and over 2½ „	

(iii) *South Indian Railway.*—From 1st December 1935 first and second class fares were enhanced, as follows:—

<i>Previous.</i>	<i>Revised.</i>
Per mile.	Per mile.
<i>1st class—</i>	
1 to 150 miles 18 pies.	All distances 21 pies.
+ 151 miles and over 15 „	
<i>2nd class—</i>	
1 to 150 miles 12 pies.	All distances 12 pies.
+ 151 miles and over 9 „	

Parcels traffic.—Special rates for fresh fruit in wagon loads were notified on several railways to encourage long distance movement.

Goods traffic.—The following are the more important changes made:—

Coal.—With effect from the 1st April 1935, the surcharge of 15 per cent. on coal freights, which had been imposed in January 1932 was reduced to 12½ per cent. and its operation was subject to a maximum of Re. 1 per ton.

Manures.—Over the Bengal Nagpur, East Indian and Eastern Bengal Railways (from 1st January 1936) and over the Madras and Southern Mahratta and South Indian Railways (from 1st February 1936) the previous bases of charge for traffic in wagon loads, which was one-tenth pie per maund per mile was enhanced as follows:—

	Per maund per mile.
<i>Bengal Nagpur, East Indian and Eastern Bengal Railways—</i>	
1 to 150 miles	0.14 pie.
+ 151 miles and over	0.11 „
<i>Madras and Southern Mahratta and South Indian Railways</i>	0.14 „

Petrol and liquid fuel.—With effect from 1st January 1936, the rates applicable generally over several principal railways were altered: the revised bases for charge being those applicable prior to 1928, viz.:—

	Per maund per mile.
Petrol	0.83 pie.
Liquid fuel	0.42 „

32. Compensation claims for goods.—The statement below shows for each Class I Railway the amounts paid on account of compensation for goods lost or damaged during the year 1935-36 as compared with the previous seven years. The total amount paid during 1935-36 shows an increase over the figures for 1933-34 and 1934-35, though the percentage the amount paid bears to the total goods earnings is only slightly above that for 1934-35. The figure for 1935-36 is, however, substantially lower than those for the other five years.

Claims for goods lost or damaged paid by Class I Railways (excluding Jodhpur Railway) during 1928-29 to 1935-36.

Railways.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	PERCENTAGE TO GOODS EARNINGS.	
									1934-35.	1935-36.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		
Assam Bengal	20,973	19,096	15,976	10,303	5,600	5,784	5,898	5,016	0·05	0·05
Bengal and North-Western	45,387	56,914	26,865	25,291	25,866	13,288	14,460	21,995	0·07	0·11
Bengal Nagpur	1,02,726	77,437	60,128	11,878	14,255	20,002	27,342	21,123	0·05	0·03
Bombay, Baroda and Central India.	1,21,175	1,07,749	96,011	46,910	31,242	22,054	29,347	33,908	0·04	0·05
Burma	34,696	18,828	22,129	11,947	9,226	6,893	11,146	8,336	0·04	0·03
Eastern Bengal	1,53,676	1,08,360	83,409	47,013	43,211	37,416	25,536	37,167	0·08	0·12
East Indian	2,27,600	1,75,501	1,10,596	90,624	72,983	52,150	32,474	59,418	0·03	0·05
Great Indian Peninsula .	1,45,133	1,11,392	1,15,364	1,11,645	63,868	72,883	59,193	46,817	0·07	0·05
Madras and Southern Mahratta.	95,330	1,28,478	70,612	51,557	22,641	18,953	21,902	19,966	0·05	0·04
His Exalted Highness the Nizam's State.	11,443	23,075	16,206	11,978	9,899	4,459	11,034	9,043	0·08	0·07
North Western	99,446	78,321	1,26,939	65,900	59,117	21,346	47,248	79,009	0·05	0·08
Rohilkund and Kumaon .	7,204	5,775	2,611	4,574	1,220	2,654	2,400	1,179	0·06	0·03
South Indian	28,350	12,992	18,826	13,732	7,320	9,523	4,179	10,051	0·02	0·04
TOTAL	10,93,139	9,23,864	7,65,672	5,03,352	3,66,448	2,87,405	2,92,159	3,53,028	0·05	0·06

NOTE.—The above figures exclude the amount of credits afforded to home line departments for the loss of their goods.

CHAPTER III.

NEW CONSTRUCTION AND ENGINEERING WORKS.

33. Capital Expenditure.—At the end of March, 1936, the total capital at charge on all railways, including those under construction, amounted to Rs. 879·59 crores, of which Rs. 789·17 crores was capital at charge on State-owned Railways inclusive of premia paid in the purchase of Companies' lines. The remainder, Rs. 90·42 crores, represented capital raised by Indian States, Companies and District Boards.

The capital at charge of State-owned Railways is composed as follows :—

	£
Liability and debt incurred in purchase of Railways	150,106,630
Less liability and debt cancelled by the operation of Annuities and Sinking Funds	- 29,284,941
Net amount outstanding	120,821,689*
	Rs. (omitting 000)
Direct expenditure by Government	6,27,93,07
The above sterling figure converted into rupees	1,61,08,96*
	7,89,02,03
Add Provincial Railways expenditure	14,61
	7,89,16,64
Grand Total	7,89,16,64

By far the greater portion of this amount, namely, Rs. 7,50,18,33,000 is Government Capital and only 1-20th or Rs. 38,98,31,000 is owned by Companies. These figures include Rs. 34·01 crores on account of capital expenditure to the end of March 1936, on strategic lines.

The total capital outlay on all railways during 1935-36 was Rs. 3·33 crores, of which Rs. 2·58 crores were spent on State-owned Railways. The following statement shows how this outlay of Rs. 2·58 crores was distributed between open line works, rolling-stock and new line, similar figures being given for the previous four years and for 1913-14.

Year.	OPEN LINES.			New lines.	GRAND TOTAL.
	Works including Stores and general charges.	Rolling-stock.	TOTAL.		
	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.
1913-14	9·30	7·31	16·61	1·86	18·47
1931-32	1·74	2·16	3·90	2·79	6·69
1932-33	0·05	-0·55	-0·50	0·57	0·07
1933-34	-0·45	-1·82	-2·27	0·22	-2·05
1934-35	0·76	-0·69	0·07	0·18	0·25
1935-36	2·24	0·05	2·29	0·29	2·58

* £2,575,000 representing share capital of the Great Indian Peninsula Railway paid off during 1925-26 has been converted at the average rate of exchange for that year and the balance of £118,246,889 at the rate of 1s. 6d. to the rupee.

The distribution of the capital outlay in 1935-36 over the different state-owned lines is shown in the summary below:—

Railways.	OPEN LINES.			New lines.	GRAND TOTAL.
	Works, etc.	Rolling-stock.	TOTAL.		
	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.
Bengal Nagpur	0.23	0.07	0.30	..	0.30
Bombay, Baroda and Central India	0.09	0.06	0.15	..	0.15
Eastern Bengal	0.23	0.01	0.24	0.03	0.27
East Indian	1.03	0.19	1.22	-0.01	1.21
Great Indian Peninsula	-0.15	-0.38	-0.53	..	-0.53
Madras and Southern Mahratta	0.16	0.05	0.21	..	0.21
North Western	0.54	-0.05	0.49	..	0.49
South Indian	0.07	0.08	0.15	0.03	0.18
Other Railways	0.04	0.02	0.06	0.24	0.30
TOTAL	2.24	0.05	2.29	0.29	2.58

34. Lines opened during 1935-36.—110.81 miles of railways were opened to public traffic during the year and consisted of:—

1.54 miles on the 5' 6" gauge.

109.27 miles on the 3' 3 3/8" gauge.

Details regarding the sections opened are given below:—

Name of line.	Gauge.	Mileage.	Owner.	Working Agency.	Date of opening.
Extension of the line to new Faridpur Station.	5' 6"	1.54	State	Eastern Bengal Railway.	21st October 1935.
Marwar Junction to Phulad	3' 3 3/8"	15.69	Indian State line	Jodhpur Railway	4th February 1936.
Jhudo-Pithoro	3' 3 3/8"	64.11	State	Jodhpur Hyderabad (British Section) Railway	1st June 1935.
Agastiyampalli-Point Calimere	3' 3 3/8"	5.39	Do.	South Indian Railway.	20th January 1936.
Khamblihat-Phulad Junction	3' 3 3/8"	13.25	Indian State line	Udaipur-Chitorgarh Railway.	4th February 1936.
Talala to Sasangir	3' 3 3/8"	10.83	Do.	Junagad State Railway.	*17th March 1936.

* For Goods traffic only.

NOTE.—The Jhagadia-Netrang Section of the Rajpipla State Railway (Bombay, Baroda and Central India Railway), which was temporarily closed for public traffic on 15th June 1934, was reopened on 11th November 1935.

35. Lines sanctioned in 1935-36.—During the year under review sanction was accorded to the construction of one new line only 16.22 miles long on the metre gauge.

36. Lines under active construction on 31st March 1936.—At the end of the financial year 1935-36 the mileage of new lines under active construction was as follows:—

3' 3 3/8" gauge	Miles.
	63.44
Total	63.44

The lines under active construction are given in the table below, which also show the construction agencies and the progress reached :—

Name of line.	Gauge.	Mileage actually under construction.	Working Agency.	* Progress of work (Proportion completed on 31st March 1936).
Kunkavav-Bagasra	3' 3½"	12·50	Gondal Railway .	·40
Anandapuram-Sagar	3' 3½"	16·22	Mysore Railway .	..
Prachi Road-Kodinar	3' 3½"	16·10	Gaekwar's Baroda State Railway.	·60
Sasangir-Visavadar	3' 3½"	18·62	Junagad State Railway.	·10
Total . . . . .	..	63·44		

NOTE.—The Talala-Sasangir Section of the Junagad State Railway mentioned in paragraph 34, was opened for goods traffic only on 17th March 1936, but not for passenger Traffic for which the line is ultimately meant.

37. Surveys.—Not many surveys for new lines were carried out during the year, as the prospects of such lines proving remunerative under present day conditions appeared remote. Survey work was therefore, practically limited to areas which are devoid of railway communication, or to such as held out some hopes of a railway line proving fruitful. Among the former may be mentioned the Kotabanji-Patnagarh-Bolangir-Sonepur traffic survey. The results, however, proved disappointing and led to the conclusion that development of the area by a road system was preferable.

Of the latter category was the final location survey of the proposed Pithoro-Tando Mitha Khan-Sanghar Railway in Sind, a length of about 55 miles, which was sanctioned in August 1935 though the actual survey operations were completed in the winter of that year, the results were received only at the end of the year under review. This line is intended to open out a section of country irrigated by the Sukkur Barrage project.

An Engineering survey was also carried out for a line from Noamundi to Joda, as an alternative to the Badampahar Joda line which was mentioned in last year's report. This line is intended to serve the iron ore deposits in the Joda area, Bengal Nagpur Railway.

38. Important lines under construction.—The following is a brief account of the lines which were under construction during the year :—

(i) *Prachi Road-Kodinar Railway.*—This line was mentioned in last year's report as having been commenced by the Baroda State in January 1935. Progress in construction was to some extent retarded by the prevalence of malaria, but more than half the work has been completed.

(ii) *Talala-Visavadar Railway.*—This line was also mentioned in last year's report. The first section, Talala to Sasangir, 10·83 miles, was completed and opened for goods traffic on 17th March 1936. Work on the remaining 18·62 miles from Sasangir to Visavadar was commenced in January, 1936. This section, however, lies in difficult country.

(iii) *Kunkavav-Bagasra Railway—12·50 miles.*—The construction of this metre gauge line, which is an enterprise of the Gondal Darbar, was sanctioned in December 1935. It is expected to cost roughly Rs. 9 lakhs. Work has been progressing satisfactorily and the line is expected to be opened in the course of the coming year.

* ·30 signifies that $\frac{3}{10}$ th of the work has been done.

·50 signifies that half the work has been done.

1·00 signifies completion of the work.

(iv) *Anandapuram-Sagar Railway*.—The construction of this metre gauge line, a length of 16·22 miles, was approved in September 1935. It is estimated to cost about Rs. 11 lakhs. The line is an extension of the existing Arasalu-Anandapuram Railway and lies entirely in Mysore territory. Its object is to stimulate trade and develop a large tract of country which is rich in forest produce and minerals but which, at present, suffers from the want of rapid communications and from the prevalence of malaria. The railway, which when completed will bring the famous Gersoppa Falls to within a distance of 18 miles from Sagar station, is being financed and constructed entirely by the Mysore Government.

39. Important lines opened during 1935-36.—Of the lines opened during the year, the following may be specially mentioned :—

(i) *Jhudo-Pithoro Railway*—64·11 miles.—This line was designed mainly for the transport of the increased volume of the agricultural produce of the area commanded by the Lloyd Barrage Irrigation Scheme. It was completed and opened to public traffic on the 1st June 1935.

(ii) *Agastiyampalli-Point Calmère Railway*—5·39 miles.—This line affords an instance where it was found more economical to construct and maintain a railway rather than a road, on account of the sandy nature of the soil and the liability of the areas to seasonal flooding. A point of interest attending its construction, was the discovery, during excavation, of a large number of bronze idols believed to be more than 100 years old. The idols have since been taken over by the museum at Madras.

(iii) *Extension to new Faridpur Station*.—In order to bring the railway terminus nearer to the centre of the Faridpur town, the Pachooria-Faridpur Branch of the Eastern Bengal Railway was extended by 1·54 miles from the old Faridpur Station, Ambikapur, to the New Faridpur station. The extension was opened for public traffic on the 21st October 1935.

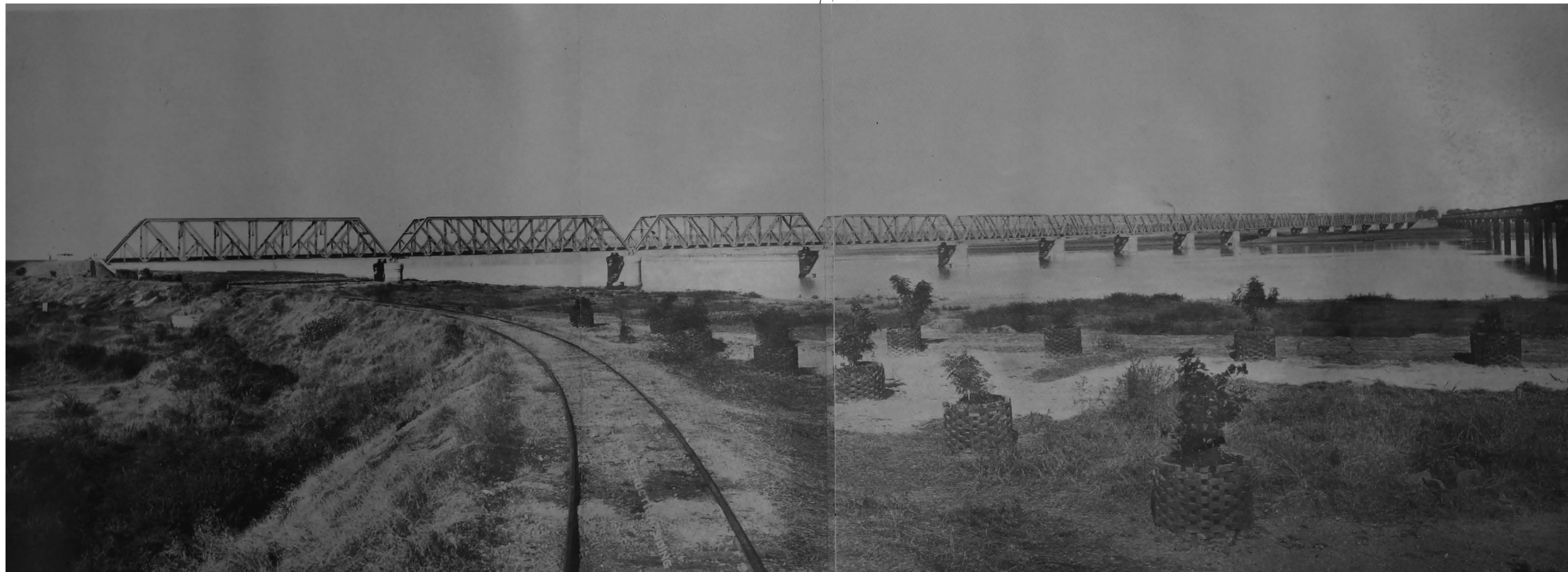
(iv) *Marwar Junction-Phulad Railway*—15·69 miles.—This line was sanctioned on the 14th January 1935 and completed and opened for traffic by the Jodhpur Darbar on the 4th February 1936. With the opening of the Khambli Ghat Phulad section of the Mauli-Phulad Railway by the Mewar Darbar on the same date, this line forms a through connection between the Jodhpur Railway and the Udaipur Chitorgarh Railway.

40. Important New Works.—(i) *Meghna Bridge, between Ashuganj and Bhairab Bazar, Assam Bengal Railway*.—Mention of this Scheme was made in last year's report. It was sanctioned early in 1935, and the main construction work commenced in November 1935. Rapid progress was made during the first working season, by the end of which the wells for the six shore piers and the twin wells for four of the eight main piers had been founded. Progress was also made with the construction of the approach banks at Ashuganj and Bhairab Bazar. The total estimated cost of the bridge is Rs. 56·33 lakhs of which a sum of Rs. 14·69 lakhs was expended in the year. It is anticipated that the bridge will be completed and opened for traffic before the end of the financial year 1937-38.

(ii) *Nerbudda Bridge near Broach, Bombay, Baroda and Central India Railway*.—The old bridge over the Nerbudda River on the Bombay, Baroda and Central India Railway main line near Broach, was a single line bridge and the girders were too weak for modern day loads and speeds. As this was a severe handicap to the movement of traffic, the construction of a new double line girder bridge up to modern standards on a new alignment 2·43 miles long, was commenced in 1932. The bridge was completed during the year at a cost of Rs. 76 lakhs and opened to traffic as the "Silver Jubilee Bridge" on the 20th December.

(iii) *Borivli-Vihar Electrification, Bombay, Baroda and Central India Railway*.—The originally electrified section of the Bombay, Baroda and Central India Railway extended from Churchgate station to Borivli. This necessitated a change of trains for passengers and bazar supplies at Borivli

BOMBAY, BARODA & CENTRAL INDIA RAILWAY.



Silver Jubilee Bridge over Nerbudda River.

NORTH WESTERN RAILWAY.



Engine Shed at Quetta after the earthquake on 31st May 1935.

and involved a longer time in the journey between Bombay and Virar. In order to do away with these disadvantages a scheme for extending the electrification to Virar was investigated in 1926 but postponed at the time for financial reasons. The project was reconsidered during the year as the time had come to renew the stock necessary for steam working if it was decided to continue the existing steam services. In view, however, of the superior advantages of electric working, it was decided to extend the existing electrified service to Virar, a distance of 16 miles, at a cost of Rs. 24·83 lakhs, utilising the track structures, etc., released from the temporary electrification between Colaba and Churchgate. It is anticipated that this work will give an improved train service that will lead to the development of the outlying areas with a corresponding increase in traffic.

41. Open Line Improvements.—(i) *Permanent Way Renewals and major traffic facilities.*—The programme for relaying with 60 lb. steel rails the main line from Katihar to Gorakhpur on the Bengal and North-Western Railway was continued during the year. On the Madras and Southern Mahratta Railway, too, sanction was accorded to the 40 miles Section from Yesvantpur to the Mysore frontier being relaid with new 60 lb. rails in substitution of 41½ lb. rails, at a cost of Rs. 10·88 lakhs.

Among other works undertaken during the year with the object of improving train operation may be mentioned the lengthening of loops and the provision of improved (Standard III) interlocking arrangements on the Chingleput Villupuram Section of the South Indian Railway at a cost of Rs. 5·62 lakhs; the extension of loops on the Section Ghaziabad to Saharanpur, North Western Railway, at a cost of Rs. 2 lakhs; and arrangements to isolate the run-through line from connected sidings, etc., with a view to increasing speed at 8 stations on the Khargpur-Nagpur main line of the Bengal Nagpur Railway at a cost of Rs. 2·27 lakhs.

(ii) *Strengthening of bridges and tunnels.*—To allow of the intensive use of heavy locomotives on the Sholapur Division, Great Indian Peninsula Railway, it was found necessary to regirder the Krishna bridge consisting of 36 × 103' spans. The girders of this bridge were of wrought iron and nearly 66 years old, and necessitated a restriction both in the weight and the speed of trains. It was accordingly decided to regirder them at a cost of about Rs. 9½ lakhs using converted girders released from other bridges.

Nalganga Bridge, Great Indian Peninsula Railway.—A high flood which occurred in the Nalganga river in 1930 revealed that the waterway provided at this bridge was insufficient, and as the arches of the bridge had already shown signs of failure, it was decided to rebuild the bridge as a girder bridge, advantage being taken of the opportunity to relay the new alignment with heavier rails. The scheme was accordingly sanctioned for commencement at a cost of Rs. 4·12 lakhs.

The Down Saranda tunnel on the Bengal Nagpur Railway was causing considerable anxiety owing to frequent falls of rock from the unlined roof of the tunnel, which necessitated a reduction of speed of all trains through the tunnel and a careful system of patrolling both by day and night. It was, therefore, decided with the advice of the Geological Survey Department to line the tunnel, beginning with the worst portions. The first two stages of the work were accordingly commenced during the year at a cost of Rs. 1·11 lakhs.

(iii) *Remodelling of the East Indian Railway Workshops at Jamalpur.*—A full description of this scheme was given in last year's report. During the year under review good progress was maintained and about 44 per cent. of the work was completed. It is expected that the work will be finished during 1936-37.

(iv) *Remodelling of Carriage and Wagon Shops at Jhansi (Great Indian Peninsula Railway).*—Mention was made of this work in the report for 1934-35. During the year under review further progress was made and about 50 per cent. of the work was completed.

(v) *Realignment to shift the junction from Chichoki Mallian to Qila Sheikhpura, North Western Railway.*—With a view to improving the facilities for the public and providing good railway services between Lahore and Qila Sheikhpura and between Qila Sheikhpura and Nankana Sahib, it was decided to realign the section between Bahrianwala and Chichoki Mallian so as to shift the junction Qila Sheikhpura at a cost of about Rs. 3·73 lakhs. The results anticipated are a better service between the places mentioned which, it is hoped, will recapture to the railway a good portion of the traffic now using the road, and also effect a reduction in general working expenses, as also a reduction in the staff previously employed at the waterlogged and unhealthy station of Chichoki Mallian, where the incidence of sickness is high.

(vi) *Khan Alampura Yard Remodelling.*—The traffic at Khan Alampura Yard had considerably increased in recent years and the existing facilities proved to be inadequate to handle it. In busy seasons, an average of nearly 800 wagons per day had to be handled with the result that serious congestion occurred. Owing to the limitations of the yard, about 60 per cent. of these wagons had to pass through Khan Alampura without being marshalled, the remarshalling being done at other junctions on the North Western and East Indian Railways thus causing much delay and inconvenience. It was, therefore, considered necessary to increase the capacity of the yard and also to provide facilities for proper marshalling of trains. A remodelling scheme was, therefore, sanctioned in November 1935 at a cost of approximately Rs. 6 lakhs.

(vii) *Coimbatore Station, South Indian Railway.*—The remodelling of this station, which is very cramped and the facilities at which are inadequate to meet the demands of the traffic offered by the important town and commercial centre it serves, was proposed some years ago, but postponed for want of funds. With the advent of the Pykara Hydro-Electric Scheme, the town has also shown a tendency to expand inspite of the general trade depression, and complaints have been frequent regarding the inadequate station accommodation. It was, therefore, decided in 1935 to embark on a scheme of remodelling to be carried out in stages, and sanction was accorded to work being undertaken on the first stage at a cost of Rs. 8·43 lakhs. This stage is designed to meet only the immediate essential and urgent demands and consists mainly of recasting the passenger and goods yards, providing a new station building with an underbridge in place of the existing level crossing, and power signalling and electric lighting.

42. Hardinge Bridge, Eastern Bengal Railway.—As mentioned in last year's report, a Committee of engineers was formed to investigate the situation at the Hardinge Bridge. The Committee presented their final report in November 1935. They recommended certain works to be undertaken immediately and also others to be undertaken in the future, the time of execution being dependent on the movements of the river. The main work during 1935-36 was the restoration of the guide bank across the original breach, which was completed by 1st June 1935. Other subsidiary works were carried out in accordance with the recommendations of the Committee. Repairs were carried out to the Right Guide Bank which suffered from some slips, and to the isolated head, and some stone was added to the apron. During the monsoon of 1935 a small embayment formed below the tail of the Right Guide Bank. This was not entirely unexpected as a similar embayment had occurred on the model at Poona during the experiments. With this knowledge as a guide, immediate steps were taken to prevent further damage.

CHAPTER IV.

TRANSPORTATION AND WORKING.

43. **Statistics.**—The volume of business handled by railways is best indicated by “passenger miles” as regards passenger traffic and by “net ton miles” as regards goods traffic. These figures are arrived at by multiplying the total number of passengers and tons of goods carried by the number of miles over which they are moved. The following table shows that the volume of traffic thus expressed which class I Railways carried increased during the year, as compared with the previous two years. The figures of net ton miles given do not include the mileage incurred by purely departmental trains, but this mileage only represents about 3 per cent. of the total.

(Figures in thousands.)

Particulars.	Class I Railways.			
	1933-34.	1934-35.	1935-36.	Percentage of increase (+) or decrease (—) compared with 1934-35.
Passenger miles	16,384,713	16,987,135	17,353,294	+2·16
Net ton miles	18,043,937	19,547,067	19,773,124	+1·16

Service performed.—The following table shows the number of train miles run to carry the above mentioned traffic. Passenger train miles show an increase of 2·14 and 4·97 per cent. on the broad and metre gauge, respectively, and a decrease of 0·26 per cent. on the narrow gauge. The figures of goods train miles show an increase of 3·29 and 3·96 per cent. on the broad and narrow gauge, respectively, and a decrease of 1·54 per cent. on the metre gauge. Full details of train and engine miles of Class I Railways are given in statements Nos. 17 and 32 of Volume II and those of classes II and III Railways in statement No. 37:—

(Figures in thousands.)

Particulars.	CLASS I RAILWAYS.											
	BROAD GAUGE.				METRE GAUGE.				NARROW GAUGE.			
	1933-34.	1934-35.	1935-36.	Percentage of variations with 1934-35.	1933-34.	1934-35.	1935-36.	Percentage of variations with 1934-35.	1933-34.	1934-35.	1935-36.	Percentage of variations with 1934-35.
Passenger (including proportion of mixed) train miles.*	65,508†	67,420†	68,873	+2·14	30,745†	31,234†	30,787	+4·97	2,323	2,273	2,267	—0·26
Goods (including proportion of mixed) train miles.*	37,712	40,172	41,493	+3·29	18,947	19,887	19,580	—1·54	1,548	1,565	1,627	+3·96

* Includes mileage of electric locomotive trains.

† Revised figures.

In addition to the train services mentioned above, a large amount of what may be called unproductive or "other" engine miles, *viz.*, shunting, light and assisting are run. During the year under review, this mileage was equivalent to about 17 per cent. of the total engine miles (including departmental). The total departmental train and engine mileage, which is also not directly productive, amounted to 9.6 million miles, or about 5 per cent. of the total engine miles. As the shunting miles on railways form the greater proportion of unproductive mileage, the following table has been prepared to show the ratio of shunting miles per 100 train miles on the passenger and goods services of Class I Railways:—

Particulars.	BROAD GAUGE.				METRE GAUGE.			
	1933-34.	1934-35.	1935-36.	Percentage of variations with 1934-35.	1933-34.	1934-35.	1935-36.	Percentage of variations with 1934-35.
Shunting miles per 100 train miles (Passenger and proportion of mixed).	5.37	5.03	4.94	-1.79	5.43	5.07	4.57	-9.86
Shunting miles per 100 train miles (Goods and proportion of mixed).	35.8	35.4	15.1	-0.85	31.9	32.6	32.3	-0.92

Engines.—The work done by engines is expressed by the figure "engine miles per engine per day". Based on the number of engines on the line, this figure shows an increase on the broad gauge from 65 to 69 and on the metre gauge from 65 to 66. Based on the number of engines in use, the number of engine miles per engine per day increased from 108 to 110 on the broad gauge and from 102 to 103 on the metre gauge. The percentage of engines under or awaiting repairs in mechanical and transportation workshops decreased from 18.3 to 17.7 and from 14.1 to 13.4 on the broad and metre gauges, respectively.

44. Speed of goods trains.—The average through speed of goods trains is calculated on the total time taken by a train from the start to the finish of its run inclusive of stops *en route*. During the year under review the average speed on class I Railways was practically the same as in the previous year: the figures being 11.5 on the broad gauge and 11.2 on the metre gauge during 1935-36 as compared with 11.6 and 11.0 respectively in the previous year. In statement No. 20 of Volume II detailed particulars are given for each railway.

45. Loads of goods trains.—The average net or freight load of broad gauge goods trains on Class I Railways during the year under review increased from 391 tons (Steam) in 1934-35 to 393 tons in 1935-36. On the other hand, the figure for metre gauge lines decreased from 174 in 1934-35 to 171 in 1935-36. Statement 23 of Volume II contains the figures for each railway.

The main index figure of goods train working, *viz.*, "net ton miles per engine hour" showed a decrease from 1,946 in 1934-35 to 1,931 in 1935-36 on the broad gauge and from 891 in 1934-35 to 887 in 1935-36 on the metre gauge.

46. Wagon usage.—The amount of work got out of the available wagon stock may be expressed either in the average number of miles run per wagon per day, both loaded and empty wagons being taken into account, or in the average number of net ton miles carried per wagon per day. It should, however, be noted that both these statistical figures indicate the work done by the total number of wagons on railways and not only by wagons actually in use, as all empty wagons are also taken into account, irrespective of whether they are actually in use or are stabled in sidings during the period

they are in excess of traffic requirements. The following table shows these two results for 1935-36 compared with the previous year :—

Particulars.	CLASS I RAILWAYS.			
	Broad gauge.		Metre gauge.	
	1934-35.	1935-36.	1934-35.	1935-36.
Wagon miles per wagon day	34.8	35.1	28.2	28.1
Net ton miles per wagon day	308	309	147	142

The average percentage of unserviceable wagons in mechanical and transportation workshops and sick lines to the total number of goods wagons increased from 9.31 in 1934-35 to 9.56 in 1935-36 on the broad gauge and from 2.84 in 1934-35 to 2.88 in 1935-36 on the metre gauge.

Passenger vehicles.—Similar figures with regard to repairs of passenger vehicles show a decrease from 11.96 in 1934-35 to 11.83 in 1935-36 on the broad gauge and from 8.52 in 1934-35 to 8.04 in 1935-36 on the metre gauge.

Turning to individual railways, some of the principal features of the year's transportation working are as follows :—

Assam Bengal Railway.—The shunting miles per 100 passenger and goods train miles fell from 8.25 and 32.8 in 1934-35 to 7.43 and 29.8 in 1935-36, respectively.

Bengal Nagpur Railway (broad gauge).—The wagon miles per wagon day and net ton miles per wagon day advanced from 32.8 and 321 in 1934-35 to 35.5 and 353 in 1935-36, respectively. The net ton miles per goods locomotive day on line and in use advanced from 13,798 and 24,789 in 1934-35 to 15,936 and 25,747 in 1935-36, respectively. The shunting miles per 100 passenger and goods train miles fell from 5.23 and 44.8 in 1934-35 to 4.79 and 42.0 in 1935-36, respectively.

Bombay, Baroda and Central India Railway.—The net ton miles per engine hour on the broad gauge and wagon miles per wagon day on the metre gauge advanced from 2,191 and 33.2 in 1934-35 to 2,260 and 38.6 in 1935-36, respectively. The net or freight load per goods train on the broad gauge increased from 410 in 1934-35 to 418 in 1935-36.

Eastern Bengal Railway (metre gauge).—The engine miles per day per engine in use and on line advanced from 104 and 61 in 1934-35 to 109 and 68 in 1935-36, respectively, indicating a more intensive use of locomotive power. The shunting miles per 100 passenger train miles fell from 8.40 in 1934-35 to 7.61 in 1935-36.

Great Indian Peninsula Railway (broad gauge).—The engine miles per day per engine in use and on line advanced from 127 and 67 in 1934-35 to 131 and 72 in 1935-36, respectively.

Madras and Southern Mahratta Railway (broad gauge).—The wagon miles per wagon day and net ton miles per wagon day advanced from 42.4 and 333 in 1934-35 to 46.4 and 369 in 1935-36, respectively. The net ton miles per engine hour increased from 1,722 in 1934-35 to 1,864 in 1935-36. The net ton miles per goods locomotive day on line advanced from 12,937 to 14,047. The shunting miles per 100 goods train miles fell from 32.1 to 30.7.

His Exalted Highness the Nizam's State Railway (broad gauge).—The net ton miles per engine hour increased from 1,798 to 1,835.

North Western Railway (broad gauge).—The net ton miles per goods locomotive day on line advanced from 10,259 to 11,071. The engine miles per day per engine in use increased from 103 to 106.

Jodhpur Railway.—The net ton miles per goods locomotive day on line advanced from 4,874 to 6,452. The engine miles per day per engine on line increased from 59 to 66. The shunting miles per 100 passenger train miles fell from 10.4 to 8.82.

South Indian Railway (broad gauge).—The net ton miles per engine hour and per goods locomotive day on line advanced from 961 and 7,707 to 1,086 and 8,636, respectively. The engine miles per day per engine in use and on line increased from 111 and 72 to 115 and 77, respectively. The shunting miles per 100 goods train miles fell from 44.8 to 38.5.

47. Punctuality of passenger trains.—The following table shows the percentage of passenger trains not losing time to total number of trains run during 1935-36, as compared with 1934-35, on Class I Railways:—

	All trains (including electric multiple unit trains).	Mail and important through trains.	Mixed trains.	Suburban trains.	Other passenger trains.
<i>Broad Gauge.</i>					
1935-36	87.3	81.9	83.5	88.5 95.1*	85.3
1934-35	88.1	82.9	85.7	89.4 95.5*	85.3
<i>Metre Gauge.</i>					
1935-36	88.5	88.8	87.1	97.4 90.2*	87.8
1934-35	88.0	87.2	87.0	95.9 97.3*	85.8

* Bombay, Baroda and Central India, Great Indian Peninsula and South Indian Railways' electric multiple unit trains.

It will be seen that on the broad gauge there was a slight falling off in the percentage of all passenger trains not losing time except under other passenger trains. On the metre gauge although the percentage of trains not losing time shows a falling off under suburban electric trains, there has been an improvement in the running of all other passenger trains.

48. System of ticket checking.—The systems in force on railways remained substantially the same as in the previous year, *viz.*, check by "Ticket Checkers" at stations and by "Travelling Ticket Examiners" in trains. In order to expedite the disposal of cases against those found travelling without tickets and refusing to pay the charges due on demand certain local Governments arranged to appoint special Magistrates to hold their courts at railway stations, *e.g.*, on the Assam Bengal and South Indian Railways.

The following briefly summarises some of the more important activities in this matter:—

(i) *Bengal and North-Western Railway.*—During the year 10 ticket checking raids were carried out in the United Provinces and 19 in Bihar with the co-operation of the Police and a special Magistrate.

(ii) *Bombay, Baroda and Central India Railway.*—The anti-mendicant gangs introduced in 1934 were retained, but 4 additional gangs which experimented on other sections were discontinued, as it was found that more satisfactory results could be obtained by the normal methods of checking. Nearly half a million mendicants were turned out of trains and railway premises.

(iii) *Eastern Bengal Railway.*—A small branch of specially selected staff called "The Fraud Detection and Espionage Branch" was organised to detect and stop leakage of revenue by frauds committed in some cases in collusion with certain of the staff. This branch prosecuted 243 cases of faked, forged and defaced tickets and of fraudulent use of season tickets.

(iv) *East Indian Railway.*—The administrative control of ticket checking was strengthened by the formation of a special branch principally to keep in close touch with the ticket checking work on divisions and to co-ordinate such work. This branch, in conjunction with the Watch and Ward Department, takes such action as investigation shows to be necessary to reduce ticketless travelling.

A percentage of the collected tickets from stations was subjected to detailed examination by the Accounts Department to bring to light irregu-

larities at the time of issue or of collection, and to check frauds in connection with the re-selling of used tickets.

(v) *North Western Railway*.—An organisation of special ticket examiners was maintained on each Division to work in groups consisting of five men with a "Group-in-charge". These groups were employed alternately in checking tickets at stations and on trains according to a fixed programme. They also carried out surprise checks at stations, such checks being outside the ordinary programme. The head ticket examiner prepared the programmes for checking on each Division and issued them weekly to his staff.

An experiment was made on certain Divisions of sending out lady ticket examiners on day trains to check ladies' tickets. The necessity for having such checks appears to have been established.

Experiments are being made on one Division to check every train instead of 40 per cent. by a special staff with a view to ascertaining what difference a cent per cent. check will make.

(vi) *South Indian Railway*.—From the 1st April 1935, 51 out of the total of 197 travelling ticket examiners and 14 travelling ticket inspectors employed were utilised for an intensive check of trains over sections under headquarters control—the check was extended in July and the number so employed was increased to 75. In December 1935, this check was discontinued on certain sections and introduced on others, the staff being further increased to 81.

The method of intensive check varied, from time to time, as under:—

- (i) two travelling ticket examiners were deputed to work on each of the important trains and one on other trains;
- (ii) one travelling ticket examiner was deputed to man each train in the area;
- (iii) important trains were each manned daily by one travelling ticket examiner and other trains on alternate days;
- (iv) the squad system was introduced according to which a squad of three travelling ticket examiners was given a definite section and the check of trains on that section was left to their discretion. Even with this system important trains were manned daily.

An experimental measure of station check was tried twice on the Mutupet-Arantangi section: two or three travelling ticket examiners being posted at each of the stations on this section for a period of 7 to 10 days. Their primary duty was to check trains on arrival at the station and to watch all sides of the platform before and during the arrival of trains. They had also to see that all passengers entering or leaving the station had their tickets and that they made use of the proper entrances and exits at stations. This system of check minimises the percentage of missing tickets in the check area and increases the sale of platform tickets.

49. *Statement showing the total number of passengers detected travelling without proper tickets on Class I Railways, during the calendar years 1931 to 1935—*

Railways.	1931.	1932.	1933.	1934.	1935.
Assam Bengal	52,656	160,302	48,344	45,059	52,176
Bengal Nagpur	78,364	66,840½	71,058	84,920	86,345
Bengal and North-Western	344,106½	352,357	320,653	318,118½	302,549
Bombay, Baroda and Central India	264,031	279,859	806,200½	749,308	756,872
Burma	226,220	230,724	235,960	192,372	199,767
Eastern Bengal	195,387	251,900	269,328	226,427	176,993
East Indian	99,491½	181,918½	143,628½	144,052	231,258
Great Indian Peninsula	271,409	331,717½	307,962	257,839	274,220
Jodhpur	23,041	20,600	27,990	20,298	19,106
Madras and Southern Mahratta	63,528	48,390	49,345	41,264	150,175
His Exalted Highness the Nizam's State	12,960½	19,804½	20,611	17,239	17,131
North Western	432,190	476,057	337,981½	228,026	342,860
Rohilkund and Kumaon	27,843	29,908	30,050	32,221	37,220
South Indian	181,084	173,904	162,697	162,649	146,107

50. Road Motor Competition.—The desirability of adopting suitable measures to meet road competition continued to engage the attention of all railways. Brief particulars of the position in this respect on the principal railways and of the steps taken by them during the year are given in the following paragraphs :—

Assam Bengal Railway.—The sections principally affected by motor competition at present are the Silchar-Sylhet, the Furkating-Badulipara-Jorhat, and the Chaparmukh-Silghat. To meet this competition, train services were improved and the question of reducing third class fares on the Sibsagar-Khowang and Chaparmukh-Silghat Railways was taken up.

Bengal and North-Western Railway.—Road competition affects principally passenger traffic between Benares and Allahabad. Reduced return journey fares were introduced during the year in order to prevent traffic being diverted to the road.

Bengal Nagpur Railway.—Reduced fares, on a competitive basis adjusted with the fares charged by buses were in force on certain narrow gauge sections as stated in last year's report, as also on certain other competitive broad gauge sections.

Road competition from lorries for the carriage of certain commodities between Ranchi and Calcutta, a distance of about 250 miles, has been met with a certain amount of success by a reduction in freight rates and the introduction of an Express Goods Service.

Competition between Vizagapatam and Vizianagram, a distance of about 40 miles, has been met by the quotation of special reduced rates.

Bombay, Baroda and Central India Railway.—Special enquiries were made to ascertain the loss caused by road competition. On the basis of an actual count over a short period, it was estimated that the loss on account of the diversion of third class traffic amounted to Rs. 28 lakhs per annum. This is in addition to the loss of revenue consequent on a reduction of fares, and the issue of concession tickets, and also on account of the increased expenditure incurred by the railway for augmenting the normal daily services and opening additional halting stations.

Investigations were also made to determine the extent to which goods were carried by road in competition with the railway, and efforts made to regain some of the lost traffic by the quotation of special rates.

Burma Railways.—In the report for 1934-35 mention was made of the introduction of two fast local trains between Letpadan and Paungde and the extension of the existing service between Toungoo and Penwegen up to Nyaunglebin. Three more fast local train services were added during the year, and halts arranged at certain level crossings. These trains proved to be popular and checked to a considerable extent the drop in the number of passengers travelling for distances upto 50 miles.

Competition in regard to goods traffic increased and a large proportion of the paddy traffic was moved by lorries. With a view to combating this competition, a system of rebates on railway freight for rice was introduced in March, 1936.

Eastern Bengal Railway.—The introduction in 1934-35 of third class ordinary return tickets in local booking arrested the diversion of traffic to roads in the Calcutta suburban area and on certain sections of the metre-gauge where motor competition was severe.

The feasibility of running Diesel electric cars on the Sealdah-Budge Budge section so as to provide an accelerated and more frequent train service was examined.

East Indian Railway.—The position in regard to road motor competition for passenger traffic eased to some extent owing to a decline in the number of buses licensed for operation, though it was still intensive on certain sections. Further diversion of passenger traffic was checked by substantial

reductions in third class fares and by incurring considerable expenditure on the provision of increased facilities, such as more frequent train services, co-ordination of road-rail services, e.g., at Mussorie and Patna, provision of additional halts, running of more through service carriages and adjustment of train timings. The provision of additional train services, principally by the adoption of cheaper operating units is estimated to have increased train mileage by 880,000.

Competition from lorries for goods traffic was intensified practically throughout the system, resulting in considerable loss of revenue through actual diversion of traffic and by reductions in rates to check such diversion. This competition, which was particularly intensive between Calcutta and the coalfields, was not confined to short distances. Regular road services were available for the transport of merchandise between Calcutta and large towns in the United Provinces and the Punjab. This was made possible by gross overloading of vehicles. Reduction of rates, speeding up of the time in transit, improvements in booking and delivery arrangements, establishment of out-agencies, inauguration of collection and delivery services at selected centres were the principal measures taken to meet this competition.

Great Indian Peninsula Railway.—Competition for passenger traffic did not show any appreciable sign of a decrease, except on the Pulgaon-Arvi section, where the reduction in lower class fares and the introduction of Diesel unit services proved effective. Reduced single and return journey fares were introduced between certain stations, and special fares were quoted on the occasion of certain fairs. Train services were also adjusted on certain other sections.

Road competition for goods traffic became more acute and widespread during the year, especially in the Bombay Presidency. Here again as in the case of the East Indian and other Railways road competition is practicable only by the almost universal practice of overloading. Reduced rates were quoted to arrest further diversion of traffic to the road.

Madras and Southern Mahratta Railway.—Road services continued to divert traffic from the railway. Additional passenger buses were put on the road, and there was also a considerable increase in the number of lorries operating for the conveyance of merchandise by consistent overloading and evading the payment of taxes.

A new feature attendant on motor competition during the year was the diversion of produce by road to minor ports on the west coast for shipment by country craft to Bombay.

To meet this competition, reduced rates were quoted for selected commodities, special services were provided for the conveyance of certain articles, train services were improved, additional services being also run by Diesel cars, and cheap return tickets were issued.

His Exalted Highness The Nizam's State Railway.—There was a small increase in the route mileage operated by the State Road Mechanical Transport Services, which showed satisfactory financial results. The earnings per mile of the suburban services declined due to there being little or no control over the activities of privately-owned buses. The introduction of new State Motor Vehicles Rules was under contemplation.

North Western Railway.—Competition from road services was intensified. Although some of the organised companies which ran motor services to regular timings and at fixed charges broke down, through lack of funds, or went into liquidation, other companies were formed to take their places.

The issue of cheap single and return journey tickets, combined with augmented and accelerated train services, on sections where road motor competition was severe had encouraging results. Through road-cum-rail tickets were introduced for journeys between Lahore and Kashmir, in conjunction with an organised road transport company, in order to counteract the tendency of passengers to travel by road for the entire journey.

In 1934-35 road competition for goods traffic was felt principally for distances within 50 miles, but during the year under review, the effective distances increased and the time taken *en route* also decreased.

The question of an extension of the system of "door-to-door" delivery by the Railway at certain important stations was under investigation.

Rohilkund and Kumaon Railway.—Return tickets were introduced between certain stations, and light passenger train services with accelerated speed were provided on certain sections.

South Indian Railway.—Considerable competition from motor buses was experienced both as regards passengers and parcels. To meet this competition, cheap single and return journey tickets were introduced, and improved travel facilities provided by the addition of fast passenger train services and extra trains at more convenient timings, and by arranging halts at level crossings.

There was also considerable competition for goods traffic necessitating the quotation of special rates and arranging for quicker transit.

51. Mela Traffic.—The large movement of passengers to places of religious importance and for important melas invariably necessitate special arrangements being made. These during the year under review were satisfactory: additional booking offices and waiting sheds being provided, additional staff being deputed and special trains being run as occasion demanded. The Assam Bengal, Eastern Bengal and East Indian Railways also quoted special return journey fares in conjunction with steamer companies to develop Buddhist pilgrim traffic.

The following were some of the more important melas for which special arrangements were made:—

(i) *Anniversary of the Mulagandha Kuti Vihara, Sarnath (Bengal and North-Western Railway).*—Publicity propaganda was conducted with satisfactory results to induce Buddhists from the Arakan coast and certain other places to travel to Benares and Gaya *via* Calcutta.

(ii) *Pushkar fair at Ajmere (Bombay, Baroda and Central India Railway).*—A temporary enquiry office was again opened this year to assist passengers generally.

(iii) *Adh Kumbh fair at Allahabad (East Indian Railway).*—This mela was held in January-February 1936. About 250,000 passengers were carried to Allahabad, but the arrangements that were made contemplated a very much larger number travelling.

(iv) *Nankana Sahab Fair (North Western Railway).*—This fair was held on the 10th November 1935, and the same special arrangements were made as in the previous year for booking passengers from temporary booking offices located near lorry stands and for their transport to the railway station. An additional facility was provided by booking passengers from the fair grounds on completion of the mela. The increase in earnings, due to these arrangements combined with the issue of the cheap third class return tickets from 72 stations on the North-Western Railway to Nankana Sahab and the issue of cheap third class single tickets from Lyallpur to Nankana Sahab, was very encouraging.

52. Wagon position.—During the year under review, the number of wagons was sufficient to meet all demands. The number loaded increased by approximately 129,000 equivalent to 3.1 per cent. more than in the previous year. Despatches of coal increased by approximately 67,900 tons representing an increase of 0.37 per cent. over the previous year.

53. Neutral examination of interchanged Wagon Stock.—The staff working under the Director of Wagon Interchange continued to examine wagons interchanged between railways at the following junctions:—

Agra Cantonment.	Khanalampura.
Ajni-Nagpur.	New Delhi.
Chheoki.	Raichur.
Ghaziabad.	Waltair.

EAST INDIAN RAILWAY.



CMR type covered wagon.

An Indian Railways' standard covered wagon suitable for animal transport.

The system of neutral umpires introduced in July 1932 at Gomoh and in February 1934 at Katni Murwara, was continued.

54. Railway Collieries.—The output from the principal railway collieries during 1935-36 compares with the previous year's output as follows:—

Colliery.	Owned by	Output (tons).	
		1934-35.	1935-36.
1. Joint Bokharo	E. I. & B. N.	672,266	611,501
2. Joint Sawang	E. I. & B. N.	59,235	50,641
3. Kurharbaree and Serampore	State	771,137	712,964
4. Bhurkunda	State	104,113	88,030
5. Kargali	State	445,172	435,340
6. Argada	B. N.	251,316	260,703
7. Talcher	B. N.	106,265	158,341
8. Jarangdih	B., B. & C. I. and M. & S. M.	118,420	103,462
9. Talcher	M. & S. M.	141,916	150,005
10. Kurasia	B., B. & C. I.	122,895	153,332

State Railway Collieries.

(i) *Bhurkunda Colliery.*—The output of the Colliery was still under restriction. No development work was done during the year and several inclines had to be kept closed. The supply of labour was satisfactory and the health of the community good.

(ii) *Kargali Colliery.*—No development work of importance was undertaken during the year except the installation of a 35 HP Haulage complete with housing. The supply of labour was satisfactory and the health of the community good.

(iii) *East Indian and Bengal Nagpur Railways' Joint Sawang Colliery.*—No constructional work was carried out at this colliery during the year under review. On the 12th of August the river Konar rose to an unprecedented height and flowed into the abandoned No. 1 Quarry which was completely inundated. The influx of water into the underground workings rendered it necessary to withdraw the pumps. Dewatering was started in December and the water has been pumped out. The supply of labour was satisfactory and the health of the community was good. There were no accidents during the year.

(iv) *East Indian and Bengal Nagpur Railways' Joint Bokharo Colliery.*—No new construction was undertaken at this Colliery during the year under review. Screening plants, haulages and the pumping plant have worked satisfactorily. The supply of labour was plentiful. There were 26 cases of small-pox of which two proved fatal. New filter beds were put into commission on 24th March 1936 and the supply of good drinking water is now plentiful.

(a) *Quarry No. 1.*—The water which accumulated in the bottom Section of this quarry during excessive rainfall in August last was pumped out by the end of January. It has since been possible to extract most of the floor coal in this area. A new dip haulage to deal with the coal at the southern dip of the quarry is being arranged for. A scheme has been drawn up for the development of the area on the east of the Godo Nala.

(b) *Quarry No. 2.*—The haulage gallery referred to in the Report for 1934-35 has been completed and the newly aligned haulage is working satisfactorily.

(c) *Quarry No. 3.*—The main haulage has been realigned and diverted to the east in order to facilitate the extraction of the thick coal at this point. A new pumping shaft is being sunk to the south-east of the present shaft. When this has been completed, a large area of thick coal can be won in the vicinity of the present shaft.

(v) *Giridih Collieries—(a) Serampore Colliery—Central Pits.*—Conditions underground have improved considerably since the report for 1934-35 and the output has been satisfactory. There have been no fresh outbreaks of fires underground. The new auxiliary haulage has been put into commission and is working satisfactorily, and the underground haulages and screening plants worked satisfactorily throughout the year.

Deep Pit.—Conditions underground have been satisfactory. The development galleries through the dyke progressed well but the area proved is still very faulty and disturbed.

16-A Pit.—Conditions in the fire area are the same as last year. There is no reason to suspect that the fire is active as the temperature within the fire dams has not risen.

(b) *Kurharbaree colliery.*—Underground conditions have generally improved.

Nos. 1 and 2 Jubilee Pits.—An ignition of firedamp occurred on 28th May and it was decided in the interests of safety to introduce safety lamps at No. 1 Jubilee mine. Second hand oil lamps were procured temporarily. 1,000 electric safety lamps will shortly be put into use. Development of the area through the dyke has made fair progress. Faulty ground and bad roof have been encountered and have retarded the progress of the development galleries in some instances. The additional 60,000 gallons per hour pump has been put into commission.

Joktiabad Pit.—Difficulties due to treacherous roof have been experienced in No. 18 Side, otherwise conditions underground have been satisfactory. The additional auxiliary pumps installed in No. 18 Side have dealt with the income of water satisfactorily.

Sariabad.—Pillar extraction on the southern boundary was commenced during the year under review. The roof is very treacherous and has to be heavily timbered. A connection was made with the old Domohani workings during the year. This area was closed down many years ago. The condition of the workings is good and this coal will be kept as a reserve for the present.

Kalimaran.—Development has made good progress and pillar extraction was started on the eastern side of the dip workings. No. 1 Side has been dewatered and opened up.

(c) *Bye Products—Coke Ovens.*—The outturn from the Bye-Product Coke and Benzol Plant was as follows:—

1. Coke	20,555 tons.
2. Tar	899 „
3. Sulphate of Ammonia	233 „
4. Benzol	34,078 gallons.
5. Rectified Solvent Naptha	950 „

There were 106 accidents at the Collieries out of which 69 proved fatal.

All plant and machinery have been maintained in a satisfactory working order during the year under review.

(vi) *Bombay, Baroda and Central India and Madras and Southern Mahratta Railways' Jarangdih Colliery.*—Outstanding gallery connections in the Rise District were made and the ventilation of this section has now an uninterrupted course. Coal winning was chiefly confined to the West Rise Section where considerable progress was made, this Section being comparatively free from gas. Bricking was extended 56 ft. in the West Water Gallery and the roof secured with girders. Two Igneous Dykes, approximately parallel and 170 ft. apart, were encountered in the main inclines and had to be blasted through. Some of the levels on the South side of No. 5

Incline having gone a distance of 2,000 ft. a new connection with the surface (No. 5 Incline) was made which is being opened out to serve as a main haulage road. Two 10 H.P. and one 3 H.P. electrically driven pumps were installed in the workings and are operating satisfactorily. The rope guides in No. 2 Shaft have been replaced by rail guides supported on girder buntons. Work on the installation of a 150 H.P. Haulage at No. 5 Incline and on the Endless Haulage from No. 5 Incline to the Loading Depôt is progressing satisfactorily.

(vii) *Bombay, Baroda and Central India Railway's Kurasia Colliery.*—The following principal works were done at this colliery during the year under review.

Labour quarters.—The remaining 14 blocks of Dhowrahs against the 1934-35 programme were completed.

Staff quarters and buildings.—Three blocks of artisan quarters were undertaken and completed during the year. Two blocks of two units each Junior Subordinate staff quarters were completed in addition.

Power House.—The work on the Power House extension was undertaken and completed with the exception of flooring.

Erection of New Belliss Engine.—The foundation for the engine was completed and the work of erection put in hand.

Siding.—Spreading of ballast in formation was finished excepting a small portion where the siding is to be linked with the Bengal Nagpur Railway.

Cutting for a trap siding and buffer end near station yard is nearly completed. The Broad Gauge slack line underneath the screening plant was also completed.

Incline Development.—The total progress during the year is given below—

No. 2 Incline	751 ft.
No. 3 Incline	699 „

(viii) *Madras and Southern Mahratta Railway's Talcher Colliery.*—The development of this colliery proceeds steadily. Recently some faults have been met in the East Panels and in parts of this area the tenderness of the roof has necessitated heavy timbering.

(ix) *Bengal Nagpur Railway's Talcher Colliery.*—The development of this colliery is still in progress. Raisings during the year under review amounted to 158,341 tons.

Coal mined in India.—In 1935 the coal mined in the various provinces of British India amounted to 21,014,469 tons as against 20,243,977 tons in 1934 or an increase of 770,492 tons.

Quantity of coal despatched by rail.—The quantity of coal carried by the East Indian and Bengal Nagpur Railways was as follows—

East Indian Railway	12,842,649 tons.
Bengal Nagpur Railway	7,875,360 „

Shipment of coal from Calcutta.—Shipments including bunker coal from the Port of Calcutta to Indian and foreign ports during 1935-36 amounted to 2,471,050 tons of which 280,869 tons were on account of Indian Railways as compared with 388,760 tons in 1934-35. No Indian coal was shipped to the Ceylon Government Railway.

Tonnage of coal inspected by the State Railway Coal Department.—The State Railway Coal Department inspected 6,332,104 tons coal during 1935-36 as compared with 6,638,649 tons in 1934-35.

Indian Coal Grading Board.—The State Railway Coal Department continued to carry out work on behalf of the Indian Coal Grading Board during the year. The amount of cargo coal shipped under the Indian Coal Grading Board to various Ports during 1935 was 1,883,872 tons and inspections were carried out by this Department both at the collieries and Kidderpore Docks.

CHAPTER V.

ROLLING STOCK AND MATERIALS.

55. Additions to equipment.—During the year the following rolling stock, including arrears brought forward from previous years, was ordered for broad and metre gauge railways:—

Items.	Broad Gauge.	Metre Gauge.
Locomotives	55	55
Coaching Stock	814	619
Goods Stock	4,358	2,010

Those actually placed on the line by the end of the year were as follows:—

Items.	Broad Gauge.	Metre Gauge.
Locomotives	35	16
Coaching Stock	349	257
Goods Stock	3,996	1,441

The numbers of coaching and goods stock shown in the preceding paragraph are stated in terms of four-wheelers, a bogie being reckoned as two four-wheelers. These figures do not, however, represent the actual net additions to rolling stock as they also include stock built in replacement of stock which had reached the end of their useful life.

No broad or metre gauge locomotives were obtained as additions during the year. On the broad gauge 128 locomotives were scrapped during the year, of which 35 were replaced so that the number of locomotives on 31st March, 1936, was 93 less than at the beginning of the year. The number of metre gauge locomotives at the end of the year was 7 less than at the beginning, 23 being scrapped during the year, 16 of which were replaced. The average tractive effort per engine rose in the course of the year from 25,531 lbs. to 25,717 lbs. on the broad gauge and from 15,033 lbs. to 15,158 lbs. on the metre gauge.

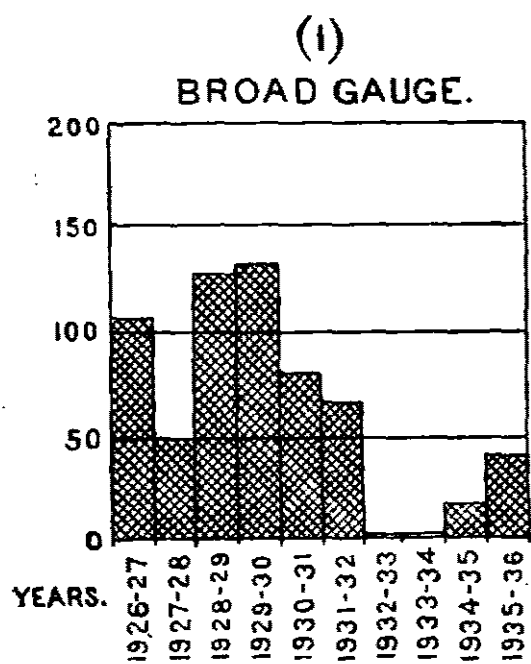
Coaching vehicles.—There was no addition to the number of coaching stock on the broad and metre gauge. The number of broad gauge coaching vehicles at the end of the year was 201 less than at the beginning, due to 550 being scrapped during the year, of which 349 were replaced. On the metre gauge, the number of coaching vehicles at the end of the year was 133 less than at the beginning, 390 being scrapped during the year, of which 257 were replaced.

Wagons.—There was a net addition of 234 wagons on both the broad and metre gauges; on the broad gauge 3,762 wagons were scrapped during the year against an addition of 3,996. On the metre gauge, 1,207 wagons were scrapped during the year and 1,441 wagons were added.

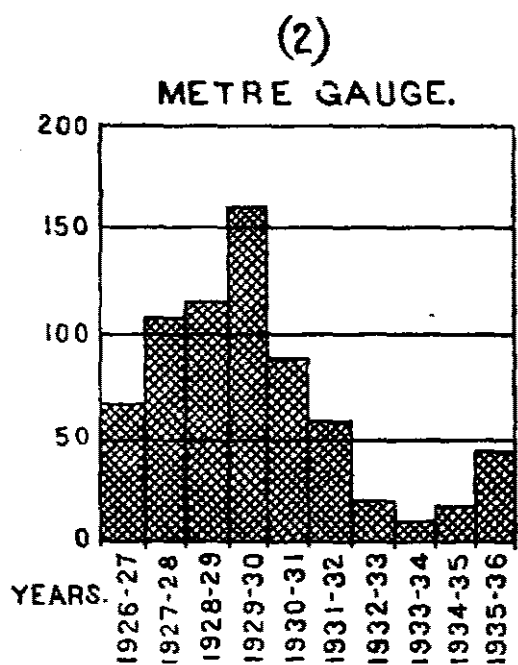
The graphs on the following pages show the total numbers of locomotives, boilers, carriages and wagons provided for in the programmes of Class I Railways during the past ten years. These figures include replacements and renewals.

56. Supply of rails and fishplates from indigenous sources.—During the year under review orders amounting to approximately 70,000 tons of rails and 3,023 tons of fishplates were placed with the Tata Iron and Steel Company, Limited.

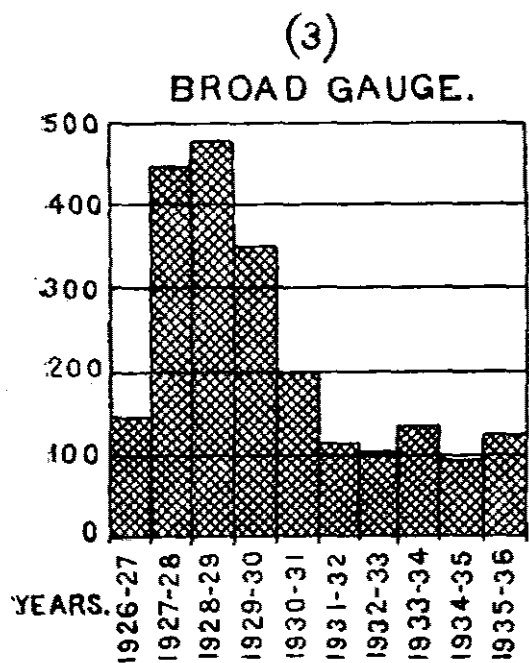
57. Purchases of timber for Carriage and Wagon building.—The consumption of timber for Carriage and Wagon building increased appreciably, but still remained relatively low due to the limited new construction programme. The value of the timber other than sleepers bought by Class I Railways (other than His Exalted Highness the Nizam's State and the Jodhpur Railways) during the year was Rs. 40.28 lakhs, compared with



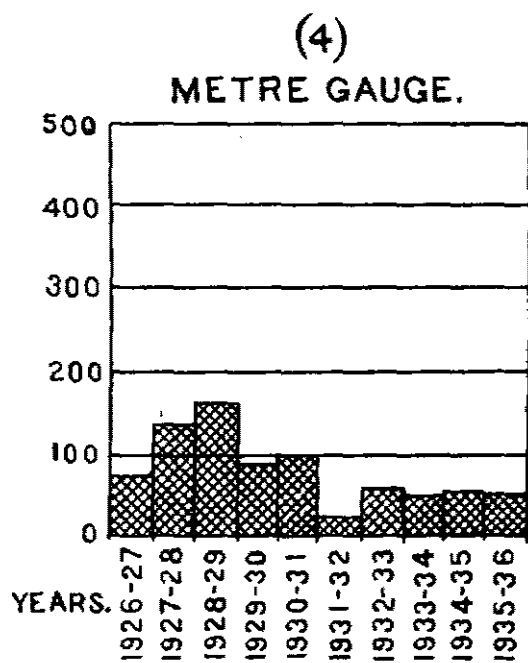
Number of locomotives provided in the rolling stock programme.



Number of locomotives provided in the rolling stock programme.



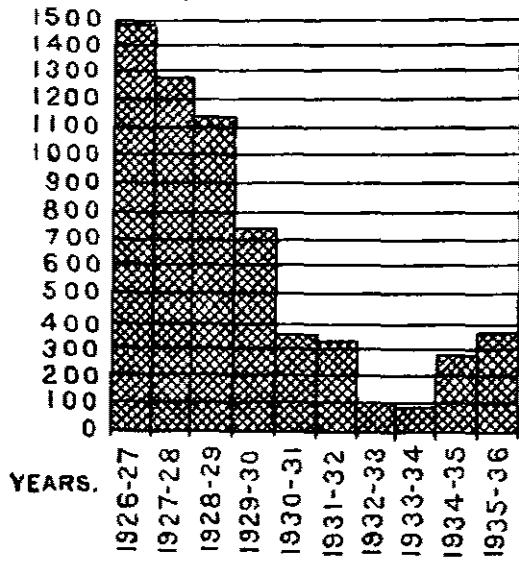
Number of boilers provided in the rolling stock programme.



Number of boilers provided in the rolling stock programme.

(5)

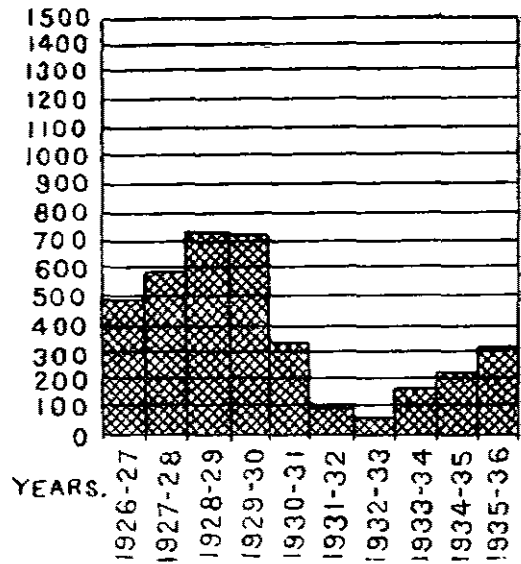
BROAD GAUGE.



Number of coaching stock units provided in the rolling stock programme.

(6)

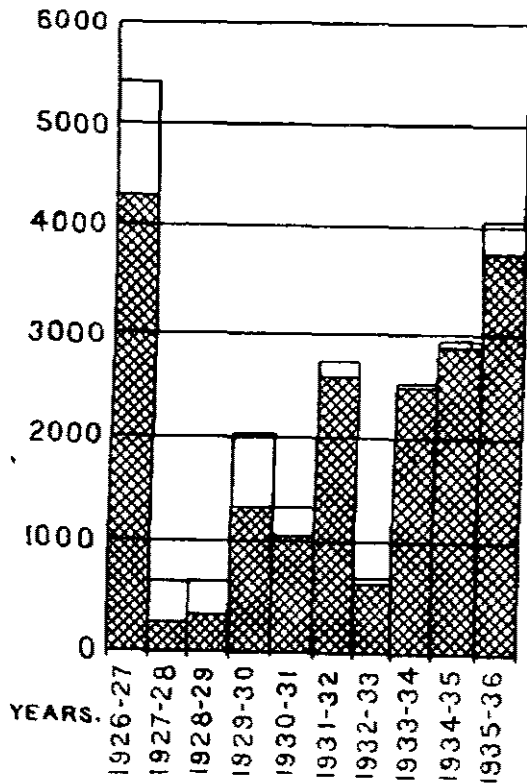
METRE GAUGE.



Number of coaching stock units provided in the rolling stock programme.

(7)

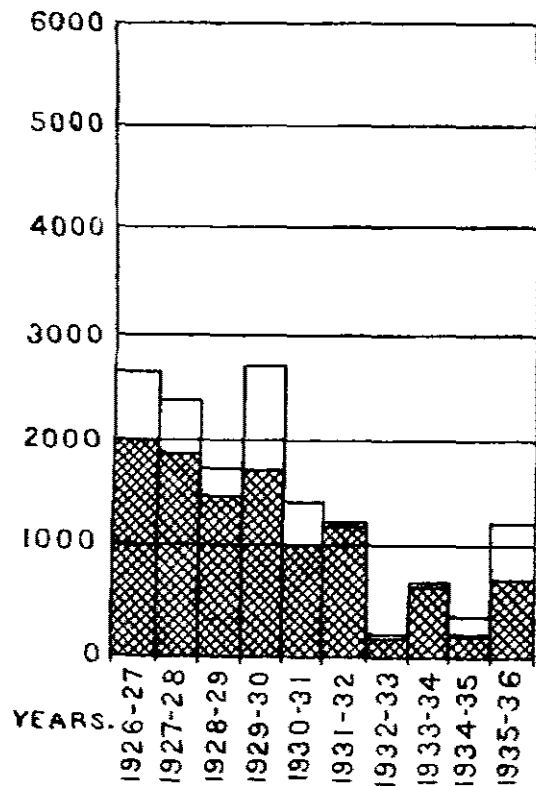
BROAD GAUGE.



General service and other types of wagons in units provided in the rolling stock programme.

(8)

METRE GAUGE.



General service and other types of wagons in units provided in the rolling stock programme.

General service wagons shown thus



Other types shown thus



Rs. 30.46 lakhs in 1934-35, Rs. 21.51 lakhs in 1933-34 and Rs. 14.17 lakhs in 1932-33.

The seasoning kilns at Lillooah, East Indian Railway, remained closed, chiefly owing to the price of teak, with which kiln seasoned woods of other species were unable to compete. The East Indian Railway reported that during 1934-35, 207 coaching vehicles and 11 sheep vans, partly built with timbers other than teak, passed through shops and were inspected. Although some of the timbers were found to have shrunk, warped or split at the ends, they were not so bad as to warrant changing. The general condition of the timber used in these vehicles was found to be fair.

The question of sawmill wastage was examined further during the year, with a view to compiling more accurate data on the actual consumption and real cost in the job of various woods, allowing for the different forms in which timber is bought, and the different wastages involved. Accurate figures for 1935-36 are not yet available. The corrected figures for 1934-35 show that the total consumption in that year by all Class I Railways other than the Burma Railways, His Exalted Highness the Nizam's State Railway, and the Jodhpur Railway was 34,173 tons in terms of round logs, compared with 29,471 tons in 1933-34. The percentage of Burma teak bought, in terms of round logs, was approximately 37, compared with some 34 per cent. in the previous year. The increase was due apparently to the slight rise in new construction, for which Burma teak is specially required.

58. Wooden Sleeper Purchase Organisation.—The total purchases of wooden sleepers during the last three years have been :—

	(Number of sleepers in lakhs.)		
	1933-34.	1934-35.	1935-36.
<i>Broad Gauge</i>	12.37	12.09 (a)	12.29
<i>Metre Gauge</i>	10.29	13.90 (b)	14.11
<i>Narrow Gauge</i>	2.20	1.51	1.42

The relative position of the various kinds of sleepers can be seen from the following percentages, based on the total number of sleepers in the track of Class I Railways :—

	1935-36.			
	Wood.	Cast Iron.	Steel.	Other kinds.
<i>Broad Gauge</i>	42.8	39.8	17.2	0.2
<i>Metre Gauge</i>	71.7	5.8	22.4	0.1

The wooden sleeper track mileage of all gauges on Class I Railways on March 31st, 1936, was 27,947 out of a grand total of 53,271 miles.

No wooden sleepers were imported from abroad. The prices of *sal* sleepers in the Eastern Group in 1935-36 averaged about Rs. 5-1-2 for broad gauge and Rs. 2-0-1 for metre gauge during the year.

At Dhilwan on the North Western Railway the following soft wood Broad Gauge sleepers from coniferous trees were impregnated with a mixture of 40 per cent. creosote and 60 per cent. liquid fuel :—

	Fir.	Chir pine.	Kail pine.	Deodar.	TOTAL.
Number of sleepers treated	42,743	133,089	47,797	113,651	337,280
Average absorption of creosote per sleeper	5.80	5.99	5.90	4.12	..
Average absorption of liquid fuel	8.71	8.99	8.89	6.18	..
Average total absorption per sleeper	14.51	14.98	14.79	10.30	..
Approximate average absorption per cubic feet.	4.84	4.99	4.93	3.43	..

NOTE.—(a) This revised figure corrects the figure 17.40 in the Annual Report of 1934-35.
 (b) This revised figure corrects the figure 13.30 in the Annual Report of 1934-35.

The prices of the sleepers, including all charges, were:—

	Untreated.	Treated.	Cost of treatment.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Deodar	4 12 0	5 12 0	1 0 0
Kail pine	3 8 0	4 11 6	1 3 6
Chir pine	3 1 0	4 10 3	1 9 3
Fir	2 14 0	3 14 6	1 0 6

The total number of sleepers treated at Dhilwan during the year was less than in 1934-35 and the cost of treatment higher on that account. The price of the untreated sleepers was lower and reduced the final cost of the treated sleeper below the cost in 1934-35.

9,934 sleepers were treated with "Ascu" (a patented form of water soluble preservative, consisting of copper sulphate, arsenic and potassium dichromate) and then dipped in oil and bitumen to retard splitting. These sleepers are to be laid in the track near normal creosoted sleepers, for comparison.

The total amount spent on wooden sleepers on Class I Railways (excluding His Exalted Highness the Nizam's State and the Jodhpur Railways) was Rs. 1.14 crores compared with Rs. 1.06 crores in 1934-35, Rs. 0.92 crores in 1933-34, and Rs. 1.59 crores in 1931-32.

The annual meeting of the Sleeper Pool Committee was held at New Delhi on the 6th of November, 1935.

59. Value of railway materials purchased.—The statement below has been revised to accord with the existing Classification of Stores which was introduced in 1932. A strict comparison with the values of the purchases during the previous year is therefore not possible, as corresponding figures under the various groups, as revised, are not available for 1934-35.

The value of stores purchased by Class I Railways (excluding His Exalted Highness the Nizam's State and Jodhpur Railways which are mainly the property of Indian States) shows an increase from Rs. 14.13 crores in 1934-35 to Rs. 15.57 crores in 1935-36. Of the total increase of Rs. 1.44 crores, Rs. 79 lakhs were accounted for by "imported materials" and Rs. 65 lakhs by "indigenous materials".

Particulars.	VALUE OF IMPORTED MATERIALS.			Value of indigenous materials.	Total purchases 1935-36.
	Purchased direct.	Purchased through Agents in India.	Total imported materials.		
	Rs. Crores.	Rs. Crores.	Rs. Crores.		
A. Bridge work and its parts, fittings and special fastenings.	0.01	0.01	0.02	0.11	0.13
B. Engineering Plant and components including all hand and power machinery.	..	0.09	0.09	..	0.09
C. Workshop machinery, plant and equipment including pneumatic machinery and tools.	0.10	0.16	0.26	0.01	0.27
D. Permanent way material and Track tools	0.07	0.10	0.17	2.82	2.99
E. Rolling stock	0.77	1.58	2.35	1.29	3.64
F. Building materials, water mains, sewage system and track and yard enclosing material and signal and Interlocking material, etc.	0.02	0.18	0.20	0.31	0.51

Particulars.	VALUE OF IMPORTED MATERIALS.			Value of indigenous materials.	Total purchases 1935-36.
	Purchased direct.	Purchased through Agents in India.	Total imported materials.		
	Rs. Crores.	Rs. Crores.	Rs. Crores.		
G. Stores Hardware, copper, Tin and Zinc ware, all leather, canvas and India rubber in bulk, Metals, Painters stores, Timber and Fuel and fuel oil, etc.	0-16	1-07	1-23	3-53	4-76
H. Electrical and Train and locomotive Lighting Plants and materials, etc., and Telegraph and Telephone equipment.	0-10	0-56	0-66	0-08	0-74
All other stores	0-07	0-94	1-01	1-43	2-44
TOTAL	1-30	4-69	5-99	9-58	15-57

60. Value of stores purchased by State-managed and Company-managed Railways during 1931-32 to 1935-36, value of stores purchased by those Railways through the Indian Stores Department and value of stores purchases controlled by the Railway Board for those railways during that period.—A statement is given below showing the value of stores imported direct, imported stores purchased in India and indigenous stores purchased by the State-managed and Company-managed Railways during the years 1931-32 to 1935-36, together with the value of stores purchased by those railways through the Indian Stores Department and also the value of stores purchases controlled by the Railway Board during the same period:—

Railways.	TOTAL VALUE OF STORES PURCHASED.				Value of stores purchased through Indian Stores Department.	Percentage of Column 6 to Column 5.	Value of stores purchases controlled by the Railway Board.	Percentage of Column 8 to Column 5.
	Stores imported direct.	Imported stores purchased in India.	Stores of Indian manufacture or of indigenous origin.	Total.				
1	2	3	4	5	6	7	8	9
1931-32.								
State-managed	1,03,28	2,91,56	5,47,71	9,42,55	1,18,08	12-68	4,51,48	47-90
Company-managed	1,41,21	1,28,46	3,87,24	6,56,91	17,87	1-30	1,78,78	26-48
TOTAL	2,44,44	4,20,02	9,34,95	15,99,41	1,25,95	7-87	6,26,21	39-10
1932-33.								
State-managed	8,64	2,26,28	3,95,16	6,29,98	1,46,64	23-98	2,81,06	41-44
Company-managed	79,00	1,07,12	2,87,83	4,73,95	4,70	0-99	95,87	20-22
TOTAL	87,64	8,33,40	6,82,99	11,08,93	1,51,54	13-72	2,86,92	32-82
1933-34.								
State-managed	6,81	2,50,68	4,94,51	7,51,96	1,70,93	22-78	3,22,17	42-84
Company-managed	66,36	1,12,71	2,65,56	4,44,63	3,81	0-85	77,58	17-45
TOTAL	73,17	3,63,39	7,60,07	11,96,59	1,74,74	14-60	3,99,75	33-40
1934-35.								
State-managed	5,40	2,57,11	5,42,69	8,05,20	2,58,51	31-48	3,48,19	43-24
Company-managed	1,10,90	1,45,65	3,51,58	6,08,13	6,15	1-01	1,40,18	23-05
TOTAL	1,16,30	4,02,76	8,94,27	14,13,33	2,64,66	18-87	4,88,37	34-55
1935-36.								
State-managed	6,37	3,36,88	6,14,15	9,57,40	2,78,11	29-05	4,05,78	42-38
Company-managed	1,23,99	1,32,21	3,43,63	5,99,83	6,78	1-12	1,40,28	23-38
TOTAL	1,30,36	4,69,09	9,57,83	15,57,23	2,84,87	18-29	5,46,06	35-06

It will be seen that the value of stores imported direct by the State-managed Railways has decreased from Rs. 103.23 lakhs in 1931-32 to Rs. 6.37 lakhs in 1935-36. This is the direct result of new stores purchase rules (commonly known as the rupee tender system), which became obligatory on those railways with effect from 1st January 1931. The value of indigenous stores purchased by these railways has increased from Rs. 547.71 lakhs in 1931-32 to Rs. 614.15 lakhs in 1935-36. The value of stores purchased by these railways through the Indian Stores Department has also been increasing steadily.

In the case of Company-managed Railways, the value of stores imported direct decreased during the aforesaid period from Rs. 141.21 lakhs to Rs. 123.99 lakhs.

61. Purchase of Stores by railways through the Indian Stores Department.—The total value of stores purchased by all railways through the agency of the Indian Stores Department during the year under review amounted to Rs. 290.21 lakhs of which Rs. 29.10 lakhs represented the value of textiles and Rs. 261.11 lakhs the value of engineering stores. The list of items, the purchase of which by the State-managed Railways through the agency of the Indian Stores Department is obligatory, was reviewed and the following items of railway stores were added to the list:—

Machine tools of all kinds and accessories, not already included in the list;

Hand and steam cranes of all kinds (with the exception of breakdown cranes);

Special rails not included in the Railway Board's contract with Messrs. The Tata Iron and Steel Company;

Rail anchors, Diesel Engine locomotives and rail cars;

Wheels and wheel centres for carriages and wagons;

All standardized signalling and interlocking fittings and pig lead.

The value of stores purchased by railways through the Indian Stores Department increased from Rs. 264.98 lakhs during the previous year to Rs. 290.21 lakhs during the year under review.

62. Cost of maintenance and supply of locomotive power and cost of maintenance and operation of Carriage and Wagon Stock.—The results obtained during the year under review and the nine previous years in regard to the cost of maintenance and supply of locomotive power under the three major heads of accounts (running repairs, workshop repairs and operating expenses) and also of the cost of maintenance and operation of carriage and wagon stock per 1,000 gross ton miles, for both broad and metre gauges of the Class I Railways in India, are reproduced in graphic form on the two following pages:—

63. Central Standards Office.—At the commencement of the year under review the Central Standards Office for Railways which was created on the 1st of March 1930 on a temporary basis for a period of five years, was made permanent with effect from 1st April 1935, with a staff consisting of—

Chief Controller of Standardization,

two Deputy Chief Controllers of Standardization,




three Assistant Chief Controllers of Standardization,

together with increased office and drawing office establishment.

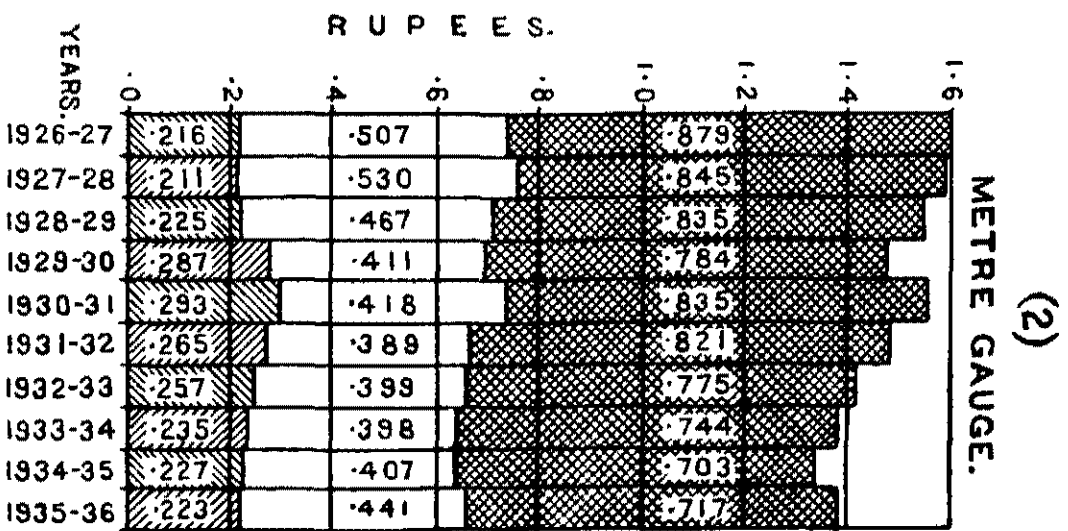
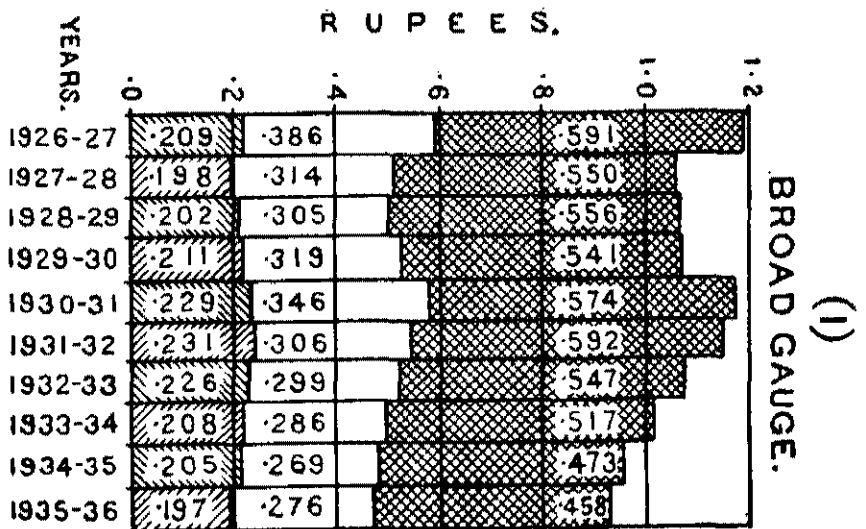
During the year under review the Civil Engineering Branch of the Central Standards Office standardized broad gauge plate girders 60' and 80' spans of mild steel for ML and HM loadings. After successful trial manufacture of—

(1) 1 in 12 and 1 in 8½ scissors crossovers, 17' and 15'-6" track centres, Broad Gauge 90R;

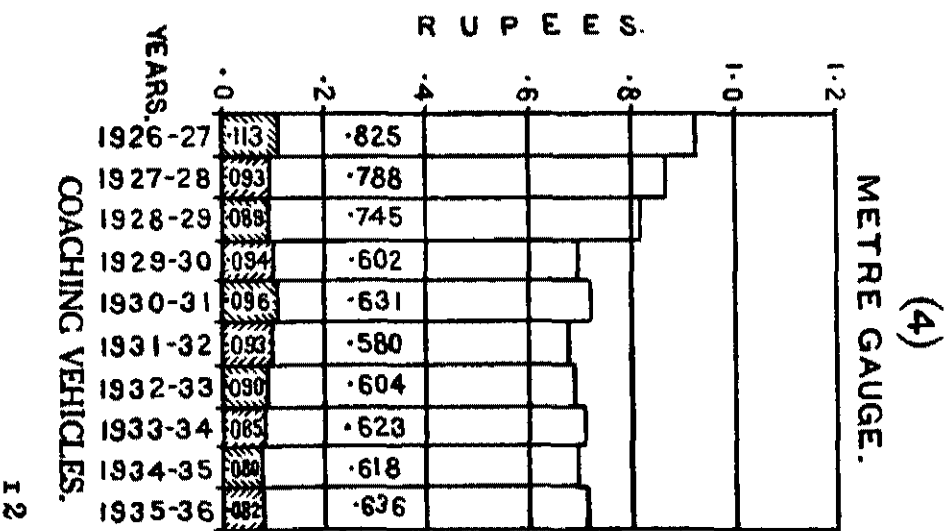
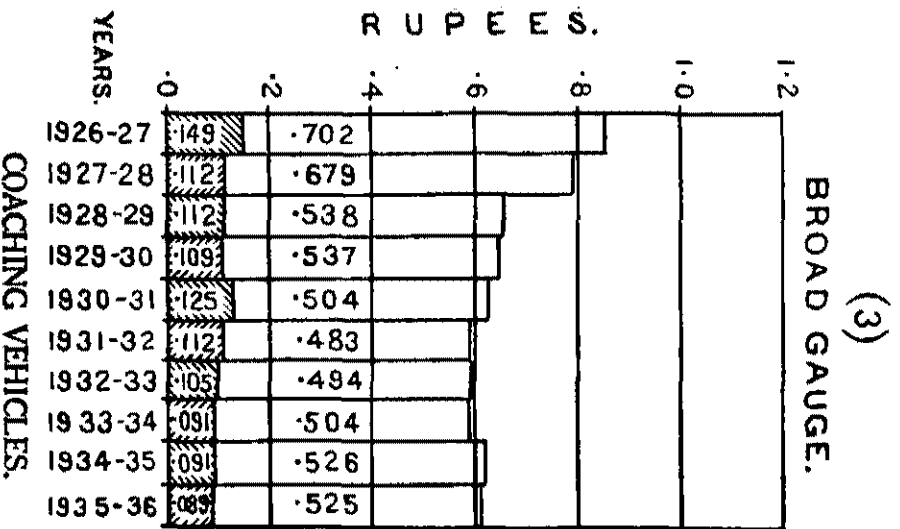
(2) 1 in 12 and 1 in 8½ turnouts on pressed steel trough sleepers with two way keys and loose jaws, Broad Gauge 90R;




Running repairs shown thus 
 Workshop repairs shown thus 
 Operating expenses shown thus 

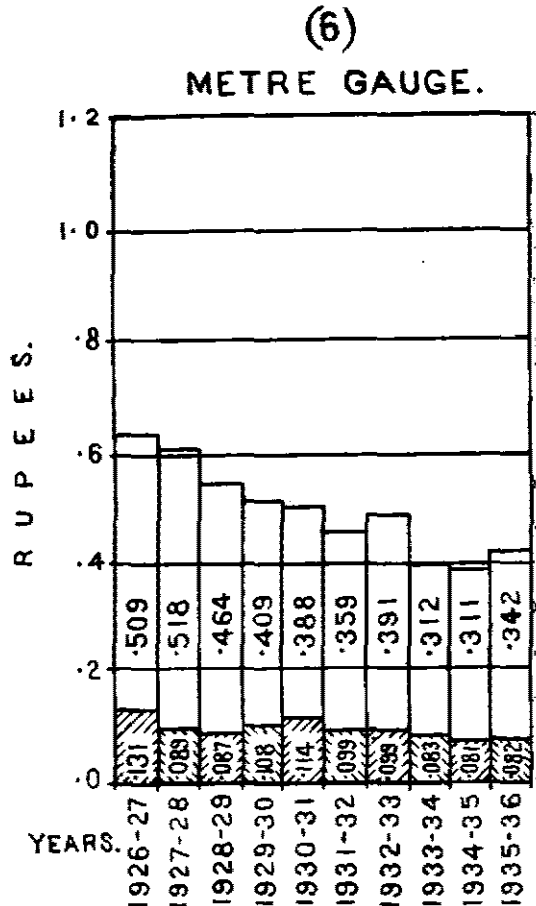
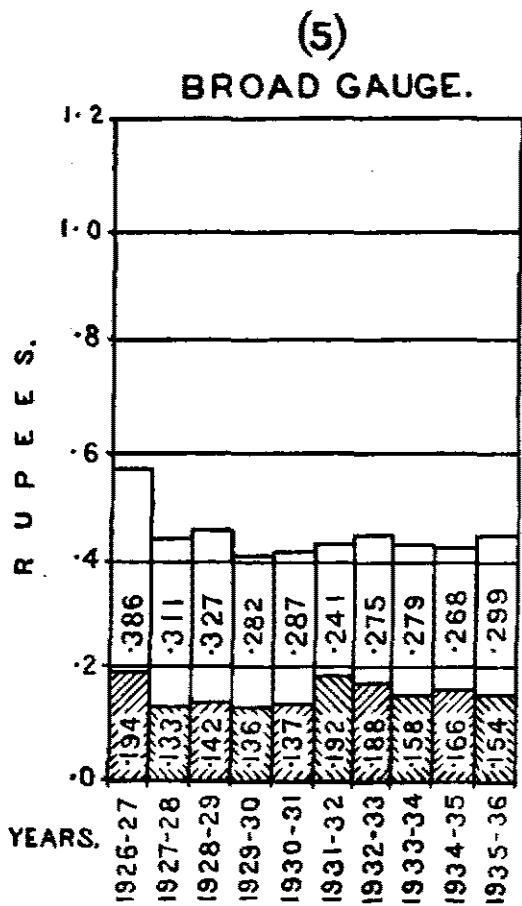
COST OF MAINTENANCE AND SUPPLY OF LOCOMOTIVE POWER PER 1,000 GROSS TON MILES.



COST OF MAINTENANCE AND OPERATION OF CARRIAGE AND WAGON STOCK PER 1,000 GROSS TON MILES.



Running repairs shown thus 
 Workshop repairs shown thus 
 Operating expenses shown thus 

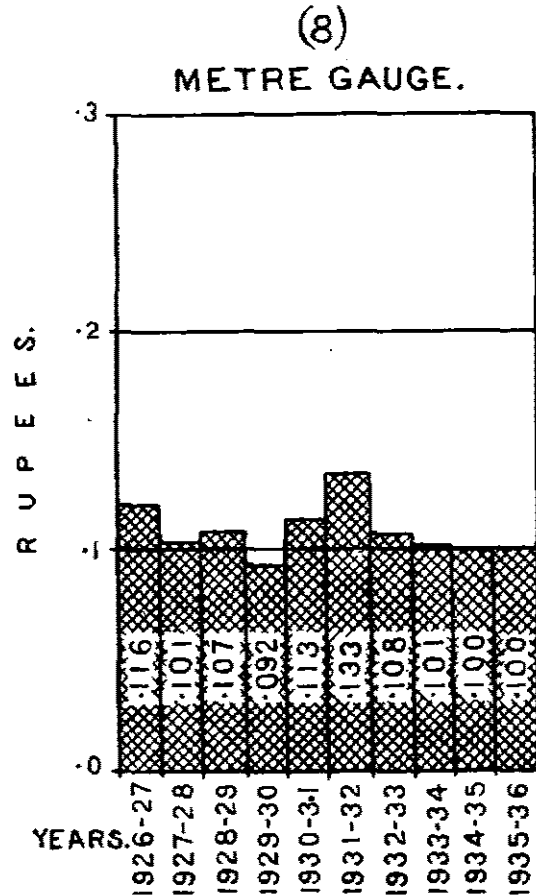
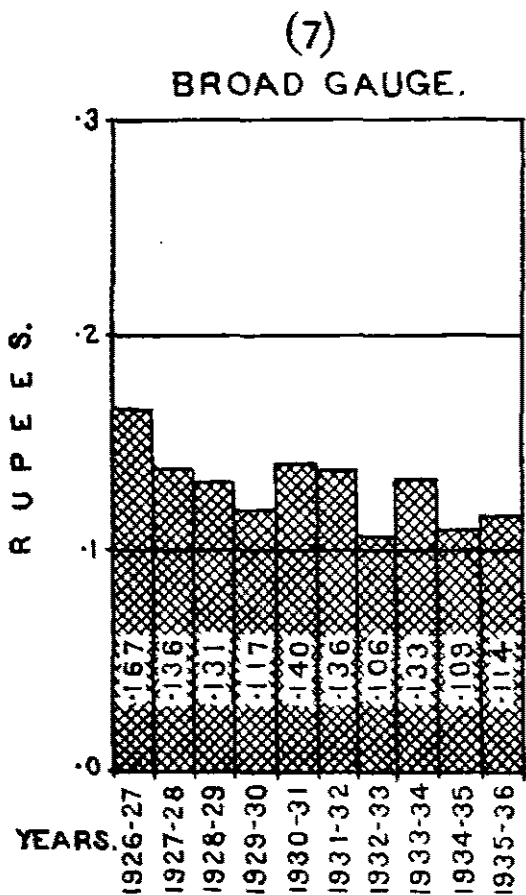


GOODS VEHICLES

Cost of maintenance and operation of carriage and wagon stock per 1,000 gross ton miles.

GOODS VEHICLES

Cost of maintenance and operation of carriage and wagon stock per 1,000 gross ton miles.



OPERATING EXPENSES

Cost of operation of carriage and wagon stock per 1,000 gross ton miles.

OPERATING EXPENSES

Cost of operation of carriage and wagon stock per 1,000 gross ton miles.

- (3) 1 in 12 turnout, Broad Gauge 75R, and 1 in 12 and 1 in 8½ turnouts, Metre Gauge 50R; and
 (4) stretcher bars for Metre Gauge switches

the sets of drawings comprising these designs were finally standardized and issued to Railway Administrations.

In addition to the above, the following designs were undertaken by the Central Standards Office and issued as tentative standards to Railway Administrations:—

Permanent Way.—Designs of pressed steel trough sleepers for broad gauge incorporating a new type of rail fastening, *viz.*, Central Standards Office type loose jaw and for metre gauge steel sleepers with pressed up lugs and standard two way keys. With a view to reducing the maintenance costs of permanent way laid on cast iron sleepers the Central Standards Office completed a design of a new type of cast iron sleeper for 90 and 115 lb. rail sections. In conjunction with this design a special cast iron joint sleeper was also designed to improve the conditions of support at rail joints. Complete sets of drawings for 1 in 8½ scissors crossovers, 14'-6" track centres, Metre Gauge 60R; 1 in 8½ diamond crossings with single and double slips for Metre Gauge 60R; 1 in 12 and 1 in 8½ Broad Gauge 115 switches and crossings on steel trough sleepers with two way keys and loose jaws and 1 in 8½ switches and crossings for Metre Gauge 75R and 60R were prepared and will be issued as Indian Railway Standards after their dimensional accuracy has been approved by actual manufacture.

Bridges.—Complete sets of designs for the broad gauge 100' span high tensile steel plate girder bridges for HM loading were prepared and issued. Similar designs for ML loading were commenced. A standard profile of 350' span high tensile steel truss girders was also prepared and issued to railways. Broad gauge 80' high tensile steel plate girders, HM and ML loadings were also commenced. Designs of 80' span mild steel plate girders for metre gauge, both HM and ML loadings, were commenced. Designs of cast iron sleeper pads for broad gauge and metre gauge span girders were prepared.

Roofs and similar Steel Structures.—Designs were prepared for the following widths of island passenger platform roofs:—

Broad Gauge 34', 60'.

Metre Gauge 20'-2", 23', 30', 34'-8", 37'-2", 50' and 60'-8".

Lighter and cheaper designs of passenger shelters for broad and metre gauge platforms, where traffic does not justify the adoption of Indian Railway Standard roofs giving full cover, were also prepared and issued to railways.

Arches and other masonry structures.—Designs for 10' and 12' span, three centre arches, both for HM and ML loadings, were issued to railways. Similar designs of 15' span were commenced.

On the Mechanical Engineering side of the Central Standards Office, further I. R. S. wagon and underframe part drawings were prepared and issued besides keeping the master set of part drawings relating to wagons, underframes, automatic vacuum brake, coaching body and truck tool drawings up-to-date.

Drawings were prepared of a revised design of locomotive bogie with longer journals, a new experimental design of metre gauge coaching bogie, and a new trial design of broad gauge carriage and wagon draft gear to save weight and cost pending the change over to the central buffer coupler.

Particular specifications were prepared in connection with the 1936-37 requirements of I. R. S. wagons and underframes for Indian Railways and assistance was given to railways in the preparation of the particular specification for the XT type locomotives.

The question of the most economical paints for wagons and underframes has been under active investigation in close collaboration with the Indian Stores Department, Industrial Intelligence and Research Bureau and the Government Test House at Alipore. Exposure tests are being carried out at Delhi and Alipore on panels painted with paints of various brands and formulae.

The question of the suitability of re-rolled carriage and wagon tyres for spring steel was also examined. As fatigue tests on carriage and wagon laminated bearing springs manufactured from re-rolled carriage and wagon tyres have demonstrated that they are not inferior to springs imported or assembled from imported spring steel sections, arrangements will be made to roll from scrap carriage and wagon tyres, the laminated spring steel requirements of the State Railways.

On the specification side 8 new I. R. S. specifications were issued and 26 I. R. S. specifications were revised during the year under reference. In addition 15 new and revised I. S. D. specifications and two B. S. specifications were adopted for use on Railways.

64. Locomotive Standards Committee.—During the year under review, the Locomotive Standards Committee met in December 1935. At this meeting information collected from railways regarding locomotive hot bearings was reviewed, and further information on the subject has been called for. Railways have been instructed to carry out extensive trials with special alloys such as Nickel Chromium Cast Iron, Molybdenum Cast Iron, Firthag Steel, Nitralloy Steel, Meehanite Iron, for bushes for wheel hub liners and coupling rods with floating bushes. Trials have also been inaugurated in regard to the design of several other items such as bogie, hind truck, drawgear, feed water heater, etc. As usual, a large number of minor modifications (necessitated by experience of the Indian Railway Standard locomotives in service) were accepted for inclusion in new I. R. S. locomotives and adoption as far as possible on existing I. R. S. engines. Reports regarding the altered design of the YF type locomotives were received and it is proposed to carry out this alteration on existing YF engines to ensure better riding at high speeds.

Dynamometer Car.—Load-speed curves for the XA, XB, XC, XD and XE type locomotives derived from Dynamometer Car tests were examined by the Committee. Trials of mechanical stokers on locomotives were concluded, and it was shown that by the use of this system of firing the capacity of the larger locomotives is increased. As the trials also showed that mechanical stokers involve heavy maintenance and less efficient coal consumption, the Committee did not recommend their introduction except in cases where service conditions necessitate the development of maximum capacity over prolonged periods.

65. Carriage and Wagon Standards Committee.—The Carriage and Wagon Standards Committee met twice during the year once in November 1935 and second time in March 1936. At these meetings besides dealing with a number of minor modifications in design of rolling stock and components, both mechanical and electrical, necessitated from experience in service, the Committee examined the proposed new design of I. R. S. III Class body and suggested a number of alterations. Draft I. R. S. specifications and drawings for vacuum gauges and lavatory fittings were also examined by the Committee. As a result of the Committees recommendation, designs have been taken in hand for a low tare CR type wagon, in which lighter sections of high tensile steel will be utilised and fabricated by arc-welding. Fifteen 68 feet high tensile steel coaching underframes in which a saving of $3\frac{1}{2}$ tons in weight has been effected are now under construction in the East Indian Railway Workshops at Tatanagar against the 1936-37 requirements of railways. Preliminary designs of a new bogie motor and parcel van for which there was a demand from railways were also examined by the Committee.

NORTH WESTERN RAILWAY.



XT Locomotive.

An Indian Railways' standard designed to handle light traffic in competition with road transport.

66. Bridge Standards Committee.—A meeting of this Committee was held in February 1936. The Committee considered the remarks of the Locomotive Standards Committee regarding the best method of engine weighment. They also considered the desirability of eliminating shop painting of steel work from two bridge specifications and recommended that shop painting should be optional at the choice of the purchaser. A paper on experiments made by the Bridge Engineer, Madras and Southern Mahratta Railway, regarding the effects of welding on to a steel member which is already stressed was considered by the Committee and they recommended that further experiments should be made on the largest possible scale on the lines indicated by them. The Committee examined a note by the Bridge Engineer of the Bombay, Baroda and Central India Railway and diagrams showing the results of investigations made on one of the 282' span of the Nerbudda Bridge, in the light of the criticisms made by the Central Standards Office and Messrs. Rendel, Palmer and Tritton, and indicated lines on which a design for a span of 200' or over should be prepared for their consideration at a future meeting. The Committee reconsidered the specifications for the design of spun concrete pipes in the light of further evidence available and recommended the issue of a general specification for re-inforced pipes and also recommended certain essential features for inclusion in a contemplated specification for the design of structural steelwork other than bridges carrying rail or road traffic. They also considered the draft Indian Railway Standard Code of Practice for Electric Arc Welding prepared by the Central Standards Office and recommended certain modifications. The Committee looked into the question of preparing standard charts similar to one submitted by the North Western Railway to facilitate the examination of designs of reinforced concrete beams and recommended the preparation of charts for various working stresses. Results of fresh tests made on concrete slabs by the North Western Railway were also considered. The Committee also considered the draft Indian Railway Standard Code of Practice for the design of bridge piers and abutments prepared by the Central Standards Office and approved of it with certain modifications.

67. Track Standards Committee.—A meeting of this Committee was held in February 1936. The Committee recommended the preparation of designs of combination fishplates. They considered the question of altering or re-designing the Indian Railway Standard Fishplates, in the light of criticisms received from various Railways, and the desirability of adopting Messrs. Rendel, Palmer and Tritton's designs and concluded that no alteration or departure from the present standards was necessary. Recommendations were made by the Committee regarding the question of standardizing hand and motor trollies. The Committee also considered the reports of the Senior Government Inspector, Bangalore, regarding the Madras and Southern Mahratta Railway's experiments with Hayes' derails, the report of the North Western Railway on the results of the trial of fitting loose jaws to saddle plate sleepers and the report of the Bengal Nagpur Railway on the behaviour of saddle plate sleepers. The adoption of designs of broad and metre gauge stretcher bars for diamonds and slips was recommended. The Committee considered the financial justification of the adoption of rail bound manganese steel crossings as an Indian Railway Standard and recommended the preparation of designs of same for trial purposes. The Committee perused the correspondence between the Central Standards Office and railways on the subject of upward setting of fishplates and reconditioned fishplates and advocated repressing of fishplates for re-conditioning worn rail joints. The Committee saw the orders of the Railway Board and recommendations of the Signalling and Interlocking Standards Committee on the question of sleeper spacing in the vicinity of noses of switches to meet signalling and interlocking requirements and recommended a tolerance of $\pm 1\frac{1}{2}$ " in the position of such sleepers. The question of indicating the location of standard broad and metre gauge stretcher bars on standard assembly drawings for switches was also considered. The Committee considered the question of provision of

gauge widening on curves in the light of the results of further dynamometer car tests carried out by the Great Indian Peninsula Railway. They also examined the arrangements made and progress up-to-date of research being undertaken by the Central Standards Office to determine the stresses in rails and general question of track stability with various classes of sleepers. Further, the Committee recommended the preparation of alternative designs of steel sleepers with parallel sides instead of waisted sides.

68. Signalling and Interlocking Standards Committee.—The tenth meeting of the Committee was held in December 1935. It considered the revision of Rule 1 (c), Part III of Chapter VIII of "Rules for the opening of a Railway" and the question of preparing a standard design of marker light to meet the requirements of Rule 269 of General Rules. The preparation of standard designs of apparatus to comply with the provisions of Part I, Section 6 of the Manual of Signalling and Interlocking was declared by the Committee to be premature. The Committee recommended the elimination of multiple types of unit cranks, various types of chain wheels and wire cranks, the two-piece lock bar and "A" type signal spectacles for future new works and replacements. The Committee also considered the report of the Sub-committee on double-wire interlocking installed on the Assam Bengal Railway. The Committee further considered the desirability of deleting the wrapping tests specified in clause 7 of the Indian Railway Standard Specification for Galvanised Solid Steel Wire for Signalling purposes and recommended their retention. The Committee opined that Stations like Hindun Cabin, which have no loops, did not come within the scope of paragraph (2) Standard (iii), Part II, Chapter VIII of Rules for the opening of a railway. On reconsideration of their previous recommendation in this connection, the Committee decided that it was not necessary to standardize swivel wheels. The Committee agreed to accept the new unit type shunt and dwarf signals proposed by the Great Indian Peninsula Railway in supersession of the existing standards. The Committee examined the suitability of some of the printed and draft specifications of the Indian Stores Department for adoption as Indian Railway Standard Specifications. The Committee disposed of various criticisms of the Manual of Instructions for the Installation and Maintenance of Block Signalling Apparatus. They expressed the opinion that it was not necessary for point rodding bolts to be provided with spring washers. The suggestion to define tolerances for width, thickness and length of arms and diameter of boss in the standard drawings for cranks was considered by the Committee but they could not make definite recommendations in the absence of proposals from the manufacturers regarding the proposed tolerances and their cost. The Committee recommended the cancellation of I. R. S. Specification No. S. 7—34 and the adoption of the specification suggested by Messrs. Rendel, Palmer and Tritton with certain modifications. They further considered the necessity of designing stiffer stretcher bars for power operated standard switches and concluded that it was not necessary to make any change in the existing track standards. The Committee perused correspondence regarding various existing designs of Signalling and Interlocking equipment and recorded their recommendations in each case. The Committee discussed at length the question of the present standard sleeper spacing in the vicinity of the nose of the switch and recommended that, without making any departure from the present standard plans, a tolerance of dimensions of sleeper spacing might be permitted to an extent to be specified by the Central Standards Office and on the understanding that no alterations would be required in the manufacture of any standard parts.

69. Standing Committee on Standards and Specifications for Indian Railways.—During the year under review, the Standing Committee on Standards and Specifications met once in January 1936 and dealt with 42 subjects new and outstanding from the previous meetings. The revised policy and procedure to be followed in the Central Standards Office for the adoption, etc., of I. R. S. and I. S. D. Specifications was accepted and published along with their report.

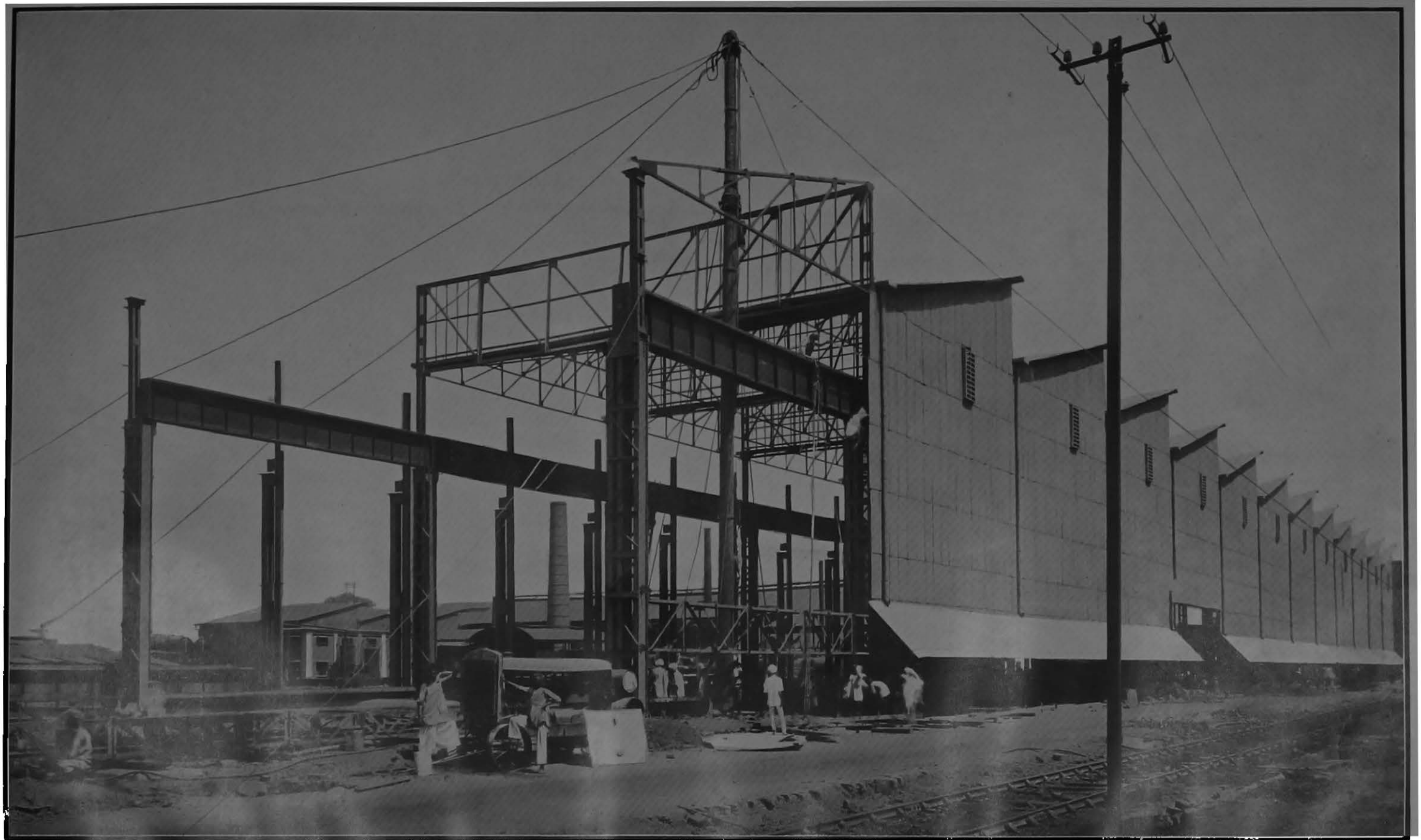
EAST INDIAN RAILWAY.



CR type covered wagon.

An Indian Railways' standard general service covered wagon.

EAST INDIAN RAILWAY.



Heavy Boiler Shop at Jamalpur (showing erection of last bay).

70. Electrical Standards Committee.—During the year under review, the Electrical Standards Committee on which are represented the Chief Electrical Engineers of important Indian Railways, was inaugurated. The first meeting of the Committee was held in September 1935 and amongst the important subjects considered were the adoption by railways of new and existing I. S. D. specifications for electrical equipment.

CHAPTER VI.

STAFF.

71. Number of staff.—The total number of employees (permanent and temporary) on all Indian Railways and in the office of the Railway Board and other offices subordinate thereto (excluding staff employed on construction) at the end of the year 1935-36 was 712,364 as compared with 705,656* at the end of 1934-35. The total route mileage at the end of the year was 43,118. The following table shows the number of employees by communities on the 31st March 1935 and 1936. A similar statement showing details by railways is given as Appendix C of Volume II of the Report by the Railway Board on Indian Railways for 1935-36.

Date.	Europeans.	INDIANS.							GRAND TOTAL.
		Hindus.	Muslims.	Anglo-Indians and domiciled Europeans.	Sikhs.	Indian Christians.	Other classes.	Total.	
31st March, 1935	3,524*	501,158*	152,363*	13,450*	8,752*	16,774*	9,635*	702,132*	705,656*
31st March, 1936	3,218	504,977	155,439	13,423	8,740	16,824	9,742	709,145	712,364

* Represents revised figures due to minor corrections made in the figures published last year.
[These figures exclude the staff on loan from the Indian Audit and Accounts Service (Deptt.).]

72. Cost of staff.—The following statement shows the number and cost of all staff, superior and subordinate (including labourers), permanent and temporary, open line and construction, employed on Class I Railways during the years 1934-35 and 1935-36. Contractors' labour is not included.

Railway Systems.	Year.	NUMBER OF STAFF ON 31ST MARCH.							COST OF STAFF.			
		OPEN LINE.			CONSTRUCTION.			Gazetted Officers on loan from the Indian Audit and Accounts Service (Deptt.).	Gazetted Officers.	Non-gazetted employees.	TOTAL.	Total including staff on loan from the Indian Audit and Accounts Service (Deptt.).
		Gazetted Officers.	Non-gazetted employees.	TOTAL.	Gazetted Officers.	Non-gazetted employees.	TOTAL.					
1	2	3	4	5	6	7	8	9	10	11	12	13
									Rs.	Rs.	Rs.	Rs.
Assam Bengal	1935	64	16,249	16,313	NH	1	1	..	11,06,818	66,39,629	76,45,942	76,45,942
	1936	67	16,261	16,328	4	342	346	..	10,88,252	66,56,434	77,44,686	77,44,686
Bengal and North-Western.	1935	75	27,345	27,420	NH	NH	NH	..	11,36,357	71,22,097	82,58,454	82,58,454
	1936	78	27,280	27,358	NH	NH	NH	..	11,82,966	71,76,951	83,60,917	83,60,917
Bengal Nagpur	1935	102*	64,103*	64,205*	NH	NH	NH	..	29,85,593*	2,82,67,708*	3,12,53,306*	3,12,53,306*
	1936	189	65,368	65,557	NH	5	5	..	32,58,963	2,98,31,885	3,30,90,848	3,30,90,848
Bombay, Baroda and India. Central	1935	171*	68,698*	68,869*	2	331	333	..	29,00,311	3,77,86,943	4,06,87,254	4,06,87,254
	1936	170	64,439	64,609	2	304	306	..	30,65,543	3,69,85,792	4,20,51,335	4,20,51,335

NOTE 1.—* represents revised figures for 1934-35 due to changes made by the railway administrations in the figures published last year.

NOTE 2.—The figures of cost include the salaries and wages of staff, bonus contributions to the provident fund, gratuities, overtime allowances and all other allowances which are of the nature of extra pay and which are not granted to meet some definite expense incurred in the performance of duty, such as travelling allowance.

Railway Systems.	Year.	NUMBER OF STAFF ON 31ST MARCH.							COST OF STAFF.			
		OPEN LINE.			CONSTRUCTION.			Gazetted Officers on loan from the Indian Audit and Accounts Service (Deptt.).	Gazetted Officers.	Non-gazetted employees.	TOTAL.	Total including staff on loan from the Indian Audit and Accounts Service (Deptt.).
		Gazetted Officers.	Non-gazetted employees.	TOTAL.	Gazetted Officers.	Non-gazetted employees.	TOTAL.					
1	2	3	4	5	6	7	8	9	10	11	12	13
Burma	1935	98	23,470	23,568	NH	5	5	2	Rs. 15,54,358	Rs. 1,28,66,064	Rs. 1,30,20,422	Rs. 1,39,90,176
	1936	97	23,651	23,748	NH	NH	NH	2	15,43,357	1,30,93,408	1,30,39,765	1,36,69,162
✓ Eastern Bengal	1935	*118	51,217*	51,335	NH	29	29	2	20,22,359	2,21,75,567	2,42,14,826	2,42,79,929
	1936	122	49,455	49,577	NH	54	54	2	21,57,177	2,32,84,979	2,55,42,156	2,55,12,249
✓ East Indian	1935	313	122,783*	123,096*	NH	100	100	3	50,16,853*	5,39,84,045*	6,40,00,899*	6,40,72,593*
	1936	393	124,867	125,150	NH	2	2	6	53,59,865	6,06,87,810	6,60,47,766	6,61,59,765
✓ Great Indian Peninsula.	1935	225	80,968	81,203	NH	NH	NH	1	42,78,066	4,37,98,822*	4,60,76,894*	4,60,99,319*
	1936	212	83,323	83,540	NH	NH	NH	1	42,36,427	4,38,77,189	4,61,63,616	4,61,85,333
Jodhpur	1935	22	7,029	7,051	2	920	922	NH	3,84,688	23,44,592	27,29,180	27,29,180
	1936	24	7,379	7,403	1	395	396	..	4,29,613	27,17,371	31,47,184	31,47,184
Madras and Southern Mahratta.	1935	141	49,736*	49,877*	NH	88	88	..	23,27,043*	2,27,82,275*	2,51,09,318*	2,51,09,318*
	1936	139	49,580	49,699	NH	66	66	..	22,86,086	2,35,83,706	2,59,69,792	2,59,69,792
Nizam's State	1935	62	16,741	16,803	NH	19	19	..	9,86,420	61,86,453	71,72,873	71,72,873
	1936	59	16,077	16,136	1	19	20	..	9,33,691	64,57,691	74,48,222	74,48,222
✓ North Western	1935	206	103,605	103,870	NH	6	6	5	48,88,508	5,59,97,174*	6,08,85,682*	6,04,87,316*
	1936	207	104,948	105,213	NH	2	2	4	43,33,936	5,72,78,686	6,16,61,622	6,17,10,334
Rohilkhand and Kumaon.	1935	15	5,545	5,560	NH	NH	NH	..	2,21,646	15,86,970	17,68,616	17,68,616
	1936	16	5,572	5,588	NH	NH	NH	..	2,05,443	15,68,864	17,69,332	17,69,332
South Indian	1935	129	36,200	36,329	3	292	295	..	19,68,846	1,65,61,577	1,85,30,423†	1,85,30,423†
	1936	128	36,783	36,911	NH	31	31	..	19,37,630	1,65,75,268	1,85,32,898†	1,85,32,898†
TOTAL	1935	1,890*	668,704*	670,594*	7	1,791	1,798	16	Rs. 8,12,93,666*	Rs. 82,24,40,922*	Rs. 85,37,48,588*	Rs. 85,40,14,701*
	1936	1,856	674,938	676,792	8	1,290	1,228	15	3,23,94,144	33,03,70,994	36,31,65,138	36,34,41,537

NOTE 1.—* Represents revised figures for 1934-35 due to changes made by the railway administrations in the figures published last year.

NOTE 2.—The figures of cost include the salaries and wages of staff, bonus contributions to the provident fund, gratuities, overtime allowances and all other allowances which are of the nature of extra pay and which are not granted to meet some definite expense incurred in the performance of duty, such as travelling allowance.

NOTE 3.—† Exclusive of Emergency cut of —4,64,599 and —2,526 for 1934-35 and 1935-36 respectively.

The above statement shows that there was an increase of 6,198 in the total number of staff employed on open line on 31st March 1936 as compared with 31st March 1935 while the staff on loan from the Indian Audit and Accounts Service and the Construction staff were less by 1 and 570 respectively. The increase in the total cost of staff including staff on loan from the Indian Audit and Accounts Service during 1935 as compared with the preceding year was Rs. 94,26,856. This increase was mainly due to the restoration of the wage cut. In a small measure employment of additional

staff and discontinuance of short time working also contributed towards the increase.

73. Indianisation.—Superior Services—

State-managed Railways.—32 appointments were made to the Superior Railway Services both by direct recruitment and promotion. Details are given below:—

Direct Recruitment.

DEPARTMENT.	VACANCIES FILLED BY							TOTAL.
	EUROPEANS.	INDIANS.					TOTAL.	
		Hindus.	Muslims.	Anglo-Indians and domiciled Europeans.	Sikhs.	Indian Christians.			Other classes.
Agency . . . . .	..	..	..	..	..	..	..	..
Engineering . . . . .	..	3	1	..	..	..	..	4
Accounts . . . . .	..	1	1	..	..	..	..	2
Transportation (Traffic) and Commercial.	..	4	1	..	1	..	..	6
Transportation (Power) and Mechanical Engineering.	2	5	3	..	..	1	..	9
Stores . . . . .	..	..	..	..	..	..	..	..
Others . . . . .	..	3	..	..	..	..	..	3
TOTAL	2	16	6	..	1	1	..	24

Percentage { Europeans } 7.69
 { Indians } 92.31

Three European officers who were recruited through the Secretary of State as a part of recruitment for the year 1935-36 joined about the end of March 1935 and six Indian officers who were recruited through the Public Service Commission as a part of recruitment for the year 1934-35 joined after 1st April 1935. Had the European officers referred to above joined after the 1st March 1935 and the Indian officers before 31st March 1935 the percentages would have been Europeans 21.8, Indians 78.2.

Promotions.

DEPARTMENT.	VACANCIES FILLED BY							TOTAL.
	EUROPEANS.	INDIANS.					TOTAL.	
		Hindus.	Muslims.	Anglo-Indians and domiciled Europeans.	Sikhs.	Indian Christians.			Other classes.
Agency . . . . .	..	..	..	..	..	..	..	..
Engineering . . . . .	..	..	..	1	..	..	..	1
Accounts . . . . .	..	1	1	..	..	..	..	2
Transportation (Traffic) and Commercial.	1	1	..	..	..	..	..	1
Transportation (Power) and Mechanical Engineering.	..	..	..	1	..	..	..	1
Stores . . . . .	..	..	..	..	..	..	..	..
Others . . . . .	..	..	..	..	..	..	..	..
TOTAL	1	2	1	2	..	..	..	5

Lower Gazetted Service.—19 promotions were made to the Lower Gazetted Service in the various departments. Six went to Europeans and 13 to Indians, of whom five were Hindus, two Muslims, four Anglo-Indians and

Domiciled Europeans, one Indian Christian and one other classes. Figures by departments were as follows :—

DEPARTMENT.	VACANCIES FILLED BY							
	EUROPEANS.	INDIANS.						TOTAL.
		Hindus.	Muslims	Anglo-Indians and domiciled Europeans.	Sikhs.	Indian Christians.	Other classes.	
Agency . . . . .	..	..	..	..	..	..	..	..
Engineering	1	1	1	2	..	..	1	5
Accounts . . . . .	..	..	..	..	..	..	..	..
Transportation (Traffic) and Commercial.	4	3	1	..	..	1	..	5
Transportation (Power) and Mechanical Engineering.	1	1	..	1	..	..	..	2
Stores . . . . .	..	..	..	1	..	..	..	1
Others . . . . .	..	..	..	..	..	..	..	..
TOTAL	6	5	2	4	..	1	1	13

74. *Company-managed Railways.*—The following tables give a summary of the recruitment made to the Superior Services on Company-managed Railways during the year under review. Part I relates to direct recruitment and Part II to appointments made by promotion. A detailed statement by individual railways will be found in Appendix G of this report.

PART I.

Statement showing the number of appointments filled by direct recruitment in the Superior establishment on (Class I) Company-managed Railways, excluding His Exalted Highness the Nizam's State and Jodhpur Railways during 1935-36.

DEPARTMENT.	VACANCIES FILLED BY							
	EUROPEANS.	INDIANS.						TOTAL.
		Hindus.	Muslims.	Anglo-Indians and domiciled Europeans.	Sikhs.	Indian Christians.	Other classes.	
Agency . . . . .	..	..	..	..	..	..	..	..
Accounts	2	..	..	1	..	..	1	3
Engineering	2	2	1	1	1	..	..	5
Transportation (Traffic) and Commercial.	..	1	2	..	..	..	..	3
Transportation (Power) and Mechanical Engineering.	..	2	..	..	..	..	..	2
Stores . . . . .	..	1	..	..	..	..	..	1
Other Departments	1	2	..	..	1	1	..	4
TOTAL	5	6	3	2	2	1	1	13

Percentages . { Europeans 21.7
Indians 78.3

PART II.

Statement showing the total number of vacancies in the Superior establishments on (Class I) Company-managed Railways excluding His Exalted Highness the Nizam's State and Jodhpur Railways filled by promotion from lower to the Superior services during 1935-36.

DEPARTMENT.	VACANCIES FILLED BY							TOTAL.
	EUROPEANS.	INDIANS.						
		Hindus.	Muslims.	Anglo-Indians and domiciled Europeans.	Sikhs.	Indian Christians.	Other classes.	
Agency . . . . .	..	..	..	..	..	1	..	1
Accounts . . . . .	..	..	..	1	..	..	..	1
Engineering	1	8	..	..	..	..	..	8
Transportation (Traffic) and Commercial.	..	4	1	1	..	..	..	6
Transportation (Power) and Mechanical Engineering.	1	2	..	..	..	..	..	2
Stores	1	..	..	..	..	..	..	..
Other Departments	1	1	..	..	..	..	..	1
TOTAL	4	10	1	2	..	1	..	14

It will be observed from Statement Part I that during the year under review the total number of appointments made by direct recruitment to the superior services on Company-managed Railways was 23 of which 5 went to Europeans and 18 to Indians, of whom 9 were Hindus, 3 Muslims, 2 Anglo-Indians and Domiciled Europeans, 2 Sikhs, 1 Indian Christian and 1 of other classes. The ratio of Indian to European recruitment was 78.3 to 21.7. The percentage of Indian recruitment in the principal departments was:—

	Direct recruitment.
Accounts	50.0
Engineering	71.4
Transportation (Traffic) and Commercial	100.0
Transportation (Power) and Mechanical Engineering	100.0
Stores	100.0
Other Departments	80.0

Among Indian recruits the proportionate recruitment from each community was as shown below:—

Hindus	50.0
Muslims	16.7
Anglo-Indians and Domiciled Europeans	11.1
Indian Christians	5.5
Sikhs	11.1
Others	5.5

It will be seen from Appendix G to this report that the recruitment on Company-managed Railways has been small. While the Bombay, Baroda and Central India Railway appointed 2 Muslims and Bengal Nagpur Railway appointed one Muslim by direct recruitment, the Assam Bengal and Madras and Southern Mahratta Railways did not obtain the required percentage of Muslims. These Railways have been addressed in the matter which continues to be watched by the Railway Board.

75. Review of the progress made since 1925.—The statements on the following pages will throw further light on the progress made in Indianisation and in the recruitment of the various communities both on State-managed and Company-managed Railways since 1925, as reflected in the relative strength of Europeans and Indians belonging to the various communities. Part I relates to superior staff and Part II to subordinate staff on scales of pay rising to Rs. 250 and over.

PART I.

Statement of gazetted officers on State-managed Railways and Officers of corresponding rank on Company-managed (Class I) Railways (excluding H. E. H. the Nizam's State and Jodhpur Railways) on the 1st April 1925, 31st March 1935 and 31st March 1936.

GEN. VI C

Name of Railway.	1st April 1925.									31st March 1935.									31st March 1936.									
	Indians.								Total number on the Railway (columns 2 plus 9)	Indians.								Total number on the Railway (columns 11 plus 18)	Indians.								Total number on the Railway (columns 20 plus 27)	
	Europeans.	Hindus.	Muslims.	Anglo-Indians.	Sikhs.	Indian Christians.	Other classes.	Total.		Europeans.	Hindus.	Muslims.	Anglo-Indians and domiciled Europeans.	Sikhs.	Indian Christians.	Other classes.	Total.		Europeans.	Hindus.	Muslims.	Anglo-Indians and domiciled Europeans.	Sikhs.	Indian Christians.	Other classes.	Total.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
<i>State-managed Railways.</i>																												
Burma	90	8	..	..	..	..	12	15	105	78	8	..	9	..	..	..	20	98	74	5	..	9	..	..	9	28	97
Eastern Bengal	79	81	..	..	..	..	12	48	125	156	143	..	9	..	..	..	162	1118	55	47	7	10	1	..	..	67	122
East Indian	227	45	138	..	..	..	28	87	314	169	83	17	87	3	..	..	144	318	152	91	16	24	4	..	..	141	293
Great Indian Peninsula	176	18	5	..	..	..	23	46	221	150	86	12	10	..	..	..	75	225	141	84	12	8	..	..	..	71	212
North Western	192	60	18	..	..	..	23	101	293	182	74	28	14	11	..	..	133	265	128	80	27	18	14	..	..	189	267
Railway Board and Miscellaneous Offices.	59	8	8	..	..	..	14	25	84	39	17	5	5	..	..	..	29	68	42	16	4	6	1	..	..	29	71
TOTAL	822	169	86	..	..	..	115	320	1,142	624	256	68	184	16	21	18	1,008	1,087	592	273	66	70	20	21	20	470	1,062
<i>Company-managed Railways.</i>																												
Assam Bengal	52	6	1	2	9	61	36	15	5	7	1	28	64	39	17	5	7	1	1	81	70
Bengal Nagpur	170	27	5	19	51	221	1115	41	9	122	2	1	..	177	1192	114	40	9	20	3	1	..	2	75	189
Bengal and North-Western	55	3	1	..	..	..	..	4	59	61	7	4	3	..	..	..	14	75	60	7	4	2	..	..	..	18	73
Bombay, Baroda and Central India	159	14	..	..	..	..	21	85	194	119	84	5	2	1	..	..	52	171	116	85	7	3	1	..	..	56	172
Madras and Southern Mahratta	122	15	1	..	..	..	6	22	144	192	80	5	5	2	..	..	48	1140	88	85	..	5	2	..	..	51	189
Bohilkund and Kumaon	12	1	..	..	..	..	..	1	13	10	2	..	..	..	..	..	5	15	10	2	..	1	..	..	..	6	16
South Indian	93	17	1	..	..	..	3	21	114	69	50	3	9	..	..	..	68	132	67	49	1	9	..	..	..	61	128
TOTAL	668	88	9	..	..	..	61	148	806	1502	179	28	148	6	10	16	1,287	1,789	494	186	29	46	8	11	14	293	787
GRAND TOTAL	1,485	257	95	..	..	..	176	468	1,948	1,126	435	96	132	22	31	34	1,760	1,876	1,086	459	95	116	28	32	34	763	1,849

STAFF.

Statement showing the percentages of the relative strength of Europeans and Indians of various communities.

Europeans	Hindus	Muslims	Anglo-Indians and domiciled Europeans.	State-managed Railways.	Company-managed Railways.	TOTAL	1925.*	1935.	1936.	Sikhs	Indian Christians	Other classes	TOTAL	1925.*	1935.	1936.																
							71-98	82-26	76-23					14-80	10-80	12-94	8-15	1-12	2-21	..	..	..	..	..	..	..
Indians—cond.																	State-managed Railways.	57-41	55-74	..	..	..	..	..	..	..	..	..	..	..	..	..
																	Company-managed Railways.	68-62	62-77
TOTAL																	76-23	160-02	58-73	..	..	..	..	..	..	..	..	..	..	..	..	..
																	State-managed Railways.	14-80	122-55	25-71
TOTAL																	10-80	122-69	23-51	..	..	..	..	..	..	..	..	..	..	..	..	..
																	12-94	123-19	24-73	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTAL																	8-15	16-26	6-23	..	..	..	..	..	..	..	..	..	..	..	..	..
																	1-12	13-55	3-66	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTAL																	2-21	15-12	5-14	..	..	..	..	..	..	..	..	..	..	..	..	..
																	..	17-72	6-59	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTAL																	..	16-06	5-84	..	..	..	..	..	..	..	..	..	..	..	..	..
																	..	17-04	6-27	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTAL																	..	142-59	44-26	..	..	..	..	..	..	..	..	..	..	..	..	..
																	28-02	136-58	37-23	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTAL																	28-77	139-98	41-27	..	..	..	..	..	..	..	..	..	..	..	..	..

* Anglo-Indians, Sikhs, and Indian Christians included in "Other classes" in 1925.

† Revised figures.

PART II.

Statement of subordinates on scales of pay rising to Rs. 250 per mensem and over on Class I Railways (excluding H. E. H. the Nizam's State and Jodhpur Railways), on the 1st April 1925, 31st March 1935 and 31st March 1936.

Name of Railway.	1st April 1925.									31st March 1935.								31st March 1936.									
	Europeans.	Indians.						Total number on the Railway (columns 2 plus 9).	Europeans.	Indians.						Total number on the Railway (columns 11 plus 18).	Europeans.	Indians.						Total number on the Railway (columns 20 plus 27).			
		Hindus.	Muslims.	† Anglo-Indians.	† Sikhs.	† Indian Christians.	† Other Classes.			Total.	Hindus.	Muslims.	Anglo-Indians and domiciled Europeans.	Sikhs.	Indian Christians.			Other Classes.	Total.	Hindus.	Muslims.	Anglo-Indians and domiciled Europeans.	Sikhs.		Indian Christians.	Other Classes.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
State-managed Railways.																											
Burma	22	88	9	..	..	..	198	290	318	22	82	6	220	11	12	89	372	394	20	84	7	218	10	14	89	367	387
Eastern Bengal	143	106	5	..	..	..	183	274	417	56	157	7	162	8	8	3	385	391	54	168	9	163	5	8	..	6	848
East Indian	859	300	25	..	..	..	789	1,114	1,973	373	472	48	1,013	20	9	9	1,568	1,941	385	458	57	990	17	12	6	1,540	1,875
Great Indian Peninsula	236	125	29	..	..	..	803	957	1,243	232	225	33	602	10	93	75	1,098	1,270	222	228	36	600	17	97	70	1,049	1,270
North Western	401	328	123	..	..	..	378	329	1,280	264	355	193	396	100	31	29	1,104	1,358	244	360	189	888	98	32	80	1,082	1,326
Railway Board and miscellaneous offices.	*	*	*	..	..	..	*	*	*	‡	148	27	‡26	13	‡4	1	‡14	‡216	2	152	32	20	18	5	1	223	225
TOTAL	1,717	942	191	..	..	..	2,331	3,464	5,181	989	1,434	316	3,419	157	152	153	4,631	5,570	877	1,440	330	2,869	160	163	146	4,008	5,485
Company-managed Railways.																											
Assam Bengal	22	28	4	..	..	..	46	73	95	17	34	4	35	2	..	3	78	95	13	37	6	44	2	..	4	92	105
Bengal Nagpur	333	140	13	..	..	..	403	656	889	170	309	‡21	‡407	17	11	8	‡673	‡843	104	223	21	461	17	18	6	741	845
Bengal and North-Western	31	15	2	..	..	..	59	76	107	14	21	7	59	1	1	..	89	103	14	21	7	57	1	1	..	87	101
Bombay, Baroda and Central India	155	253	25	..	..	..	506	734	939	123	301	36	319	3	40	120	819	942	121	310	35	314	3	41	113	821	942
Madras and Southern Mahratta	65	31	1	..	..	..	173	205	290	‡65	‡60	..	‡183	‡2	8	4	‡252	‡317	60	64	2	131	2	3	4	256	315
Rohilkund and Kumaon	6	5	1	..	..	..	13	19	25	5	1	2	11	..	..	..	14	19	7	3	2	6	..	..	..	14	21
South Indian	63	78	2	..	..	..	158	233	296	37	88	5	148	..	10	1	252	289	31	87	6	142	..	..	1	244	275
TOTAL	695	640	48	..	..	..	1,358	1,946	2,641	431	374	375	1,162	325	65	136	3,177	3,608	350	745	78	1,208	25	66	133	2,255	2,605
GRAND TOTAL	2,412	1,482	239	..	..	..	3,689	5,410	7,822	1,370	1,418	391	3,581	182	3217	289	5,808	9,178	1,227	2,185	408	3,577	185	229	279	6,263	8,090

Statement showing the percentages of the relative strength of Europeans and Indians of various communities.

Community	Railway Type	1925.	1935.	1936.	Community	Railway Type	1925.	1935.	1936.
		%	%	%			%	%	%
Europeans	State-managed Railways.	38.14	31.86	15.99	Sikhs	State-managed Railways.	†	2.82	2.92
	Company-managed Railways.	26.32	16.53	13.44		Company-managed Railways.	†	10.96	0.96
	TOTAL	30.84	16.75	15.17		TOTAL	†	‡2.23	2.29
Hindus	State-managed Railways.	18.18	25.74	26.25	Indian Christians	State-managed Railways.	†	‡2.73	2.97
	Company-managed Railways.	20.44	‡27.38	28.60		Company-managed Railways.	†	‡2.49	2.53
	TOTAL	18.95	‡26.27	27.01		TOTAL	†	‡2.65	2.83
Muslims	State-managed Railways.	3.69	‡5.67	6.02	Other Classes	State-managed Railways.	†44.99	2.75	2.66
	Company-managed Railways.	1.82	‡2.88	2.99		Company-managed Railways.	†51.42	‡5.21	5.11
	TOTAL	3.05	‡4.78	5.04		TOTAL	†47.16	‡3.63	3.44
Anglo-Indians and domiciled Europeans.	State-managed Railways.	†	‡43.43	43.19	TOTAL	State-managed Railways.	66.86	‡33.14	34.01
	Company-managed Railways.	†	‡44.55	46.37		Company-managed Railways.	73.68	‡33.47	36.56
	TOTAL	†	‡43.79	44.23		TOTAL	69.16	‡33.25	34.63

* Not available.

† Anglo-Indians, Sikhs and Indian Christians included in "Other classes" in 1925.

‡ Revised figures.

It will be observed that the Indian element in the superior services has risen from 28.02 per cent. on State-managed and 17.74 per cent. on Company-managed Railways in 1925 to 44.26 per cent. on State-managed and 37.23 per cent. on Company-managed Railways in 1936. Among the Indians the percentage increase by communities in 1936 as compared with 1925 is shown below :—

	State-managed.		Company-managed.	
	Percentages.		Percentages.	
	1925.	1936.	1925.	1936.
Hindus	14.80	25.71	10.30	23.51
Muslims	3.15	6.22	1.12	3.68
Anglo-Indians and domiciled Europeans.	*	6.59	*	5.84
Sikhs	*	1.88	*	1.02
Indian Christians	*	1.98	*	1.39
Other classes	10.07*	1.88	6.32*	1.78

* Anglo-Indians, Sikhs and Indian Christians included under "other classes" in 1925.

Turning to the subordinate staff on scales of pay rising to Rs. 250 per mensem and over, the corresponding figures are as under :—

	State-managed.		Company-managed.	
	Percentages.		Percentages.	
	1925.	1936.	1925.	1936.
Europeans	33.14	15.99	26.32	13.44
Indians—				
Hindus	18.18	26.25	20.44	28.00
Muslims	3.69	6.02	1.82	2.99
Anglo-Indians and domiciled Europeans.	*	43.19	*	46.37
Sikhs	*	2.92	*	0.96
Indian Christians	*	2.97	*	2.53
Other classes	44.99*	2.66	51.42*	5.11
Total Indians :	66.86	84.01	73.68	86.66

* Anglo-Indians, Sikhs and Indian Christians included under "other classes" in 1925.

76. Representation of minority communities in railway services.—In the report for the year 1934-35, the action taken by the Railway Board to give effect to the orders issued by the Government of India in regard to the representation of minority communities in railway services was explained.

To assist the Railway Board to watch the operation of these orders, an additional officer was temporarily appointed at the Railway Board's headquarters with effect from the 17th October 1935.

During the year under review instructions were issued to railway administrations that the percentages prescribed for Muslims and other minority communities should be applied to vacancies in each grade or division of a service to be filled by direct recruitment. The State-managed Railways were also advised at the same time that no fresh restriction should be introduced in the rules for recruitment of subordinate staff without the previous approval of the Railway Board. A copy of these orders was also forwarded to the Company-managed Railways in order to enable them to consider the adoption of a similar procedure.

The following figures show, by communities, the number and percentage of subordinate staff (excluding labourers and inferior servants) recruited on State and Company-managed Railways during the years 1934-35 and 1935-36 :—

	State-managed.				Company-managed.			
	1934-35.		1935-36.		1934-35.		1935-36.	
	Number.	Percentage.	Number.	Percentage.	Number.	Percentage.	Number.	Percentage.
Hindus	1,231	64.49	1,655	52.29	1,243	65.73	1,188	65.42
Muslims	367	19.29	1,123	35.47	295	15.60	297	16.35
Anglo-Indians and Domiciled Europeans.	213	11.19	227	7.17	247	13.06	188	10.35
Sikhs	24	1.26	72	2.27	15	0.80	12	0.72
Indian Christians	41	2.15	77	2.46	71	3.75	97	5.34
Parsis	7	0.37	3	0.09	18	0.95	13	0.72
Other Communities	20	1.05	5	0.16	2	0.11	14	0.77
Europeans	..	..	3	0.09	..	..	6	0.32
TOTAL	1,903	100.0	3,165	100.0	1,891	100.0	1,816	100.0

The following figures show the overall percentage on both State and Company-managed railways during 1934-35 and 1935-36 :—

	1934-35.	1935-36.
Europeans	*	0.19
Hindus	65.20	57.09
Muslims	17.45	28.50
Anglo-Indians and Domiciled Europeans	12.13	8.33
Sikhs	1.03	1.70
Indian Christians	2.95	3.49
Parsis	0.66	0.32
Other communities	0.58	0.38

} 4.64 } 5.51

It will be observed from the figures given above that during the year under review direct recruitment to subordinate railway services of the different minority communities, for whom percentages have been fixed by the Government of India, was satisfactory.

77. Training of staff.—Area Schools—(a) East Indian Railway School of Transportation, Chandausi.—The courses of instruction at the Railway School at Chandausi were on the same lines as during the previous year. There was a slight increase in the number of students who attended the school but there was a slight fall in the number of student days. This was due to an increase in the number of staff attending short term courses. In spite however of the fall in student days the cost per student day remained the

* In 1934-35 Europeans were not shown separately.

NORTH WESTERN RAILWAY.



Divisional Superintendent's Office at Quetta after the earthquake on 31st May 1935.

same as during the previous year, this was due to a decrease in the total school expenditure. The following figures illustrate the position:—

	Number of students.	Student Days.	Cost per student day.
1934-35	917	37,829	Rs. 1-14-0
1935-36	919	35,551	Rs. 1-14-0

(i) The total expenditure of the school chargeable against the Revenue Account for the year 1935-36 was Rs. 66,000 against Rs. 70,000 in the previous year.

(ii) No Refresher courses were held during the month of January 1936 on account of the Adh Kumbh Mela when the Divisions were unable to send staff to the School.

(iii) Two courses of Probationary Officers were held during the year.

(b) *Walton Training School, North Western Railway, Lahore Cantonment.*—During the year 1935-36, the School continued the training of staff for the North Western Railway. The total number who attended the School in the year under report, inclusive of Probationary Officers, was 1,234.

Several training courses which had been discontinued during the depression were revived and new courses introduced.

The courses held in the School have hitherto been described as "Training" and "Refresher" courses, and as these terms are apt to give a slightly erroneous impression of the nature of such courses, it has been decided to add a new category, *i.e.*, "Promotion" course and reclassify the existing courses under these three heads.

The School now provides for the theoretical and practical training of personnel in all the branches of railway working.

The beneficial results of Refresher Courses for those already in service are becoming more marked as the number of staff passing through the School increases. The activities of the School are of great advantage to the Administration in improving the general standard of efficiency.

78. Improvements in the service conditions of the staff.—*Hours of Employment Regulations.*—Mention was made in the last year's report of the decision to give statutory effect to the Hours of Employment Regulations on the Bombay, Baroda and Central India and Madras and Southern Mahratta Railways with effect from the 1st November 1935. In accordance with this decision these regulations were extended to these two Company-managed railways by Railway Department (Railway Board) Gazette Notification No. L35LG46, dated the 5th June 1935, and by the 1st November 1935, the Hours of Employment Regulations had been given statutory effect on six railway systems, *viz.*, North Western, East Indian, Eastern Bengal, Great Indian Peninsula, Bombay, Baroda and Central India and Madras and Southern Mahratta Railways, employing about 71 per cent. of railway workers in India.

The question of the statutory application of these regulations to the remaining railway systems was further examined by the Railway Board and it was decided early in 1936 that owing to the present financial position on railways the extension of these regulations to the remaining railways should be deferred and that the position should be re-considered towards the close of the year 1936.

79. Welfare.—(i) *Assistance to Railway employees from Railway funds towards the education of their children.*—In the Report for 1934-35 it was stated that Government of India had arrived at certain conclusions on the recommendations contained in the reports submitted by the officer on special duty and on the suggestions of the All-India Railwaymen's Federation and that before orders implementing those conclusions actually issued it was proposed to discuss the matter at a meeting of the Central Advisory Council for Railways. The subject was included in the Agenda for discussion at the meeting of the Central Advisory Council for Railways held in April 1935

but it could not be discussed at that meeting for want of time. It was brought up at the following meeting when it was decided to refer the matter to a Sub-committee. A Sub-committee was accordingly appointed and submitted their report which was considered by the Central Advisory Council for Railways. The matter is now under the consideration of the Government of India.

(ii) *Staff Benefit Fund*.—The Staff Benefit Funds established on principal railways continued to function during the period under review and provided various amenities and afforded considerable relief to subordinate and lower paid staff. Mention was made in the last year's report of a suggestion made by the All-India Railwaymen's Federation to the Railway Board to consider the question of giving greater publicity to the discussions in the Staff Benefit Fund Committees and the publication, in the railway weekly gazettes, of resolutions arrived at such meetings of the Committees. This suggestion was considered by the Railway Board during the period under review and orders were issued to the Agents of State-managed Railways that those railway administrations should publish annually for the information of the staff a comprehensive report on the working of their Staff Benefit Funds and that they might at their discretion also publish from time to time any other items regarding the working of the fund which might be considered of sufficient importance.

(iii) *Railway Sports*.—The eighth annual Inter-Railway Athletic Tournament was held in the Irwin Amphitheatre at New Delhi on the 20th and 21st March 1936. The Bombay, Baroda and Central India, Bikaner, Eastern Bengal, East Indian, Great Indian Peninsula, Jodhpur, Madras and Southern Mahratta, North Western, and South Indian Railways and the Railway Board entered their teams. The tournament was won by the North Western Railway for the eighth year in succession, the South Indian Railway being the runners-up.

For the field games a hockey tournament was held from the 16th to 19th and on the 23rd of March 1936. The Bombay, Baroda and Central India, East Indian, Great Indian Peninsula, Madras and Southern Mahratta and North Western Railways teams competed. The North Western Railway won the tournament, the East Indian Railway being the runners-up.

80. Report of the Royal Commission on Labour.—The recommendations of the Royal Commission on Labour concerning railways continued to engage the attention of the Railway Board during the period under review but no decisions were reached on recommendations of major importance such as those relating to the establishment of a Joint Standing Machinery for the settlement of disputes on railways and other cognate matters relating to the grant of facilities to Unions. With reference to certain recommendations made by the Royal Commission on Labour on the subject of providing certain facilities in the matter of representation of cases of employees charged with an offence which, if proved, might involve dismissal, suitable provisions were made by the Railway Board in the Rules regulating discipline and rights of appeal of non-gazetted railway servants issued by the Board to the Agents of State-managed Railways in June 1935; *i.e.* :—

- (i) in the case of a railway servant charged with an offence, the maximum penalty for which is dismissal, a procedure has been prescribed for holding an enquiry and allowing the railway servant concerned, if he so desires, to be accompanied by another railway servant; and also
- (ii) in the case of a railway servant who has completed 7 years' continuous service and is charged with an offence meriting removal from service, it has been provided that the officer competent to pass the orders of discharge may, if he considers it necessary or desirable, grant the railway servant concerned a personal interview at which the latter may be accompanied by another railway servant.

81. Security of Service.—*Rules regulating discipline and rights of appeal of non-gazetted railway servants.*—It was mentioned in last year's report that certain reports called for on the working of the Rules regulating the discharge and dismissal of State Railway non-gazetted Government servants had been received from the Agents of State-managed Railways and that they were under examination by the Railway Board.

During the period under review a fresh set of rules known as the Rules regulating the discipline and rights of appeal of non-gazetted Railway servants were made by the Governor General in Council in exercise of the powers conferred on him by the Direction appended to the Railway Services (Classification, Control and Appeal) Rules and issued in June 1935 in supersession of the Rules for the discharge and dismissal of non-gazetted Government servants issued in 1930. These rules deal with all questions of discipline and rights of appeal of non-gazetted railway servants, the following being some of the main features in which they differ from the rules which they superseded:—

- (i) these rules regulate *inter alia* the infliction of minor penalties such as censure, etc.;
- (ii) these rules provide that in the case of a railway servant charged with an offence, the maximum penalty for which is dismissal a procedure has been prescribed for holding an enquiry and allowing the railway servant concerned, if he so desires, to be accompanied by another railway servant;
- (iii) these rules also provide for the procedure outlined in (ii) above being applied where a railway servant who has completed 7 years' continuous service is charged with an offence meriting removal from the service for inefficiency, repeated offences of a minor character, etc., while the original rules issued in 1930 provided for such a treatment in the case of employees with ten years' continuous service;
- (iv) these rules further provide for a right of appeal to the Railway Board on an original order passed by an Agent or to the Financial Commissioner, Railways, on an original order passed by the Controller of Railway Accounts.

Certain amendments of a minor nature were also issued to these rules.

82. Meetings with the All-India Railwaymen's Federation.—During the period under review the Railway Board met the representatives of the All-India Railwaymen's Federation on two occasions, once in June 1935 and next in January 1936. The principal subjects discussed at the meeting held in June 1935 related to the extension of the Hours of Employment Regulations, substitution of departmental labour for contract labour, uniform minimum standard of labour policy for all railways, rules for recognition of Associations of Industrial employees, rest accommodation for relieving staff temporarily on duty in out stations, Rules for determining the relative seniority and promotion of non-gazetted staff on Railways and the employment of lady doctors in railway hospitals. At the meeting held in January 1936, the following were the principal subjects discussed:—

- (i) Hours of Employment Regulations,
- (ii) recruitment of staff; so far as they related to State-managed Railways,
- (iii) rules regulating discipline and rights of appeal of non-gazetted railway servants so far as they related to State-managed Railways,
- (iv) new scales of pay for inferior staff and other low-paid workers so far as they related to State-managed Railways, and
- (v) adverse effects on service conditions of accounts clerical staff after separation of railway Accounts from Audit.

The suggestions put forward by the Federation at these two meetings are under the consideration of the Railway Board.

CHAPTER VII.

AMENITIES FOR PASSENGERS.

83. To the extent to which funds were available, Railways continued their policy of extending facilities tending to make for the greater convenience and comfort of passengers. Improvements were made in existing stock and replacements affected with carriages of more modern pattern. Programmes drawn up for the provision of additional waiting rooms and halls, covered and raised platforms, separate refreshment rooms for Hindus and Mohammedans and vendors' stalls were proceeded with. Other matters which received special attention were the arrangements for the supply of drinking water and the washing, cleaning and disinfection of carriages—in particular the latrines in third class carriages. Additional restaurant car services were also introduced.

The existing position on railways in regard to some of these matters and the additional facilities provided on the principal Railways are briefly summarised in the following paragraphs:—

(i) *Booking offices.*

Assam Bengal Railway.—An additional booking office was opened at Gangasagar and that at Chandpur extended. Temporary booking offices were opened at five stations during *melas*. A new station was also opened at Kalidaha.

Bengal and North-Western Railway.—Fifty-nine temporary booking offices were opened at twelve stations to meet the requirements of pilgrim traffic; eight being provided at Sonapore during the Kartik Purnamashi *mela*.

Bombay, Baroda and Central India Railway.—A separate booking office for upper class passengers was opened at Church Gate. Temporary booking offices were opened for the convenience of pilgrims and others attending some of the big fairs, such as the Khwaja and Pushkar fairs at Ajmer, and the Urs Fair at Mahim.

Eastern Bengal Railway.—Under arrangements with the East Indian Railway their booking office in Park Street was opened for the booking of passengers, luggage and parcels over the Eastern Bengal and connected railway and steamer services.

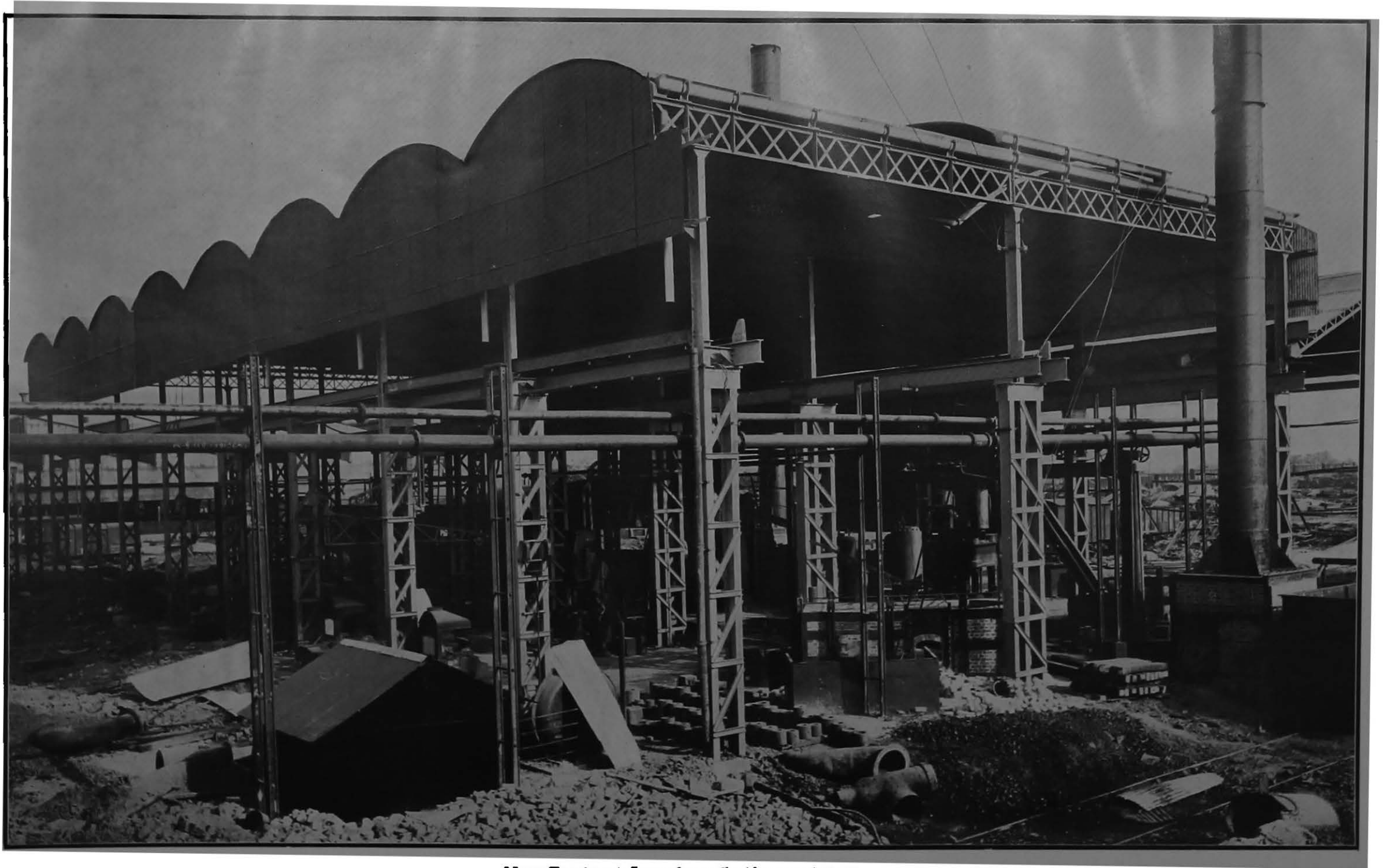
East Indian Railway.—A new booking office was opened at Kingeraig between Sunny View and Mussoorie and the old one closed. The existing lower class booking office on the City side of Cawnpore was also opened for booking first and second class passengers. During the Adh Kumbh Mela, Sangam (near Allahabad) and Prayag Ghat stations were opened, also several temporary booking Offices at Allahabad, Naini and Bindhachal. Booking offices were opened at Gaya City and Palmerganj Bathing Ghat temporarily during the Pitripukh *mela*.

Madras and Southern Mahratta Railway.—The two city booking offices at Tirupati East and Vellore Town, worked by the South Indian Railway were opened for the booking of passengers for the Madras and Southern Mahratta Railway. Two flag stations were also opened and twelve halts for rail cars provided.

His Exalted Highness the Nizam's State Railway.—Temporary booking offices were opened during important jattras and *melas*.

North Western Railway.—A city booking office was opened at Khunda Ladheke. Moga Hospital city booking office was as usual re-opened temporarily for the booking of intermediate and third class passengers, also a temporary booking office for passengers at Sadhoke station.

EAST INDIAN RAILWAY.



New Forge at Jamalpur (half completed).

During the summer season a booking office for passengers and luggage was opened on the Mall at Simla.

South Indian Railway.—New stations were opened at Point Calimere, Natarajapuram and Neyveli.

(ii) *Waiting rooms and waiting halls.*

Assam Bengal Railway.—Gomdandi and Dhoom Ghat stations were converted to semi-pucca standard with third class waiting halls and ladies waiting rooms. A third class waiting room for ladies was provided at Tinsukia and an intermediate and third class waiting room for ladies at Mariani. Cement benches were provided in the waiting halls at Sitakund and Senchoa and the ladies waiting rooms at Laksam and Sonaimuri were extended.

Bengal and North-Western Railway.—Two upper class waiting rooms were opened one each at Shohratgarh and Ghughli also a third class waiting hall at Chainwa.

Bengal Nagpur Railway.—A new third class waiting hall was provided at Birsola, also an intermediate class waiting room at Sakhigopal. The third class waiting halls at Pendurti and Meramandeli were extended.

Bombay, Baroda and Central India Railway.—Improvements and alterations were in progress to waiting rooms and lower Class waiting halls at nine stations.

Burma Railways.—The waiting hall on the island platform at Thingangyun and the third class waiting hall at Pyawbwe were extended.

Eastern Bengal Railway.—The following were provided :—

A ladies waiting room at Taltalahat, an additional third class passenger hall at Banmankhi, a permanent station building with waiting hall at Barpeta Road, new ladies' waiting room and passenger hall with verandah at Arariya Court, and a waiting hall at Siliguri, with a foot overbridge over the Darjeeling Himalayan Railway lines, were provided.

East Indian Railway.—Waiting rooms were provided for intermediate class passengers generally at Dhanbad, Lahksar, Shahjahanpur, Chandausi, Mirzapur and Prayag and separate rooms for "ladies" and "gentlemen" at Madhupur and Fyzabad, and a ladies waiting room at Bhagalpur. One third class waiting hall at Kastagram and two third class ladies waiting rooms at Dubrajpur and Sainthia were also provided.

Great Indian Peninsula Railway.—The waiting halls at Savda, Raver, Wun, Nimbhora, Burhanpur and Jalamb were paved. Two wagon bodies were provided as shelters, one each at Karanja Town and Murtazapur Town. Electric lights were fitted in the waiting rooms at Kasara, Vasind, Talegaon, Jubbulpore and Kirkee. The third class waiting hall at Katni was enclosed.

Jodhpur Railway.—One additional waiting room for upper class and one for third class passengers were provided.

Madras and Southern Mahratta Railway.—Waiting halls for third class passengers were provided at two stations.

His Exalted Highness the Nizam's State Railway.—The upper class gentlemen's waiting rooms at Secunderabad and at Pedapalli were improved and minor additions made in the upper class waiting rooms at Hyderabad (broad gauge), Vikarabad, Kazipet, Dornakal and Mahbubnagar. A third class waiting hall was provided at Dichpalli.

North Western Railway.—Waiting rooms for upper class passengers generally were provided at Mehrabpur and Sanawan and for ladies only at Shahdadpur and Bahawalnagar. Waiting rooms for intermediate and third class passengers were built at Gujranwala Town, Amritsar, Khunda Ladheke, Delhi and Mithiani. The first and second class waiting rooms at Karachi city and Karachi Cantonment and the intermediate class waiting rooms at Lahore were provided with Indian type latrines.

South Indian Railway.—Additional waiting halls were built at Punthottam (a festival centre), Kodikkalpalaiyam, Manjattidal and Ravanasamudram.

The following statement summarises the number of waiting rooms and waiting halls provided on each Class I railway for the use of intermediate and third class passengers:—

	A. D.	B. & N. W.	B. N.	B., B. & C. I.	Burma.	E. B.	E. I.	G.I.P.	Jodhpur.	M. & S. M.	N. S.	N. W.		R. & K.	S. I.
												C.	S.		
1. Total number of stations open for passenger traffic.	295	352	510	649	452	453	753	560	144	539	210	369	179	97	602
2. Number of stations at which waiting rooms or halls have been provided for intermediate class passengers:—															
(i) generally	10	5	12	1	..	6	46	NW	NW	NW	NW	11	3	NW	NW
(ii) for women only	59	10	14	1	..	4	41	NW	NW	NW	NW	16	2	2	NW
3. Number of stations at which third class waiting rooms or halls have been provided:—															
(i) generally	238	251	400	474	452	423	335	467	93	493	210	650	110	94	581
(ii) for women only	127	35	69	2	NW	323	173	13	3	14	2	50	12	12	13
4. Percentage of stations at which waiting rooms or halls have been provided as compared with the total number of stations open for passenger traffic:—															
(i) for intermediate class, generally	3.39	1.42	2.35	0.15	..	1.77	6.07	NW	NW	NW	NW	1.27	1.68	NW	NW
(ii) for intermediate class, women only	20.0	2.84	2.75	0.15	..	0.88	5.41	NW	NW	NW	NW	1.84	1.12	2.06	NW
(iii) for third class, generally	80.7	71.3	90.2	73.0	100.0	93.4	44.2	83.4	64.6	91.5	100.0	74.8	61.5	96.9	96.5
(iv) for third class, women only	43.1	9.94	13.5	0.31	NW	72.0	22.3	2.32	2.08	2.60	0.95	5.75	6.70	12.4	2.16

C.—Commercial. S.—Strategic.

(iii) The following statements show the present position in regard to platforms generally:—

(a) Number of stations provided with covered platforms.

	A. B.	B. & N. W.	B. N.	B., B. & C. I.	Burma.	E. B.	E. I.	G.I.P.	Jodhpur.	M. & S. M.	N. S.	N. W.		R. & K.	S. I.
												C.	S.		
1. Total number of stations open for passenger traffic.	295	352	510	649	452	453	753	560	144	539	210	369	179	97	602
(i) Class D (or flag stations)	98	21	64	116	91	126	123	84	57	36	53	249	34	5	143
(ii) Other than class D (or flag) stations.	197	331	446	533	361	327	630	476	87	453	157	620	145	92	459
2. (i) Number of stations at which there are two or more platforms.	22	23	33	107	77	90	300	190	5	55	25	223	9	3	79
(ii) Total number of platforms at such stations.	53	72	176	262	158	235	964	452	13	155	59	529	33	11	215
(iii) Total number of covered platforms at such stations.	4	NW	4	176	73	96	211	125	NW	63	11	144	3	6	93
(iv) Percentage of (iii) to (ii)	7.55	NW	2.27	67.2	46.2	40.8	21.9	27.6	NW	43.9	13.6	27.2	13.0	54.5	43.3
3. (i) Number of stations other than class D at which there is only one platform.	175	309	373	353	296	242	233	312	82	398	147	411	136	34	330
(ii) Number of such stations at which there are covered platforms.	NW	NW	1	5	4	NW	37	9	NW	22	NW	9	1	NW	6
(iii) Percentage of (ii) to (i)	NW	NW	0.27	1.40	1.35	NW	15.6	2.83	NW	5.53	NW	2.19	0.74	NW	1.53

C.—Commercial. S.—Strategic.

(b) Number of stations provided with platforms above rail level.

	A. B.	B. & N. W.	B. N.	B., B. & C. I.	Burma.	E. B.	E. I.	G.I.P.	Jodhpur.	M. & S. M.	N. S.	N. W.		R. & K.	S. I.
												C.	S.		
1. Total number of stations open for passenger traffic.	295	352	510	649	452	453	753	560	144	539	210	369	179	97	602
(i) Class D (or flag) stations	98	21	64	116	91	126	123	84	57	36	53	249	34	5	143
(ii) Other than class D (or flag) stations.	197	331	446	533	361	327	630	476	87	453	157	620	145	92	459
2. (i) Number of stations other than flag stations at which there are more than one platform.	22	23	75	99	62	35	370	163	5	55	11	202	9	3	79
(ii) Total number of platforms at such stations.	53	70	153	246	123	224	931	393	13	155	32	479	23	23	215
(iii) Total number of platforms at such stations above rail level.	5	56	132	223	50	180	606	316	13	155	31	373	17	13	145
(iv) Percentage of (iii) to (ii)	9.43	80.0	83.5	93.1	39.1	80.4	65.1	79.4	100.0	100.0	96.9	77.9	73.9	73.3	67.4
3. (i) Number of stations at which there is only one platform.	273	323	423	507	375	363	362	345	139	434	135	527	170	33	523
(ii) Number of such stations at which platforms are above rail level.	6	153	123	201	39	127	155	197	7	320	74	173	91	23	273
(iii) Percentage of (ii) to (i)	2.20	48.9	23.7	39.6	10.4	35.0	42.3	57.1	5.04	63.1	40.0	33.3	53.5	31.6	53.2

C.—Commercial. S.—Strategic.

(iv) Refreshment rooms for Hindus and Mohammedans.

The table below shows the number of stations on Class I Railways, provided with refreshment rooms separately and jointly for Hindus and Mohammedans on 31st March 1936, and of these the additions that were made during 1935-36.

Name of Railway.	NUMBER OF STATIONS PROVIDED WITH REFRESHMENT ROOMS FOR THE USE OF			NUMBER OF REFRESHMENT ROOMS WHICH WERE PROVIDED DURING THE YEAR.		
	Hindus and Moham-medans.	Hindus only.	Moham-medans only.	Hindus and Moham-medans.	Hindus only.	Moham-medans only.
Assam Bengal	3	..	..	..	..	..
Bengal and North-Western	..	9	9	..	..	..
Bengal Nagpur	13	..	..	..	..	..
Bombay, Baroda and Central India	..	8	8	..	..	..
Eastern Bengal	2	13	8	..	1	1
East Indian	15	3	5	..	..	..
Great Indian Peninsula	..	5	5	..	..	..
Jodhpur	3	1	..	..	..	..
Madras and Southern Mahratta	..	55*	7	..	..	..
His Exalted Highness the Nizam's State.	..	10	10	..	..	..
North Western	..	22	22	..	1	1
Rohilkund and Kumaon	1	..	..	..	..	..
South Indian	34	..	5	1	..	..

* Hindu refreshment rooms though run on Hindu lines supplying vegetarian Hindu food are open to other communities also.

(v) Vendors' stalls in waiting halls and on platforms.

Assam Bengal Railway.—One standard tea stall with kitchen for Marwaris at Chaparmukh and two for Hindus (one each) at Hojai and Sibsagar Town were opened during the year. The stalls at Lumding and Tinsukia were improved.

Bengal and North-Western Railway.—There are vendors' stalls at 38 stations. Tea stalls were provided at 3 stations.

Bengal Nagpur Railway.—No addition was made to the number of stalls, i.e., 65, in use during the previous year.

Bombay, Baroda and Central India Railway.—82 stations on the broad gauge and 32 stations on the metre gauge had stalls. Stalls were opened during the year at three stations, viz., Lower Parel, Udwarda and Kankaria.

Burma Railways.—260 stalls that were open during the previous year continued in service.

Eastern Bengal Railway.—75 stations had vendors' stalls. The designs of vendors' stalls and vending boxes were standardized and the introduction of the new designs at stations was in hand.

During the year stalls at Ichhapur, Kushtia, Bhatiapara Ghat and Kumarkhali were closed down due to poor patronage.

East Indian Railway.—Stalls existed at 110 stations: five additional stalls were opened one each at Patna City, Bihta, Sheikhpura, Madhupur and Gujhandi, during the year.

Great Indian Peninsula Railway.—Stalls were open at 140 stations of which 8 stalls were provided during the year as follows:—

2 at Dudhni and Bhamburda; and

1 each at Raja-ki-Mandi, Ganj-Basoda, Mohol and Sarola.

Jodhpur Railway.—Vendors' stalls were in existence at eight stations, of which three stalls were opened during the year, one each at Nabisar Road, Naukot Sind and Samaro Road. Ice and aerated water stalls were opened

temporarily at Mirpur Khas, Chhor, Pithoro, Nabisar Road, Jhudo and Jamesabad.

Madras and Southern Mahratta Railway.—Stalls were in use at 127 stations.

His Exalted Highness the Nizam's State Railway.—There were 128 stalls open at stations.

North Western Railway.—At the end of the year stalls were in use at 114 stations. During the year, five stalls were provided one each at Phagwara, Ummedpur, Narang, Tando Muhammad Khan and Peshawar City. Tea tables were placed in the stalls at certain of the more important stations.

Rohilkund and Kumaon Railway.—There were 14 stations at which stalls were open at the end of the year; two of these stations each had two stalls. Seven stalls were opened during the year and that at Izatnagar closed.

South Indian Railway.—At the end of the year, there were 170 stalls. During the year two fruit stalls were provided: one at Madras Egmore and the other at Ferok.

The following statement summarises the number of stations on Class I Railways, at which there were vendors' stalls:—

Railway.	Number of stations at which stalls were in service on 31st March, 1936.	Number of stalls opened during the year.
Assam Bengal	51	1
Bengal and North-Western	38	3
Bengal Nagpur	65	..
Bombay, Baroda and Central India	114	3
Burma	260	..
Eastern Bengal	75	..
East Indian	110	5
Great Indian Peninsula	140	8
Jodhpur	8	3
Madras and Southern Mahratta	127	..
His Exalted Highness the Nizam's State	23	..
North Western	114	5
Rohilkund and Kumaon	14	7
South Indian	170	2

(vi) *Water supply for passengers.*

Assam Bengal Railway.—(a) *Large stations.*—Water taps are provided on the platforms and watermen are also employed at a number of stations to supply drinking water to passengers at train times.

(b) *Small stations.*—A supply of clean chlorinated water is available at all stations in earthen chatties, and in addition to European type filters in use at twenty-four stations.

(c) Tube wells were provided during the year at Gomdandi, Laksam, Gangasagar, Katakhal, Noajan and Mairabari and wells at Haila Kandi and Silghat Town. Tube wells were also sunk at Sitakund, Baraiyadhala and Lanka. The water supply arrangement at Shamganj was improved.

(d) 29 watermen were permanently employed at 27 stations and an additional waterman was employed at Chittagong during the hot weather months.

Bengal and North-Western Railway.—(a) *Large stations.*—Hydrants are provided at suitable places on the station platforms. During the year a stand pipe close to the waiting hall near the booking office at Gonda, two hydrants at Chupra Kacheri and two on the island platform at Chupra were provided. Water is also supplied to passengers in trains by watermen provided with wheeled water tanks and buckets.

(b) *Small stations.*—Fresh cool drinking water is kept ready in buckets in the station verandah for supply to passengers in trains by watermen and other staff specially deputed for the purpose. The staff have a special uniform so that they may be easily recognised by passengers. At engine watering stations hydrants are provided for supply of fresh water to passengers. A tube well pump was provided at Motihari station.

(c) 123 watermen were permanently employed at 96 stations; and 143 more watermen were engaged temporarily during the hot weather months.

Bengal Nagpur Railway.—(a) *Large stations.*—Water taps are provided on station platforms and in waiting halls. Watermen supply water to passengers in trains from drums on wheels; these drums are kept in specially designed shelters which keep the water cool.

(b) *Small stations.*—163 drums on wheels are used by watermen for supplying water.

(c) 178 watermen were permanently employed at 136 stations and 107 additional watermen were engaged temporarily during the hot weather months.

Bombay, Baroda and Central India Railway.—(a) *Large stations.*—An adequate number of water taps are provided on platforms; in addition, permanent Hindu watermen and bhisties, supplemented by temporary men during summer season, supply drinking water to passengers. On the metre gauge section 84 Hindu watermen and Bhisties are employed in passenger trains to supply water to passengers in trains. At the majority of stations, water is stored and cooled in earthen *gharas*, in water huts and *piaos*.

(b) *Small stations.*—Hydrants are provided at certain stations and at others permanent watermen, supplemented by temporary men during the summer season, supply cool drinking water to passengers.

(c) At 29 stations on the broad gauge and at 304 stations on the metre gauge, 44 and 489 watermen respectively were employed permanently. In addition, 91 and 41 temporary watermen were employed during the hot weather months.

Burma Railways.—(a) *Large stations.*—Hydrants are provided on the platforms and in the waiting halls.

(b) *Small Stations.*—Earthen pots filled with water are placed on special stands protected from the sun.

(c) 20 watermen were permanently employed at 14 stations and 5 watermen temporarily during the hot weather months.

At Thazi four bathing places were provided for 3rd class passengers.

Eastern Bengal Railway.—(a) Additional facilities were provided as follows:—

A pipe line supplying drinking water was extended to the platform at Ranaghat; the filtered water supply for the refreshment room at Sealdah main station was improved; the platform scoops at Mymensingh were improved; the filtered water taps at Amingaon were replaced by Tomlinson type double scoop water saving device; and a tube well was sunk at Guma.

(b) 101 watermen were permanently employed at 68 stations and 11 temporarily during the hot weather months.

East Indian Railway.—(a) *Large stations.*—In addition to hydrants on platforms, galvanised tanks on wheels or trollies with earthen pots were used for supplying water to passengers. Separate trellis kiosks containing earthen pots or buckets of drinking water were also in use. A new type of tank barrow designed to keep water cool was being tried as an experimental measure on the Asansol Division.

(b) *Small stations.*—Trellis kiosks were in use at 88 stations.

(c) 684 watermen were permanently employed at 455 stations and 590 temporarily during the hot weather months.

Great Indian Peninsula Railway.—(a) *Large stations.*—Watermen were permanently employed to supply water to passengers and in addition water chatties filled with cool drinking water were kept on the platforms in water cages for Hindus and Mohammedans separately. Two drinking water fountains were provided at Harda.

(b) *Small stations.*—Kankharies and chatties containing cool drinking water were placed in shelters.

(c) 281 watermen were permanently employed at 208 stations and 382 temporarily during the hot weather months.

Jodhpur Railway.—(a) *Large stations.*—Water taps were provided on platforms, in addition to pias. Hindu watermen were also in service.

(b) *Small stations.*—Hindu watermen were engaged and pias provided at the majority of stations.

(c) 131 watermen were permanently employed at 112 stations and 16 temporarily during the hot weather months.

Madras and Southern Mahratta Railway.—One or more five gallon earthenware pots fitted with brass cock and tin lid are placed on stands at all stations. Watermen are also employed at certain stations, at others where potable water is available in sufficient quantities water taps are provided during the year. Such taps were provided at Sholinghur, Kotipalle and Anantapur.

140 watermen were permanently employed at 110 stations; 42 watermen were also employed temporarily during the hot weather months.

During the hot weather, public bodies are also permitted to supply drinking water to passengers.

His Exalted Highness the Nizam's State Railway.—Water taps were provided at all important stations and also at some small stations.

At 7 stations there were two permanent watermen and at 11 stations one each. During the hot weather, one third class compartment was set apart in each passenger train for a travelling waterman, who supplied drinking water to the passengers.

North Western Railway.—At all important stations water shelters with a sufficient number of *mutkas* or *gharras* containing cool drinking water were provided. Water hydrants and tube wells with hand pumps were installed at some stations and barrows containing cold water were in use at others. At large stations separate watermen were specially deputed to attend to "ladies" compartments and the watermen at small stations were particularly instructed to attend the "ladies" compartment first.

1,456 watermen were employed permanently at 907 stations and 701 watermen temporarily during the hot weather months. On certain sections travelling watermen supplied cool drinking water to passengers travelling by day trains.

Rohilkund and Kumaon Railway.—(a) *Large stations.*—Eighteen water carts of improved pattern were in use for the supply of water to passengers. Two double stand pipes were also provided at Gola Gokaran Nath during *melas*.

(b) *Small stations.*—In addition to cool drinking water placed in buckets for the use of passengers, Gujranwala pumps were installed at several stations.

(c) 42 watermen were stationed permanently at 42 stations and 37 watermen were engaged temporarily during the hot weather months. In addition, 11 watermen were in service at important stations.

South Indian Railway.—(a) *Large stations.*—In addition to the provision of hydrants, water tubs and drums on platforms, water carriers were detailed to supply water to passengers in trains.

(b) *Small stations.*—At some hydrants were provided and in addition water was stored in drums which were kept in a cage or box. The following were the important improvements effected during the year :—

- (i) The chlorinated drinking water tank at Cuddalore Junction was renewed.
- (ii) The drinking water supply pipe line at Cannanore station was isolated.
- (iii) The water supply to the hydrant at Tuticorin was improved.
- (iv) A drinking water tank was provided at Rameswaram station.
- (v) The water supply to the hydrant at Rameswaram station was improved.
- (vi) A new pipe line was installed at Tinnevely Junction.

(vii) *Restaurant or buffet car services.*

Assam Bengal Railway.—One restaurant car was in regular service on the Assam Mail trains between Hojai and Furkating.

Bengal Nagpur Railway.—Restaurant cars catering in European style were run on the Bombay and Madras Mail trains.

Bombay, Baroda and Central India Railway.—Restaurant cars catering in European style were in service on the Frontier Mail between Bombay Central and Delhi, on the Sind-Delhi Mail between Ahmedabad and Ajmer and the Delhi Express between Ahmedabad and Delhi.

Compartments catering in the Indian style were run in third class carriages on the Kathiawar Express between Bombay Central and Viramgam and in the Delhi Express between Bombay Central and Delhi.

Eastern Bengal Railway.—Restaurant cars catering in European style were run on the Assam Mail between Calcutta and Parbatipur.

East Indian Railway.—Restaurant cars catering in European style, were provided on 8 services :—

Nos. 1 Up and 2 Down—Calcutta-Delhi-Kalka Mails.

Nos. 3 Up and 4 Down—Bombay Mails.

Nos. 7 Up and 8 Down—Howrah-Delhi Expresses.

Nos. 5 Up and 6 Down—Calcutta-Punjab Mails.

On the Up and Down Punjab Express trains restaurant cars for lower class passengers were run between Howrah and Saharanpur. Five bogie third class carriages converted into Indian restaurant cars were running on the line from the month of August.

Great Indian Peninsula Railway.—Restaurant cars catering in European style, were run on sixteen trains, and those catering in Indian style on two trains. Buffet cars were also run on four trains.

Restaurant cars with Hindu and Mohammedan Kitchen compartments, which were run during the year between Bhusaval and Jhansi on the Bombay-Peshawar trains had to be discontinued owing to lack of patronage.

Jodhpur Railway.—Restaurant cars catering in European style, were run on Mail trains between Marwar and Hyderabad (Sind).

Refreshment cars catering in Indian style were run between :—

- Marwar and Hyderabad (Sind) on 3 Up and 4 Down mail trains.
- Jodhpur and Hyderabad (Sind) on 9 Up and 10 Down mixed trains.
- Sujangarh and Degana on 29 Up and 30 Down mixed trains.

Indian buffet cars providing light refreshments were run between Jodhpur and Phalodi on 73 Up and 74 Down mixed trains.

Madras and Southern Mahratta Railway.—Restaurant cars catering in European style were run on seven mail and express trains.

Refreshment cars catering in Indian style were run on 16 trains.

His Exalted Highness the Nizam's State Railway.—A buffet car for the supply of meals and other refreshments to Hindu and Mohammedan passengers, was run on the Up and Down passenger trains between Bezwada and Wadi.

North Western Railway.—Restaurant cars catering in European style were run on the following trains :—

- Karachi Mail trains between Lahore and Rohri.
- Quetta Mail trains between Rohri and Karachi.
- Frontier mails between Jullundur city and Rawalpindi, Lahore and Rawalpindi.
- Punjab-Calcutta mail between Lahore and Jullundur city.

Dining and vending cars for Hindus and Mohammedans were run on the following trains :—

- Bombay Express trains between Lala Musa and Delhi.
- Karachi Mail trains between Lahore and Rohri.

Rohilkund and Kumaon Railway.—Restaurant cars, catering in European style, were run on the Up and Down Agra-Kathgodam Express, and Bareilly-Kathgodam Light Passenger.

South Indian Railway.—Dining cars catering in European style were run on the Indo-Ceylon Express between Trichinopoly and Dhanushkodi and on the Blue Mountain Express between Erode Junction and Mettupalaiyam during the hill season. Indian buffet cars, providing light refreshments, were run on the following trains :—

- Dhanushkodi Fast Passenger between Madras and Dhanushkodi.
- Trivandrum Fast Passenger between Madras and Shencottah.
- Shencottah Passenger between Madras and Shencottah.

The following summarises the restaurant car services during 1935-36 :—

Railway.	Number of trains on which restaurant cars were run, catering in		Number of trains on which buffet cars were run.	Remarks.
	European Style.	Indian Style.		
Assam Bengal	2	..	..
Bengal Nagpur	4	..	..
Bombay, Baroda and Central India	6	4	..	
Eastern Bengal	2	..	..
East Indian	8	2	..	
Great Indian Peninsula	16	2	4	
Jodhpur	2	6*	2	
Madras and Southern Mahratta	7	16*	..	* Refreshment cars..
His Exalted Highness the Nizam's State.	..	..	2	
North Western	5	4	..	
Rohilkund and Kumaon	3	..	..
South Indian	4	..	6	

GREAT INDIAN PENINSULA RAILWAY.



Third Class Buffet Car on the Poona Express.

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(viii) *Improvements carried out in existing lower class carriages.*

Progress in regard to the provision of amenities for the comfort and convenience of passengers in the existing lower class carriages has been maintained.

Electric lighting in lower class carriages has been improved on the Assam Bengal, Bengal and North-Western, Burma, Eastern Bengal and East Indian Railways. Most of the lower class stock on railways is now fitted with electric lights.

Seats in Intermediate class carriages on the Bengal Nagpur Railway are now upholstered in Rexine. The Burma Railways are paying attention to the smooth running of lower class carriages by alteration of bogie swing links and provision of less stiff elliptical springs. On the Eastern Bengal Railway, the metal straps fixing the cushions to the benches in Intermediate class compartments now pass through the cushions instead of over them, thus affording more comfortable seating. The central back rests in 48 metre gauge bogie corridor third class carriages on the South Indian Railway have been raised to prevent inconvenience to passengers. The centre double seats in 208 Intermediate class compartments on the North Western Railway have been converted to single ones. 97 third class carriages with female compartments on the Assam Bengal Railway have been provided with inter-communication windows on the partition between male and female compartments. The South Indian Railway have provided female compartments fitted with window bars in 5 broad gauge bogie Brake Van and Third class carriages.

The progress in providing illuminated plaques to readily identify female compartments at night, has been maintained.

Side louvres fitted to the old stock on the Eastern Bengal Railway are gradually being replaced by roof ventilators.

Additional footstep and hand rails have been provided in lower class carriages for the convenience of passengers getting into and out of the carriages at low level platforms on the South Indian Railway.

The provision of hat pegs and hooks in all the intermediate and third class carriages has been taken in hand on the North Western Railway and 1,277 lower class carriages were provided with these fittings during the year.

(ix) *Improvements carried out in the latrines of third class carriages.*

The improvement of latrines in third class carriages continues to receive attention.

Electric lights have been provided in all the latrines of lower class stock on the Bengal and North-Western, Bombay, Baroda and Central India and South Indian Railways. The lighting of third class latrines on the main line block rakes has been improved on the Burma Railways. The 10 watt vacuum lamps in third class carriages on the Eastern Bengal Railway continue to be replaced by 15 watt gas filled lamps. On the North Western Railway latrines of 283 bogie third class carriages have been provided with electric lights, leaving a balance of 195 vehicles to be completed in this respect.

An improved type of latrine has been introduced on the Bengal and North-Western Railway and this is being fitted as the carriages pass through shops for re-building. Cast iron enamelled latrine pans have been fitted in place of those of ordinary cement finish in lower class compartments on the Bengal Nagpur Railway. The zinc pans in latrines of old type carriages are gradually being replaced by enamelled pans and composition flooring on the Eastern Bengal Railway. About 100 latrines have been so dealt with during the year. Elephant flooring and walls to waist line were fitted in latrines in 5 new third class carriages on the Madras and Southern Mahratta Railway. Sloping fixed shutters are being provided in the latrines of third class carriages on this railway as they pass through shops. On the Jodhpur Railway, latrines in third class carriages have been provided with water tanks

besides other minor improvements such as coat hooks and frosted glass windows.

Iron coat hooks have been provided in all latrines of lower class carriages on the Assam Bengal Railway. 119 carriages have also been fitted with brackets for holding *lotas* and soap.

The problem of enlarging the size of latrines in lower class carriages is engaging the attention of railways and satisfactory progress is being made in this direction.

(x) *Arrangements to ensure cleanliness of latrines in passenger trains.*

Assam Bengal Railway.—Train examiners at terminals and intermediate train examining stations were required to give special attention to cleaning and disinfecting lavatories and latrines in all carriages. At terminal stations train examiners were made personally responsible for seeing that the roof tanks of carriages were clean and filled with water before each trip. District officers inspected all coaches at regular intervals. Overhead watering arrangements for carriages were provided at Badarpur, Lumding, Akhaura and Shaistaganj.

Bengal and North-Western Railway.—Latrines were inspected at all carriage examining stations and thoroughly washed out and cleaned at terminal stations.

Bengal Nagpur Railway.—Khargpur, Chakardharpore, Bilaspur, Khurda Road, Dongargarh, Jharsuguda and Amda were provided with disinfectant tanks mounted on wheels to facilitate the cleaning of lavatories.

Bombay, Baroda and Central India Railway.—Tanks of carriages were filled at starting stations and replenished at large stations *en route* by special staff. Notices were also exhibited in the lavatories of third class carriages on the broad gauge advising the public to inform the guard or station staff, when the services of a sweeper were required. The names of stations, where sweepers were specially provided for the purpose, were also detailed in these notices. On the metre gauge, lavatories in carriages were cleaned *en route* by sweepers provided at certain stations.

Burma Railways.—Extra sweepers for cleaning latrines in third class carriages were posted at important stations, where through trains had a sufficiently long halt.

Eastern Bengal Railway.—The latrines in all carriages were washed, cleaned and disinfected at terminal stations, and special arrangements were made for cleaning at three intermediate stations on the broad gauge and four stations on the metre gauge. Sweepers were also kept in readiness at other stations to attend to latrines of carriages on through trains. Arrangements were made to fill the lavatory tanks of intermediate and third class compartments at eleven stations.

East Indian Railway.—The tanks of carriages were filled at all starting stations and also *en route* when necessary. At terminal stations each rake was thoroughly cleaned and washed. At the larger stations staff were detailed for cleaning carriages and attending to latrines. All Head Train Examiners had instructions to inspect trains and see that the orders issued were complied with.

Great Indian Peninsula Railway.—All latrines were flushed with water, then scrubbed down with soap and water, flushed again with water and finally disinfected at the starting stations. At intermediate stations, sweepers were detailed to clean lavatories in each unoccupied compartment, and those in the occupied compartments, when desired by passengers.

Water tanks were provided to supply water for the tanks in third class lavatories both at starting stations and at certain stations *en route*.

Jodhpur Railway.—Carriage tanks were filled at terminal stations and at intermediate engine changing stations. At stations where trains stopped

for a sufficiently long time, the staff attended to latrines, if and when desired by passengers.

Madras and Southern Mahratta Railway.—The carriage tanks on all trains were filled with water and latrines cleaned at starting stations and at suitable stations *en route*. At all important stations, sweepers were detailed to attend to each train to clean latrines.

His Exalted Highness the Nizam's State Railway.—At all starting stations and at junctions, staff were instructed to fill up water tanks of all passenger carriages and to sweep and clean all latrines.

North Western Railway.—Instructions were issued to the staff to give particular attention to the cleanliness of latrines in passenger carriages and to see that tanks in carriages were filled both at the starting station and at stations *en route*. Instructions were also issued that sweepers should be detailed to attend to latrines on arrival of trains.

Rohilkund and Kumaon Railway.—All tanks of passengers and mixed trains were filled at starting stations and suitable intermediate stations. At all carriage examining stations and at certain terminal stations, sweepers were posted to clean latrines.

South Indian Railway.—The lavatories in carriages on trains were cleaned at starting stations and at stations *en route* where train examining staff were posted. Time permitting, lavatories were cleaned at other stations also or if specially requested by passengers. Third class carriages on through trains were cleaned at some of the principal stations on the broad gauge and at Trichinopoly on the metre gauge. Public complaint books have also been kept at important stations.

(xi) *Overcrowding in third class carriages.*

A census of the number of passengers actually carried in third class carriages is taken on all Railways during the period of the year when traffic is normally at its peak, in order primarily to see to what extent there is overcrowding. The results of the census taken during the year under review showed that the stock provided was generally sufficient and cases of overcrowding were comparatively rare. Enquiries made in these cases indicated that the overcrowding was due to exceptional circumstances that could not ordinarily be foreseen such as a sudden rush of marriage parties, etc. The figures recorded at these censuses were placed before the Local Advisory Committees of the Railways concerned and action taken as required in each case.

CHAPTER VIII.

MISCELLANEOUS.

84. **Accidents.**—(a) The following table shows the number of railway servants and other persons killed and injured in accidents on Indian Railways, excluding casualties in railway workshops, during the year 1935-36 as compared with the previous year :—

Cause.	KILLED.		INJURED.	
	1934-35.	1935-36.	1934-35.	1935-36.
<i>A.—Passengers.</i>				
In accidents to trains, rolling-stock, permanent-way, etc.	15	5	74	87
In accidents caused by movements of trains and railway vehicles exclusive of train accidents.	189	177	794	787
In accidents on railway premises in which the movement of trains, vehicles, etc., was not concerned.	5	3	38	27
Total	209	185	906	901
<i>B.—Railway servants.</i>				
In accidents to trains, rolling-stock, permanent-way, etc.	10	16	107	135
In accidents caused by movements of trains and railway vehicles exclusive of train accidents.	183	164	2,269	2,306
In accidents on railway premises in which the movement of trains, vehicles, etc., was not concerned.	24	22	6,071	6,618
Total	217	202	8,447	9,059
<i>C.—Other than passengers and railway servants.</i>				
In accidents to trains, rolling-stock, permanent-way, etc.	32	98	42	139
In accidents caused by movements of trains and railway vehicles exclusive of train accidents.	2,545	2,599	790	767
In accidents on railway premises in which the movements of trains, vehicles, etc., was not concerned.	28	25	67	84
Total	2,605	2,722	899	990
GRAND TOTAL	3,031	3,109	10,252	10,950

(b) Out of the total of 3,109 persons killed, 1,968 were trespassers; 542 were reported to be suicides and 50 were killed on railway premises otherwise than during the movement of trains, vehicles, etc. The increase in the number killed, as compared with previous year, is principally under the head "suicide" (82). The number of passengers killed, decreased by 24 and of passengers injured by 5 although there was an increase of 3 million passenger train miles.

(c) The following statement shows the number of passengers killed and injured on all railways during each of the last 5 years:—

Year.	PASSENGERS.	
	Killed.	Injured.
1931-32	255	912
1932-33	231	843
1933-34	232	964
1934-35	209	906
1935-36	185	901

(d) On class I Railways the number of railway servants killed in accidents which occurred during the movement of trains and railway vehicles, exclusive of train accidents, decreased by 12 whereas the number injured increased by 27.

The following table analyses the main causes of these accidents:—

Cause.	KILLED.		INJURED.	
	1934-35.	1935-36.	1934-35.	1935-36.
Misadventure or accidental	124	110	2,022	2,058
Want of caution or misconduct on the part of the injured person.	45	49	182	181
Want of caution or breach of rules, etc., on the part of servants other than the person injured.	3	1	30	23
Defective apparatus or system of working, dangerous places, dangerous condition of work or want of rules or systems of working.	..	..	1	..
Total	172	160	2,235	2,262

(e) The following statement analyses the accidents which occurred during the last two years, grouped under the principal causes. A statement showing

the accidents in greater detail for each railway will be found in Appendix D. of Volume II of this report:—

	1934-35.	1935-36.
1. Running over cattle	9,362	9,538
2. Derailments not involving passenger trains	3,217	3,077
3. Accidents due to failure of couplings and draw gear	2,029	2,025
4. Accidents due to failure of engines owing to faulty material, workmanship and operation arising from the working of the running staff	1,406	1,639
5. Accidents due to failure of other rolling-stock	748	435
6. Accidents due to failure of engines owing to faulty material and workmanship in the Mechanical Department	556	403
7. Broken rails	323	321
8. Derailment of passenger trains	274	273
9. Fires in trains or at stations or bridges	215	220
10. Running over obstructions on the lines other than those at level crossings	189	201
11. Collision involving goods trains or goods vehicles	133	165
12. Attempted train wrecking	107	101
13. Trains running over obstructions or vehicles at level crossings	73	85
14. Flooding of permanent-way	107	83
15. Land slips	52	68
16. Passenger trains running in the wrong direction through points but not derailed	72	62
17. Collisions involving passenger trains	47	59
18. Accidents due to failure of axles	51	52
19. Collisions between light engines	33	39
20. Accidents due to failure of tyres or wheels	33	20
21. Train wrecking	17	10
22. Accidents due to failure of brake apparatus	15	9
23. Failure of bridges or tunnels	5	4
24. Miscellaneous	315	325
Total	19,379	19,214

(f) The total number of accidents shows a decrease of 165 as compared with the previous year; although there was an increase in total train miles of about 3.9 millions:—

- (i) "Running over cattle" still accounts for the largest number of accidents, *i.e.*, 50 per cent. of the whole. Next in order, are "derailments not involving passenger trains" (16 per cent.), "accidents due to failure of couplings and draw gear" (11 per cent.), "accidents due to failure of engines owing to faulty working of the running staff" (9 per cent.), "accidents due to failure of other rolling stock" (2 per cent.), and "accidents due to failure of engines owing to faulty material, etc., in the mechanical department" (2 per cent.).
- (ii) Accidents in railway workshops accounted for the death of 12 and injuries to 8,136 railway servants, or an increase of 794 in the latter head as compared with the previous year.

85. Brief details are given below of the more serious accidents which occurred during the year under review:—

On the 10th May, 1935, No. 239 Up passenger train derailed at the up facing point of Salmari yard on the Eastern Bengal Railway,

resulting in serious injuries to six passengers, one of whom subsequently died, and slight injuries to six others. The driver of the train was seriously injured and three other railway employees slightly. The damage to rolling stock amounted to approximately Rs. 11,000 and to track Rs. 1,200.

On the 15th May, 1935, No. 38 Down mixed train collided with the rear of No. 600 Down goods train, which was standing at the Down outer signal of Barrackpore station on the Eastern Bengal Railway. Two persons were injured—a passenger by No. 38 Down who received slight injuries and the guard of No. 600 Down who was seriously injured and subsequently succumbed to his injuries. The damage to the engine and rolling stock was approximately Rs. 4,000 and to the track Rs. 150.

On the 16th June, 1935, No. S-30 Up goods train from Manikpur while running through on the loop line at Chitrakot station on the Great Indian Peninsula Railway ran into a dead-end siding and crashed into wagons standing there. The engine crew of three men and an extra fireman on the engine were slightly injured. The total damage to permanent way and rolling stock amounted to Rs. 2,454.

On the 29th June, 1935, No. 49 Grand Trunk Express, from Madras to Delhi, while running through Ghoradongri station on the Great Indian Peninsula Railway took the turn out to a short goods loop and collided with the stock standing thereon. Five persons were injured slightly. Three vehicles were damaged badly.

On the 1st February, 1936, No. 509 Up goods train coming from Raxaul entered Sagauli station on the Bengal and North-Western Railway at too high a speed to be able to stop at the buffer dead-end of the dock siding into which it was admitted and crashed through into the station building. Four passengers in the waiting hall and the Assistant Station Master on duty in the booking office were killed. The telegraph clerk received slight injuries. There was very little damage to the engine and none to the vehicles of the train.

On the 8th February, 1936, "A" pilot engine No. 1208, with a load of nine vehicles ran into a motor bus at level crossing No. 20-B on the Dumri Giridih Road on the East Indian Railway. Four passengers in the bus were killed instantaneously and fifteen injured more or less seriously.

On the 8th March, 1936, No. 4 Down Mail ran into a motor car at a level crossing at mile 66/24, between Kadok and Pyinbongyi on the Burma Railways. The driver of the car who was seriously injured subsequently expired in hospital and two other occupants of the car were slightly injured.

On the 24th March, 1936, No. 144 Up passenger train derailed near the approach to the Nahara Nullah bridge at mile 664/8 between Samnapur and Charegaon on the Bengal Nagpur Railway due to the line buckling. The driver and one fireman died as a result of their injuries and the second fireman was slightly injured. Fourteen passengers were injured, two seriously. The total damage to permanent way and rolling stock amounted to Rs. 47,000.

86. Damage by earthquakes, fire, floods and cyclones.—The most disastrous event of the year was the earthquake at Quetta on the 31st May, which affected a large part of the Quetta Division. 974 railway employees and members of their families were killed, 813 were injured, and very extensive damage was done to railway property. The decision by the Government that Quetta should be rebuilt, has made it necessary to restore all railway works to a more substantial design than previously existed owing to the danger of future shocks. The latest estimate for restoration of railway property on the Division stands at Rs. 104·18 lakhs.

On the 24th July, there was a disastrous explosion in the Joktiabad coal pit, of the Kurharbaree colliery, East Indian Railway, due to a blown out shot igniting the coal dust which had been expelled into the air by shots previously fired. The accident resulted in the death of 62 persons and in injuries to 14 others.

Railways were also subjected during the year to the usual floods and cyclones but the actual resulting damage was on the whole fortunately relatively small. The Assam Bengal Railway was visited by 5 cyclones during the year, 4 of which were between the 10th April and 19th May, but the damage was restricted mainly to roofs blown off and to a few of the quarters being blown down.

The damage to the South Indian Railway by a cyclone on the night of the 15th November, 1935 was, however, more extensive, as the storm travelled across the peninsula causing damage to about 6 sections of the railway and to the Nilgiri Mountain railway.

On the Bengal Nagpur Railway narrow gauge section, 2 trains were capsized by severe gales. The resulting damage was estimated at a little over Rs. 11,000.

Burma Railways.—Breaches due to heavy rains occurred on 21 sections causing interruption to traffic for a total of 111 days as against 74 days in the previous year.

87. Publicity.—The Central Publicity Bureau was able during the year under review to extend its contacts with other countries and particularly in the Far East, as a result of the deliberations at the Oriental Tourist Conference, convened by the Japanese Government in Tokyo in May, 1935, at which the Central Publicity officer, Indian State Railways was present.

The objects of this Conference were:—

To develop the tourist industry among all countries in the Orient and the South Sea Islands.

To support the common interests of the tourist organisations in these countries.

To improve travelling facilities for the benefit of tourists.

Thirty-five organisations from 21 different countries were represented at the Conference.

The outbreak of hostilities between Italy and Abyssinia prevented as good a tourist season as might have otherwise been expected. Tourist traffic began falling off by the end of November, 1935, but revived in February, 1936 and by the end of March had surpassed the results of the previous year. The number of passengers on world cruises increased by 29 per cent., the earnings therefrom being 22 per cent. more than in the previous year.

The directions in which publicity propaganda was undertaken by the various Railways generally is indicated in the following paragraphs:—

Bengal Nagpur Railway.—The issue of posters and handbills of a new design and of notices in vernacular newspapers was arranged on the occasion of certain *melas*, in addition to a more general distribution of leaflets and posters throughout the year. Editorial mention was obtained in various newspapers of travel facilities, holiday and excursion trains and boat specials. Two films on Puri were exhibited by the Indian Tea Cess Committee's travelling cinema cars at several stations. Effective advertisement is obtained by the narration of experiences by the passengers themselves, particularly by those who have travelled by excursion trains. Arrangements for the transportation, lodging and feeding of and for sight-seeing by passengers travelling by Excursion Specials were undertaken by the Railway at an inclusive cost. In Calcutta, such parties were met by the Officer-in-Charge of the Publicity Section and a few selected officials who looked after the excursionists. Buses bearing placards "Bengal Nagpur Railway Conducted Tours" were engaged to take people for sight-seeing in Calcutta.

CENTRAL PUBLICITY.



Indian State Railways Publicity Stall at the British Empire Exhibition, New York, during 19th to 30th November 1935.

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Educational travel for students also received special attention, and a "Conducted Tour" for the students of the Rajkumar College was particularly successful. At the request of the Local Government, the Officer-in-Charge of the Publicity Branch served on the general as well as the Publicity Committee of the Bengal Educational Conference.

A new edition of the Directory of Commodities containing information for the trading public was issued.

Bombay, Baroda and Central India Railway.—Leaflets and handbills were issued to give more publicity to local fairs and festivals and to the arrangements made by the Railway. In the case of fairs of All-India importance, such as the Rath Jatra fair at Puri and the Adh-Kumbh mela at Allahabad, publicity propaganda was conducted on a large scale in conjunction with the Central Publicity Bureau. Stalls were opened for the supply of information and for the distribution of handbills in connection with the Pushkar fair at Ajmere and at the exhibition held at Baroda on the occasion of the Golden Jubilee of His Highness the Gaekwar of Baroda. Extensive propaganda was also carried out by posters, leaflets and press advertisements in connection with the arrangements made for small parties of pilgrims and tourists.

Eastern Bengal Railway.—Efforts were made to foster goods traffic by the issue of posters and handbills, advertising the special rates for jute to Calcutta and the facilities for quick transport of certain other commodities.

Posters were exhibited and various forms of publicity literature distributed at ten exhibitions, and several railway publicity films were lent to exhibition authorities. A "talkies" set was provided for the broad and metre gauge cinema cars and used in connection with the "Puja Bazar Special Train".

Lantern slides depicting places of scenic, historic or religious interest and showing the facilities and concessions offered by the Railway were prepared and exhibited in several cinemas in Calcutta and the mofussil as well as in a touring cinema. Gramophone records describing in Bengali a visit to Calcutta and the facilities provided by the railway were lent to the All-India Radio Station at Calcutta, from where an address was also broadcast on the principal features of the Railway. Over half a million time tables, tariffs, junction rate lists, rate circulars, etc., were distributed during the year.

East Indian Railway.—Announcements of Poojah holiday concessions, special trains, arrangements for reservation and advance booking of passengers at Howrah and Calcutta City booking offices were broadcast by the All-India Radio Service in English and Bengali.

Illustrated pamphlets on travel facilities and concessions and pictorial posters of certain places of interest were published.

The measures adopted by the Railway to combat road motor competition, such as the issue of short period daily return tickets, running of additional train services, and the improvement of train connections, formed a special feature of publicity propaganda, through coloured handbills, folders, etc.

Arrangements were made for franking on envelopes issued to the public, slogan advertisements giving publicity to hot weather retreats, cheap week-end fares, seasonal concessions, etc.

Special attention was paid to advertising in the local vernacular press, pictorial-cum-letter press; advertisements were also published in the special numbers of certain foreign papers such as the London Chamber of Commerce Journal and the Illustrated London News.

Tourists travelling independently were supplied with itineraries and information helpful to them in their journeys. In addition, they were furnished with open letters to be used "in case of need," addressed to the railway staff requesting them to afford every assistance.

Special articles were published in newspapers and periodicals dealing with places of pilgrim and historical interest, health resorts, hill stations and the travel facilities afforded by the Railway.

Reciprocal arrangements were made with several cinemas in Calcutta and upcountry towns for the exhibition of the railway's slides at their shows in return for the display of their posters at railway stations.

15,000 pictorial posters, 31,000 letter-press posters, 700,000 handbills and 143,000 cheap illustrated folders in English and vernaculars were distributed during the year.

Great Indian Peninsula Railway.—More intensive propaganda was undertaken by means of advertisements in vernacular papers and by the distribution of handbills and posters in suitable areas. In the Deccan, announcements were made orally and by beat of drum, besides the distribution of handbills, in connection with the fairs at Pandharpur, Alandi Dehu and Kedgaon. A special effort was again made by canvassing and the wide distribution of folders advertising special concessions and fares to induce a larger number of Mohammedans from Bombay and Ahmednagar areas to attend the Bande Nawaz fair at Gulbarga. Wide publicity was given to the concessions offered by the Railway in the form of mileage coupon tickets, Christmas concession tickets and for the transport of motor cars, as well as to the facilities afforded for quick transport of goods by the bi-weekly express goods train service.

In order to stimulate students' tours during vacations the attention of the Principals of a large number of educational institutions was drawn to the concessions offered.

160,000 folders relating to various fairs, round tour tickets, zone tickets, express goods services, mileage coupon tickets, motor car concessions, etc., were printed and over 700,000 handbills distributed.

Madras and Southern Mahratta Railway.—About 700,000 handbills and pamphlets were distributed and over 9,000 posters exhibited in connection with local festivals. In addition, 14 broadcast announcements were made.

North Western Railway—Advertisement in newspapers.—Contracts for space in newspapers were made with 44 newspapers against 32 for the year 1934-35.

The cinema car introduced in 1934-35, visited one hundred and fifty-two stations and gave over 200 shows; the number of people attending was estimated at about 600,000.

Messrs. Thomas Cook and Sons introduced cabinet advertising in their head office in London, and their agencies at the more important places in India. The top half of these panels in their offices in London, Bombay, Delhi, Simla, Calcutta and Colombo was utilised for advertising concessions offered by the North Western Railway to international travellers.

Other items of interest were the issue of the Kulu Valley pamphlet, the introduction of envelope stuffers and the sale of railway picture post-cards with embossed stamps at the post offices in Bombay, Calcutta, Madras, Lucknow, Simla, Delhi and Lahore.

South Indian Railway.—More attention was paid to advertising as widely as possible fairs, festivals, races and sports meetings. All important concessions such as reduced fares, "Go As You Please Tickets" and train service facilities were advertised through posters, leaflets, press advertisements and cinema slides. Excursion special trains and small excursion parties were also arranged.

88. Anti-malarial measures.—During the year under review, anti-malarial measures were continued on railways with good results both for the staff and the railway administrations.

Bengal Nagpur Railway.—The Malariologist and his staff continued anti-malarial work on various parts of the line with great vigour. The places under malaria control numbered 34. On the open line malaria incidence was generally lower than in the previous year. On construction, malaria

only amounted to a maximum of 4·5 per cent. of all diseases and the maximum monthly infection rate in the labour force was 3·7 per cent.

Bombay, Baroda and Central India Railway.—Anti-malarial measures were continued during the year on the whole line particularly in Gangapur, Ajmer, Freelandgunj and Bombay Districts.

The total number of primary and recrudescant cases of malaria reported amongst employees only for the whole line was 11,635 and 10,086 respectively, a reduction of 952 and 1,655 cases as compared with 1934-35.

Eastern Bengal Railway.—At 12 of the stations under malaria control, anti-malarial work was carried out for a radius of half a mile from the outermost railway quarters on every side. At 12 other stations, anti-malarial work was confined to railway limits, the adjacent areas being dealt with by other public bodies. Anti-malarial work was carried out at the Hardinge Bridge and Bakudih quarries.

The Medical Department of the Railway co-operated with the Government of Bengal in the campaign against *anopheles ludlowi*, and in all cases the breeding places were rendered innocuous by suitable anti-larval measures. The Medical Department had to deal with only 7,098 malarial cases during the year as against 8,377 in 1934-35.

East Indian Railway.—The results of anti-malarial measures carried out during the year at Burdwan, Barwadih, Lhaksar and Lillooah were most satisfactory. Laboratory investigations have added considerably to the knowledge of the malaria problem at these stations.

Madras and Southern Mahratta Railway.—Anti-malarial work has been continued on the same lines as before and with similar success. Anti-malarial work continued to be performed in co-operation with neighbouring local health bodies.

Great Indian Peninsula Railway.—The usual anti-malarial measures, with a view to systematic destruction of larvae and prevention of breeding by regular cleaning and oiling of all drains, drainage of pools of stagnant water, where possible, filling up of small pits and depressions, etc., were carried out on the line.

APPENDIX A.

Railway Administrations in India alphabetically arranged in three classes according to their gross earnings showing the working agencies, ownership and route mileage open on 31st March 1936.

NOTE.—Indian Railway Systems have been classified under three classes for statistical purposes—

Class I—Railways with gross earnings of Rs. 50 lakhs and over a year.

Class II—Railways with gross earnings of less than Rs. 50 lakhs a year, but exceeding Rs. 10 lakhs a year.

Class III—Railways with gross earnings of Rs. 10 lakhs and under a year.

[NOTE.—Railways under construction or sanctioned for construction on the 31st March 1936, are shown in italics.]

RAILWAY SYSTEM.		LINES COMPRISED IN THE SYSTEM.			
Name.	Worked by	Name.	Gauge.	Route Mileage.	Owned by
1	2	3	4	5	6
CLASS I RAILWAYS.					
1. Assam Bengal	Assam Bengal Railway Company.	(a) Assam-Bengal	3' 3½"	1,131	State.
		(b) Chaparmukh-Silghat	3' 3½"	51	Branch line Company under guarantee terms.
		(c) Katakhal-Lalabazar	3' 3½"	23	Ditto.
		(d) Mymensingh-Bhairab Bazar.	3' 3½"	101	Branch line Company under guarantee and rebate terms.
2. Bengal and North-Western.	Bengal and North-Western Railway Company.	(a) Mashrak-Thawa	3' 3½"	39	State.
		(b) Tirhoot	3' 3½"	802	Do.
		(c) Bengal and North-Western.	3' 3½"	1,269	Company subsidized by the Government of India*.
3. Bengal Nagpur	Bengal Nagpur Railway Company.	(a) Anuppur-Manendragarh.	5' 6"	54	State.
		(b) Bengal Nagpur	5' 6"	2,412	Do.
		(c) Parulia-Ranchi	2' 6"	116	Do.
		(d) Raipur-Dhamtari	2' 6"	57	Do.
		(e) Satpura	2' 6"	626	Do.
		(f) Mayurbhanj	2' 6"	71	Branch line Company under rebate terms.
		(g) Parlahimedi Light	2' 6"	56	Private body.
4. Bombay, Baroda and Central India.	Bombay, Baroda and Central India Railway Company.	(a) Bombay, Baroda and Central India.	5' 6"	1,035	State.
		(b) Bombay, Baroda and Central India.	3' 3½"	1,881	Do.
		(c) Bombay, Baroda and Central India.	2' 6"	72	Do.
		(d) Nagda-Ujjain	5' 6"	35	Indian State.
		(e) Petlad-Cambay (Anand-Tarapur Section).	5' 6"	22	Ditto.
		(f) Petlad-Cambay (Tarapur-Cambay Section).	5' 6"	12	Ditto.
		(g) Dhrangadra	3' 3½"	40	Ditto.
		(h) Jaipur State	3' 3½"	180	Ditto.
		(i) Palanpur State	3' 3½"	17	Ditto.
		(j) Piplod-Devgad-Baria	2' 6"	10	Ditto.
		(k) Rajpiperia State	2' 6"	58	Ditto.
		(l) Tapti-Valley	5' 6"	156	Branch line Company under rebate terms.
		(m) Ahmedabad-Parantij	3' 3½"	89	Ditto.
		(n) Champaner-Shivrajpur-Pani Light.	2' 6"	31	Ditto.
		(o) Godhra-Lunavada	2' 6"	25	Ditto.
		(p) Nadiad-Kapadvanj	2' 6"	28	Ditto.
5. Burma	State	(a) Burma	3' 3½"	2,060	State.

* Receives land only from Government.

RAILWAY SYSTEM.		LINES COMPRISED IN THE SYSTEM.			
Name.	Worked by	Name.	Gauge.	Route Mileage.	Owned by
1	2	3	4	5	6
CLASS I RAILWAYS—contd.					
6. Eastern Bengal	State	(a) Eastern Bengal	5' 6"	847	State.
		(b) Eastern Bengal	3' 3½"	1,039	Do.
		(c) Eastern Bengal	2' 6"	17	Do.
		(d) Cooch Behar State	3' 3½"	33	Indian State.
		(e) Sara-Sirajganj	5' 6"	54	Branch line Company under rebate terms.
		(f) Khulna-Bagerhat	2' 6"	20	Ditto.
7. East Indian	State	(a) East Indian	5' 6"	4,217	State.
		(b) Cawnpore-Burhwal link.*	3' 3½"	66	Do.
		(c) Hardwar-Dehra	5' 6"	32	Branch line Company under guarantee terms.
		(d) South Bihar ‡	5' 6"	76	Branch line Company.
8. Great Indian Peninsula.	State	(a) Great Indian Peninsula.	5' 6"	3,166	State.
		(b) Dharwa-Pusad	2' 6"	43	Do.
		(c) Bhopal-Itarsi (Indian State Section).	5' 6"	57	Indian State.
		(d) Bhopal-Ujjain	5' 6"	113	Ditto.
		(e) Bina-Goona-Baran	5' 6"	147	Ditto.
		(f) Dhond-Baramati	2' 6"	27	Branch line Company under rebate terms.
		(g) Ellichpur-Yeotmal	2' 6"	118	Ditto.
		(h) Pachora-Jamner	2' 6"	34	Ditto.
		(i) Pulgaon-Arvi	2' 6"	22	Ditto.
9. Jodhpur	Indian State	(a) Jodhpur-Hyderabad (British Section).	3' 3½"	239	State.
		(b) Jodhpur	3' 3½"	767	Indian State.
		(c) Mirpur Khas-Khadro	3' 3½"	49	Company subsidized by the Government of India.†
10. Madras and Southern Mahratta.	Madras and Southern Mahratta Railway Company.	(a) Madras and Southern Mahratta.	5' 6"	1,119	State.
		(b) Alnavar-Dandeli (Provincial).	3' 3½"	19	Do.
		(c) Madras and Southern Mahratta.	3' 3½"	1,660	Do.
		(d) Kolar Goldfields	5' 6"	10	Indian State.
		(e) Bangalore-Harihar	3' 3½"	211	Ditto.
		(f) Hindupur (Yesvantpur-Mysore Frontier).	3' 3½"	51	Ditto.
		(g) Kolhapur State	3' 3½"	29	Ditto.
		(h) Sangli State	3' 3½"	5	Ditto.
		(i) Tenali-Repalle	5' 6"	22	District Board.
		(j) Bezwa d a-M a s u l i-patam.	3' 3½"	52	Ditto.
		(k) West of India Portuguese.	3' 3½"	51	Foreign Country.
11. Nizam's State	Nizam's State Railways.	(a) Bezwada Extension	5' 6"	22	State.
		(b) Dronachellam (Dhone)-Kurnool-British Frontier.	3' 3½"	36	Do.
		(c) Nizam's State	5' 6"	667	Indian State.
		(d) Nizam's State	3' 3½"	623	Ditto.

* Under running power agreement the B. and N.-W. Railway Company run and haul their trains and traffic over this line.

† Receives land only from Government.

‡ Leased to the Government for a yearly sum of £30,000.

RAILWAY SYSTEM.		LINES COMPRISED IN THE SYSTEM.			
Name.	Worked by	Name.	Gauge.	Route Mileage.	Owned by
1	2	3	4	5	6

CLASS I RAILWAYS—*contd.*

12. North Western	State	(a) North Western	5' 6"	5,649	State.
		(b) Kalka-Simla	2' 6"	60	Do.
		(c) Kangra-Valley	2' 6"	103	Do.
		(d) Kohat-Thal	2' 6"	62	Do.
		(e) Mari-Indus (Kala-bagh-Bannu).	2' 6"	158	Do.
		(f) Zhob Valley (Fort Sandeman Khanai).	2' 6"	174	Do.
		(g) Bahawalnagar Fort-Abbas-Kut-al-Imara	5' 6"	162	Indian State.
		(A) Jammu and Kashmir (Indian State Section).	5' 6"	16	Ditto.
		(i) Jind-Panipat (Indian State Section).	5' 6"	26	Ditto.
		(j) Khanpur-Chachran	5' 6"	22	Ditto.
		(k) Ludhiana-Dhuri Jakhal.	5' 6"	78	Ditto.
		(l) Rajpura-Bhatinda	5' 6"	108	Ditto.
		(m) Sirhind Rupar	5' 6"	31	Ditto.
		(n) Hoshiarpur-Doab (Jullundur Mukfarian).	5' 6"	45	Branch line Company under rebate terms.
		(o) Hoshiarpur-Doab (Phagwara-Rahon).	5' 6"	46	Ditto.
		(p) Mandra-Bhaun	5' 6"	47	Ditto.
(q) Sialkot Narowal	5' 6"	39	Ditto.		
(r) Jacobabad-Kashmor.	2' 6"	77	Ditto.		
(s) Larkana-Jacobabad	2' 6"	63	Ditto.		
13. Rohilkund and Kumaon.	Rohilkund and Kumaon Railway Company.	(a) Lucknow-Bareilly	3' 3½"	312	State.
		(b) Rohilkund and Kumaon.	3' 3½"	259	Company subsidized by the Government of India.
14. South Indian	South Indian Railway Company.	(a) South Indian	5' 6"	599	State.
		(b) Nilgiri	3' 3½"	29	Do.
		(c) South Indian	3' 3½"	1,507	Do.
		(d) Travancore (British Section).	3' 3½"	60	Do.
		(e) Morappur-Hosur	2' 6"	73	Do.
		(f) Tirupattur-Krishnagiri.	2' 6"	25	Do.
		(g) Shoranur-Cochin	3' 6"	65	Indian State.
		(h) Travancore (Indian State Section).	3' 3½"	98	Ditto.
		(i) Podanur-Pollachi	3' 3½"	25	District Board.
		(j) Tinnevely-Tiruchendur.	3' 3½"	38	Ditto.
		(k) Peralam-Karaikkal	3' 3½"	15	Foreign Country.
(l) Pondicherry	3' 3½"	8	Ditto.		

CLASS II RAILWAYS.

1. Barai Light	Barai Light Railway Company.	Barai Light	2' 6"	203	Company subsidized by the Government of India and Indian State*.
2. Bengal Dooars	Bengal-Dooars Railway Company.	(a) Bengal Dooars	3' 3½"	40	Company subsidized by District Board.
		(b) Bengal Dooars Extensions.	3' 3½"	121	Company subsidized by the Government of India.†
3. Bhavnagar State	Indian State	Bhavnagar State	3' 3½"	307	Indian State.
4. Bikaner State	Ditto	Bikaner State	3' 3½"	796	Ditto.

* Receives land only from Government and Indian State.

† Receives land only from Government.

RAILWAY SYSTEM.		LINES COMPRISED IN THE SYSTEM.			
Name.	Worked by	Name.	Gauge.	Route Mileage.	Owned by
1	2	3	4	5	6

CLASS II RAILWAYS—concl'd.

5. Darjeeling Himalayan	Darjeeling Himalayan Railway Company.	(a) Darjeeling Himalayan.	2' 0"	51	Company subsidized by Local Government.
		(b) Darjeeling Himalayan Extensions.	2' 0"	95	Branch line Company under rebate terms.
6. Dibru-Sadiya	Assam Railways and Trading Company.	(a) Dibru-Sadiya.	3' 3½"	86	Company subsidized by Local Government.
		(b) Ledo and Tikak-Magherita Colliery.	3' 3½"	5	Unassisted Company.
7. Gaekwar's State.	Baroda Indian State	(a) Gaekwar's Mehsana.	3' 3½"	255	Indian State.
		(b) Khijadiya Dhari.	3' 3½"	37	Ditto.
		(c) Prachi Road Kodinar.	3' 3½"	16	Ditto.
		(d) Bodeli Chhota Udai-pur.	2' 6"	23	Ditto.
		(e) Gaekwar's Baroda State.	2' 6"	333	Ditto.
8. Gondal	Ditto	(a) Gondal.	3' 3½"	106	Ditto.
		(b) Jetalsar-Rajkot	3' 3½"	46	Ditto.
9. Jamnagar and Dwarka	Jamnagar and Dwarka Railway Company.	(a) Jamnagar.	3' 3½"	54	Ditto.
		(b) Okhamandal.	3' 3½"	37	Ditto.
		(c) Jamnagar-Dwarka.	3' 3½"	66	Branch line Company under guarantee and rebate terms.*
10. Junagad State.	Indian State	Junagad State	3' 3½"	211	Indian State.
11. Morvi	Ditto	Morvi	3' 3½"	132	Ditto.
12. Mysore	Ditto	(a) Mysore	3' 3½"	322	Ditto.
		(b) Kolar District	2' 6"	63	Ditto.
		(c) Tarikere-Narasimharajapura Light.	2' 0"	27	Ditto.
		(d) Bangalore-Chik Ballapur Light.	2' 6"	39	Company guaranteed by Indian State.
13. Shahdara (Delhi) Saharanpur Light.	Shahdara (Delhi) Saharanpur Light Railway Company.	Shahdara (Delhi) Saharanpur Light.	2' 6"	93	Company subsidized by Local Government.†

CLASS III RAILWAYS.

1. Ahmadpur-Katwa	Ahmadpur-Katwa Railway Company.	Ahmadpur-Katwa	2' 6"	32	Branch line Company under guarantee terms.
2. Arrah-Sasaram Light	Arrah-Sasaram Light Railway Company.	Arrah-Sasaram Light	2' 6"	65	Company subsidized by District Board.
3. Bankura-Damoodar River.	Bankura-Damoodar River Railway Company.	Bankura-Damoodar River.	2' 6"	60	Branch line Company under guarantee terms.
4. Baraset-Basirhat Light.	Baraset-Basirhat Railway Company.	Baraset-Basirhat Light	2' 6"	52	Company subsidized by District Board.
5. Bengal Provincial	Bengal Provincial Railway Company.	(a) Bengal Provincial	2' 6"	33	Unassisted Company.
		(b) Dasghara-Jamalpur-gunj.	2' 6"	9	Branch line Company under guarantee terms.
6. Bukhtiarpur-Bihar Light.	Bukhtiarpur-Bihar Light Railway Company.	Bukhtiarpur-Bihar Light	2' 6"	33	Company subsidized by District Board.
7. Burdwan-Katwa	Burdwan-Katwa Railway Company.	Burdwan-Katwa	2' 6"	33	Branch line Company under guarantee terms.
8. Cutch State	Indian State	Cutch State	2' 6"	72	Indian State.

* Financed on rebate terms given by the Jamnagar Durbar.
† Receives land only from Government.

RAILWAY SYSTEM.		LINES COMPRISED IN THE SYSTEM.			
Name.	Worked by	Name.	Gauge.	Route Mileage.	Owned by
1	2	3	4	5	6
CLASS III RAILWAYS—concl'd.					
. Dehri-Rohtas Light	Dehri-Rohtas Light Railway Company.	Dehri-Rohtas Light	2' 6"	26	Company subsidised by the Government of India.
10. Dholpur State . . .	Indian State . . .	Dholpur State . . .	2' 6"	55	Indian State.
11. Futwah-Islampur . . .	Futwah-Islampur Light Railway Company.	Futwah-Islampur . . .	2' 6"	27	Branch line Company under guarantee terms.
12. Gwalior Light . . .	Indian State . . .	Gwalior Light . . .	2' 0"	295	Indian State.
13. Howrah-Amta Light . . .	Howrah-Amta Light Railway Company.	Howrah-Amta Light . . .	2' 0"	44	Company subsidised by District Board.
14. Howrah-Sheakhala Light.	Howrah-Sheakhala Light Railway Company.	Howrah-Sheakhala Light	2' 0"	20	Ditto.
15. Jagadhri Light . . .	Jagadhri Light Railway Company.	Jagadhri Light . . .	2' 0"	3	Unassisted Company.
16. Jessore-Jhenidah† . . .	Jhenidah Railway Syndicate.	Jessore-Jhenidah . . .	2' 6"	37	Ditto.
17. Jorhat (Provincial) . . .	River Steam Navigation Company and India General Navigation and Railway Company.	Jorhat (Provincial) . . .	2' 0"	32	State.
18. Kalighat-Falta . . .	Kalighat-Falta Railway Company.	Kalighat-Falta . . .	2' 6"	26	Branch line Company under guarantee terms.
19. Kulasekarapatnam Light.	East India Distilleries and Sugar Factories.	Kulasekarapatnam Light	2' 0"	27	Unassisted Company.
20. Matheran Light . . .	Matheran Steam Tramway Company.	Matheran Light . . .	2' 0"	13	Company subsidised by the Government of India. *
21. Porbandar State . . .	Indian State . . .	Porbandar State . . .	3' 3½"	41	Indian State.
22. Tezporo-Balipara Light.	Tezporo-Balipara Steam Tramway Company.	Tezporo-Balipara Light . . .	2' 6"	20	Company subsidised by District Board.
23. Trivellore Light . . .	T. Namburumal Chetty and Sons.	Trivellore Light . . .	2' 0"	2	Unassisted Company.
24. Udaipur-Chitorgarh . . .	Indian State . . .	Udaipur-Chitorgarh . . .	3' 3½"	146	Indian State.

* Receives land and rebate from Government.

† Closed to all kinds of traffic from 1st May 1938.

APPENDIX B.

Relations of the Government to Railways in India.

(Reprinted from the Report for 1914-15 and brought up to date.)

Diversity of Relations between the State and Railways.—One of the special features of the Indian Railway system is the diversity of conditions that prevails in the relation of the State to the various lines in respect of ownership and control. Of the important lines situated in British India or in which the Government of India is interested, five [the North-Western,* Eastern Bengal, East Indian (with which has been amalgamated the Oudh and Rohilkhand Railway from the 1st July 1925), Great Indian Peninsula and Burma Railways] are owned and worked by the State; five (the Bombay, Baroda and Central India, Madras and Southern Mahratta, Assam Bengal, Bengal Nagpur and South India) are owned by the State but worked on its behalf by companies enjoying a guarantee of interest from the Government; two important lines (the Bengal and North-Western, and Rohilkund and Kumaon) and many of less importance are the property of private companies, some being worked by the owning companies and some by the State or by the companies that work State-owned systems; several minor lines are the property of District Boards or enjoy a guarantee of interest granted by such Boards.

The diversity of conditions is in certain respects less important than might at first appear for the following reasons:—

The Government of India exercises under the Indian Railways Act, 1890, in respect of all Railways in British India (and also, by virtue of arrangements with Indian States, in respect of certain railways passing through such States), certain general powers. Thus a railway may not be opened until a Government Inspector has certified that it has been constructed so as to comply with requirements laid down by the Government and can be used for the public carriage of passengers without danger to them. The Government of India can also, in the interest of the safety of passengers, require a railway to be closed, or the use of particular rolling-stock to be discontinued, or may prescribe conditions for the use of the railway or the rolling-stock. They can appoint a Railway Commission to investigate complaints on certain matters such as the withholding of reasonable traffic facilities or the grant of undue preference.

In addition, the Government of India (or in some cases Local Governments) exercise under the provisions of contracts detailed control over the management of all Railways in British India greatly exceeding that which is secured by the Indian Railways Act. They also have a certain financial interest in all companies in British India, and a preponderating interest in most of the railways which are of the first importance.

History of Relations of the Government and Companies.—The main causes which have led to the present diversity of conditions in regard to the agency by which railways are managed, and the relations of the Government with the various classes of companies now in existence, are summarised in the following paragraphs:—

The first proposals for the construction of railways in India were submitted in 1844 to the East India Company in England by Mr. R. M. Stephenson, afterwards Chief Engineer of the East Indian Railways, and others; they included the construction of lines by railway companies to be incorporated for the purpose and the guarantee by the East India Company of a specified return. A contract for the construction by the East Indian Railway Company of an experimental line of 100 miles from Calcutta towards Mirzapore or Rajmehal at an estimated cost of 1,000,000*l.* was made in 1849, and a return of 5 per cent. was guaranteed by the East India Company on the Capital; and a similar contract was made in the same year with the Great Indian Peninsula Railway Company for a line from Bombay to Kalyan at an estimated cost of 500,000*l.* But the policy of entrusting generally the construction of Indian railways to guaranteed companies was not adopted until 1854 on the recommendation of Lord Dalhousie, who, in a minute, dated 20th April 1853, explained his reasons for preferring the agency of companies, under the supervision and control of the Government, to the construction of lines on behalf of the Government by its own officers. He held that the State Engineer officers would make railways as well, and possibly as cheaply, and as expeditiously as companies; but that the withdrawal from other duties of the large number

* Includes the Delhi, Umballa, Kalka and Southern Punjab Railways which are purchased by the Secretary of State on 31st March 1926 and 1st January 1930 respectively.

of officers required would be detrimental to the public interest, that the conduct of commercial undertakings did not fall within the proper functions of any Government and least of all within the functions of the Government of India, since the dependence of the population on the Government was, in India, one of the greatest drawbacks to the advance of the country, and that the country would therefore benefit by the introduction of English energy and English capital for railway purposes, with the possibility that such energy and capital would in due course be encouraged to assist in the development of India in other directions.

Old Guaranteed Railways.—The policy supported by Lord Dalhousie was adopted, between 1854 and 1860 contracts for the construction of Railways in India were made by the East India Company, or (after 1858) by the Secretary of State for India with the East Indian, Great Indian Peninsula, Madras, Bombay, Baroda and Central India, Sind (afterwards, the Sind, Punjab and Delhi), Eastern Bengal, Great Southern of India (afterwards, when amalgamated with the Carnatic Railway Company—see below—the South Indian) and Calcutta and South-Eastern Railway Companies. Under these contracts the railway companies undertook to construct and manage specified lines, while the East India Company (or the Secretary of State for India) agreed to provide land and guaranteed interest on the capital, the rate fixed being in various cases 5, $4\frac{3}{4}$ and $4\frac{1}{2}$ per cent. according to the market rates prevailing when the various contracts were made. Half of any surplus profits earned was to be used towards repaying to the Government any sums by which it had been called upon to supplement the net earnings of any previous period in order to make good the guarantee of interest; and the remainder was to belong to the shareholders. In practically all matters of importance except the choice of staff, the companies were placed by the contracts under the supervision and control of the Government which had power to decide on the standard and details of construction; the rolling-stock to be provided, the number, time and speed of train; the rates and fares to be charged; the expenditure to be incurred; the standard of maintenance; and the form of accounts. The railways were to be held by the companies on leases terminating at the end of 99 years, and on such termination the fair value of their rolling-stock, plant and machinery was to be paid to them. But provision was also made to enable the Government to purchase the lines after 25 or 50 years on terms calculated to be the equivalent of the companies interest therein and also to enable the companies to surrender their lines to the Government and to receive in return their capital at par.

Early Attempts to Secure Funds for Railway Construction without a Guarantee.—An attempt to secure the construction of railways in India, on terms more favourable to the Government than those of the contracts with the original guaranteed companies, was first made in 1862, when a subsidy, but not a guarantee, was granted to the Indian Branch Railway Company which proposed to make feeders to the trunk lines in Northern India, and did actually make one such line. Similar assistance was granted later to the Indian Tramway Company, which made a short line in Madras. In 1864, the terms granted to the two companies mentioned were taken as a standard for general adoption with a view to the encouragement of similar companies. The chief provisions were that the Government, besides giving the necessary land free of costs, would grant an annual subsidy for 20 years at a rate not exceeding £100 per mile of line with an addition in respect of large bridges costing more than £10,000. These terms failed to attract capital, and the two unguaranteed companies which had begun work found themselves after a few years unable to proceed without further assistance from the Government. Consequently, in 1867, a contract was entered into with the Indian Branch Railway Company (which soon after changed its name to the "Oudh and Rohilkhand Railway Company") by which the company was guaranteed interest at 5 per cent. per annum on the cost of certain lines to be carried out by it, on conditions similar to those laid down in the contracts of the period 1854—1860. Similarly, the Indian Tramway Company, after having been given in 1868 a guarantee of 3 per cent. per annum, went into liquidation in 1870, and became absorbed in a new company called the Carnatic Railway Company (afterwards amalgamated with the Great Southern of India Railway Company to form the South Indian Railway Company), with which the Secretary of State entered into a contract guaranteeing interest on its capital at 5 per cent. per annum. In 1869, Sir John Lawrence summed up the result of the experiment of the construction of railways by unguaranteed companies as follows:—"The Government of India has for several years been striving to induce capitalists to undertake the construction of railways in India at their own risk, and on their responsibility with a minimum of Government interference. But the attempt has entirely failed, and it has become obvious that no capital can be obtained for such undertakings otherwise than under a guarantee of interest fully equal to that which the Government would have to pay if it borrowed directly on its own account."

The attempt to encourage unguaranteed companies having thus been unsuccessful, it became necessary to decide whether the old practice of relying on guaranteed companies, of the type that had provided capital for, and had constructed, the first railways

in India, should be continued. The Government of India expressed their objections to this course. They doubted whether their power of control over such companies secured the greatest possible economy in construction. They also disliked the arrangements under which they guaranteed the interest on the capital of companies, and thus became responsible for loss on working while having only a comparatively remote prospect of profiting by the result of successful working. Two important changes were consequently made in the practice that had been followed since the beginning of railway construction in India:—

1. Arrangements were made with some of the most important of the guaranteed companies that, in lieu of the provision that half of any surplus profits was to be applied in repayment of sums advanced by the Government under the guarantee of interest, half of the surplus profits for each half-year should be the property of the Government. In consideration of this modification, the Government relinquished, in the case of three companies, the Great Indian Peninsula, the Bombay, Baroda and Central India and the Madras, its right to purchase the lines at the end of the first 25 years from the dates of the respective contracts.
2. It was decided by the Secretary of State that the time had arrived when in both raising and expending such additional capital as might be required for new lines in India, the Government should secure to itself the full benefit of its own credit and of the cheaper methods which it was expected that it would be able to use. Accordingly, for several years after 1869, the capital expenditure on railway was chiefly incurred direct by the State and no fresh contracts with guaranteed companies were made except for small extensions. Among the lines constructed or begun by State agency and from State capital between 1869 and 1880 were the Indus-Valley, Punjab Northern, Rajputana-Malwa, Northern Bengal, Rangoon and Irrawady Valley and Tirhoot.

Progress in the Construction of Railways.—By the end of 1879, in about 25 years from the introduction of railways in India, 6,128 miles of railway had been constructed by companies which had expended, approximately, £97,872,000 (these figures include the Calcutta and South-Eastern and Nalhati Railways which were constructed by companies but were purchased by the Government in 1868 and 1872, respectively). By the same date 2,175 miles of railway had been constructed by the Government at a cost of £23,695,226.

Introduction of Modified Guarantee Terms.—In 1880, the necessity for great and rapid extension of the railway system was urged by the Famine Commissioners, appointed after the great famine of 1878, who estimated that at least, 5,000 miles were still necessary for the protection of the country from famine. It was held by the Government of the time that a limit was necessary on the capital borrowed annually; and it was clear that the limit fixed was not high enough to allow of such progress in railway construction as was desirable. With reference to this difficulty the Famine Commissioner remarked: "that there would be manifest advantages in giving free scope to the extension of railways by private enterprise if it were possible; and, though the original form of guarantee has been condemned, it may not be impossible to find some substitute which shall be free from its defects, and may secure the investment of capital in these undertakings without involving the Government in financial or other liabilities of an objectionable nature."

Action in the direction suggested by the Commission was taken by the formation of three companies without a guarantee (the Bengal Central in 1881 and the Bengal and North-Western and Rohilkund and Kumaon in 1882), and three new guaranteed companies (Southern Mahratta in 1882, the Indian Midland in 1885, and the Bengal Nagpur in 1887). The Bengal and North-Western and the Rohilkund and Kumaon Railway Companies are referred to more fully, in a later paragraph. The Bengal Central Railway Company's operations were not successful at the outset, and a revised contract was entered into with the company, with effect from the 1st July 1885, under which the Secretary of State guaranteed interest at 3½ per cent. on the company's capital the balance of net earnings remaining after payment of interest on advances by the Secretary of State and debenture capital (but not the share capital) being divided between the Secretary of State and the company in the proportions of three-quarters to the former and one-quarter to the latter. The new contract gave the Secretary of State the right to take possession of the line on the 30th June 1905, or subsequently at intervals of 10 years, on repaying the company's capital at par. The rate of interest guaranteed to the Southern Mahratta Railway Company was also 3½ per cent.; in this case the balance of net earnings remaining after payment of interest on advances by the Secretary of State (but not on share or debenture capital) was divisible in the same way as in the case of the Bengal Central Railway Company. The guarantee to the Indian Midland and Bengal Nagpur Railway Companies was 4 per cent.; and the Secretary of State was entitled to three-quarters of the surplus profits in excess of all interest charges. The lines constructed by the three companies last mentioned were declared to be the property

of the Secretary of State, who had the right to determine the contracts at the end of approximately 25 years after their respective dates, or at subsequent intervals of 10 years, on repaying at par the capital provided by the companies.

The Assam Bengal Railway Company was formed on similar lines in 1892, except that any surplus profits were to be divided between the Secretary of State and the company in proportion to the capital provided by each. The rate of guarantee in this case was $3\frac{1}{2}$ per cent. for the first six years and thereafter 3 per cent.

The terms of guarantee given to the companies formed since 1880 have thus been much more favourable to the Government than in the case of those formed before 1869.

Termination of Contracts of the Old Guaranteed Companies.—In dealing with the guaranteed companies formed before 1869 and with those formed in 1881 and subsequently, it has been the practice (except in the cases mentioned above, when the purchase of some of the old guaranteed lines was postponed in order to secure to the Government a share in surplus profits) to use in some way or other at the earliest possible date the right reserved by the Government of terminating the contracts of the various companies. The method of making use of this right has differed in different cases. The Eastern Bengal, the Oudh and Rohilkhand, the Sind-Punjab and Delhi and the Southern Punjab lines were purchased and transferred to State management, the last two now forming part of the North Western Railway. Similarly, the Bengal Central line was purchased and made part of the Eastern Bengal Railway. The Madras and the Indian Midland lines were acquired but left, after acquisition, under the management of companies working other lines with which it was advantageous to amalgamate them. In the cases of South Indian, Bombay, Baroda and Central India, Southern Mahratta, and Bengal Nagpur, the course adopted has been to arrange for the continuance of management by the original company (or by a new company closely related to the old one), but to secure more favourable financial conditions for the State by one or more of the following methods:—reduction of the amount of capital retained by the companies in the undertakings, reduction of the rate of interest guaranteed by the State on such capital and modification in favour of the Government of the clauses relating to the division of surplus profits. This method was adopted also in regard to the East Indian and the Great Indian Peninsula Railways, but the contracts under which they were being worked having terminated on the 31st December 1924 and the 30th June 1925 respectively, the management of these lines has been taken over by the State from those dates. Similarly the management of the Burma Railways was taken over by the State on the termination of the contract with the Burma Railways Company on the 31st December 1928.

Arrangements between the Government and Companies at present.

—The relations between the Government and the guaranteed companies now working railways may be summarised as follows:—

The lines that they work are the property of the State.

The greater part of the capital is the property of the Government, either through having been originally supplied by it or through the acquisition by the Government of the greater part of the companies' interest on the termination of old contracts.

When funds are required for further capital expenditure, the Government has the option either of providing them or of calling on the company to provide them. Both the Government and the company usually receive interest at a fixed rate on their capital and surplus profits are divided between the Government and the company in the various proportions provided for by the contracts. The company's share is in most cases only a small proportion of the total amount.

All the contracts are terminable at the option of the Secretary of State, at specified dates; and on termination the company's capital is repayable at par.

The administrative control exercised by the Government over the companies is as follows:—

The company is bound to keep the line in good repair, in good working condition, and fully supplied with rolling-stock, plant, and machinery; to keep the rolling-stock in good repair and in good working condition; and to maintain a sufficient staff for the purposes of the line;—all to the satisfaction of the Secretary of State.

The Secretary of State may require the company to carry out any alteration or improvement in the line, or in the working that he may think necessary for the safety of the public or for the effectual working of the line.

The Secretary of State may require the company to enter into agreements, on reasonable terms and conditions, with the administrations of adjoining railways for the exercise of running powers, for the supply to one another of surplus rolling-stock, for the interchange of traffic and rolling-stock and

the settlement of through rates, and for additions and alterations to, or the redistribution of, existing accommodation in junctions or other stations in view to their convenient mutual use.

The train service is to be such as the Secretary of State may require. In order to secure a general control over the rates quoted by companies, the Secretary of State has retained power to settle the classification of goods and to authorise maximum and minimum rates within which the companies shall be entitled to charge the public for the conveyance of passengers and goods of each class.

The company has to keep such accounts as the Secretary of State may require, and these are subject to audit by the Secretary of State.

In all other matters relating to the line the company is made subject to the supervision and control of the Secretary of State, who may appoint such persons as he may think proper for the purpose of inspecting the line, auditing the accounts, or otherwise exercising the powers of supervision and control reserved to him. In particular, the Secretary of State has the right to appoint a Government Director to the Board of the company, with a power of veto on all proceedings of the Board. All the moneys received by the company in respect of the undertaking, whether on capital or revenue account, have to be paid over to the Secretary of State.

All expenditure by the company has to be stated and submitted for the sanction of the Secretary of State.

Thus, the Government has the preponderating financial interest in the lines worked by the two classes of guaranteed companies, those formed before 1869 and retained as working agencies with reduced capital after purchase, and those formed on terms more favourable to the State after 1880; it has exceedingly wide control over the methods of working; and it has the right of taking possession of the lines at specified times on repayment at par of the capital of the companies.

Other Lines Worked by Companies.—In addition to the lines referred to above, and apart from lines constructed by Branch line companies, District Boards and Indian States, two lines of some importance have been constructed by companies which receive no direct assistance by the Government, namely, the Bengal and North-Western Railway and the Rohilkund and Kumaon Railway. (The Rohilkund and Kumaon Railway Company was guaranteed interest at 4 per cent. during construction and received for 10 years thereafter a subsidy of Rs. 20,000 per annum. This ceased in 1894). While, however, these companies have no guarantee or other direct payment from the Government, they derive some advantage (partly through direct participation in profits and partly through reduction of expenses) from the fact that the working of certain State lines has been entrusted to them, the Tirhoot Railway to the former company and the Lucknow-Bareilly Railway to the latter. Their lines can be purchased by the State in 1937 or 1942 on terms which are different in respect of the different sections of the lines, but are, on the whole, much more favourable to the companies than those provided for in the contracts with the guaranteed companies. Failing purchase in 1937 or 1942, the lines will become the property of the State in 1981 on payment of certain amounts. The general administrative control exercised by the State over these companies and the control over expenditure are similar to that which is exercised, as explained above, over guaranteed companies.

APPENDIX C.

The Organisation for Government control.

The initial policy of the Government of India for the construction and working of railways was the establishment of guaranteed railway companies of English domicile. Control over the operations of these companies was at first secured through the appointment of a consulting Engineer of Guaranteed Railways. Some years later local Consulting Engineers were appointed for the exercise of control over guaranteed railways and over State-owned railways in the construction of which the State had been financially interested and which had been leased to companies for working. These officers combined the duties of supervision and control on behalf of the Government of India and of an Inspector under the Government of India Railway Act. The Government of India were not directly concerned with the ownership of railways until 1868 when the Calcutta and South Eastern Railway was surrendered to the Indian Government under the terms of the contract between the Secretary of State and the Company.

Owing to the Government of India having in 1869 definitely adopted the policy of direct construction and ownership of railways, a period of rapid development of railway construction ensued and it became necessary to relieve the Public Works Department Secretariat of the Government of India in some measure of the detailed control of railways. Accordingly in 1874 a State Railway Directorate was established and the greater portion of the State Railway establishment and business connected with State Railway Administration was transferred to the control of the Director of State Railways, an officer who functioned on much the same lines as the head of a department under the Government of India. The Consulting Engineer to the Government of India for State Railways was at the same time associated with him but all important matters had still to be referred to the Public Works Department. A special Deputy Secretary in the Railway Branch of the Secretariat of the Public Works Department was also appointed to conduct the correspondence between the Government of India and these officers.

Early in 1877 a further change was made in the organisation responsible for the administration and control of State Railways and in the place of one Director of State Railways three Directors of territorial systems and one Director of State Railways Stores were appointed. These territorial divisions comprised the following systems:—

Central	1,179 miles,
Western	927 miles,
and North Eastern	830 miles.

This division of the administration on a territorial basis proved unsatisfactory in practice as it resulted in the issue of conflicting orders as far as the management of open lines was concerned although no difficulty was experienced in the supervision of new construction.

As the number of lines under construction had decreased and in order to remedy the defect just mentioned, it was decided in 1880 to abolish the Directors of the Central and Western Systems and to transfer the work allotted to them to the Consulting Engineers of the neighbouring guaranteed railways. The abolition of these two appointments resulted in an increase in the administrative work of the Secretariat and it was found necessary to raise the status of the Deputy Secretary to whom the powers previously exercised by the Directors had been entrusted, to that of Director General of Railways.

In the revised organisation the Consulting Engineer to the Government of India for State Railways was associated with the Director General of Railways and assisted the latter primarily in an advisory capacity in matters of civil engineering while the Director of Stores similarly acted in matters concerning stores and rolling-stock and at the same time was an adviser in matters affecting establishment. The Director of Traffic was appointed at the same time as an adviser on traffic problems and the accounts work of the department was placed under the Accountant General, Public Works Department.

Government control and supervision of the Guaranteed Railways continued to be exercised by the Local Consulting Engineers to Government. There were five such officers at the time with headquarters at Bombay, Madras, Calcutta, Lahore and Lucknow. The Consulting Engineers at Madras and Bombay worked directly under the Government of these Presidencies, while those at Calcutta, Lahore and Lucknow were under the immediate orders of the Government of India. Under this arrangement practically all powers affecting the finances and day to day management of the

railways were vested either in the Consulting Engineers or in the Government, both for the guaranteed railway companies and later on for State Railways which had been leased for working to railway companies.

The following is a list of the administrative appointments that existed in 1881:—

1. Member of the Governor General's Council, Public Works Department.
2. Secretary, Public Works Department.
3. Deputy Secretary, Railway Branch.
4. Under Secretary, Railway Branch.
5. Consulting Engineer of State Railways.
6. Director General of Railways.
7. Director of Construction.
8. Accountant General, Public Works Department.
9. Director of State Railways, Stores.
10. Three Assistants to the Director General of Railways.
11. Consulting Engineers for Guaranteed Railways at Calcutta, Lahore and Lucknow.
12. Deputy Consulting Engineers for Guaranteed lines, Calcutta, Lahore and Lucknow.

Madras and Bombay.

13. Joint Secretary, Railway Branch and Consulting Engineer for Railways.
14. Deputy Secretary, Public Works Department.

Punjab.

15. Secretary, Public Works Department.

By this time also Local Governments and Administrations had been induced to take a practical interest in the management of railways and in a few cases short extensions had been constructed from funds the interest of which Local Governments had accepted responsibility to pay. Such lines were controlled by the Local Governments concerned under the general supervision of the Government of India.

After 1881 further alterations of a more or less detailed character were made in the administrative organisation and by 1890 the following changes had taken place. Instead of a Deputy Secretary and Under Secretary, Railway Branch, there were then only an Under Secretary and an Assistant Secretary, Railways, in the General Branch. The posts of Director of State Railways, Stores, and Director of Construction had disappeared and in their place there was an Under Secretary, who was an *ex-officio* Deputy Director General of Railways. The post of Accountant General, Railways, had also been abolished and the Accountant General, Public Works Department, was once more made responsible for this work.

Further changes were made in 1897. In that year the post of Director General of Railways was abolished and the post of a Secretary to the Government of India in the Public Works Department was created in its place. The other administrative and secretariat appointments at the headquarters of the Government of India at the time were:—

- (1) Director of Railway Construction, and Deputy Secretary and *ex-officio* Director of Stores.
- (2) Director of Railway Traffic, and Deputy Secretary and *ex-officio* Director of Railway Statistics.
- (3) Two Under Secretaries.
- (4) Two Assistant Secretaries.
- (5) One Mechanical Assistant.

The post of Consulting Engineer for State Railways was also abolished and his duties transferred to the two Directors. The supervision of the accounts work of the Department, however, still remained under the Accountant General, Public Works Department, who was also an *ex-officio* Deputy Secretary to the Government of India.

In October 1901, Sir Thomas Robertson, C.V.O., was appointed by His Majesty's Secretary of State for India in Council as Special Commissioner for Indian Railways to enquire into and report on the administration and working of Indian Railways. In his report, which became available in 1903, Sir Thomas recommended that the administration of the railways in India should be entrusted to a small Board consisting of a President or Chief Commissioner who should have a thorough practical knowledge of railway working, and should be a member of the Viceroy's Council for railway

matters, and two other Commissioners who should be men of high railway standing and should have a similar training to that of the President. He recommended that the Board should, in addition to the necessary office establishment, be provided with—

- (1) A Secretary who should have received a suitable training in the practical working of railways, and who should be *ex-officio* a Secretary to the Government of India.
- (2) A Chief Inspector of Railways, to advise on all technical, engineering and mechanical questions.
- (3) A suitable number of Government Inspectors.

Sir Thomas Robertson's recommendations were carefully considered by the Governor General in Council and the Secretary of State, and early in 1905 it was decided that the Railway Branch of the Public Works Department of the Government of India should be abolished and that the control of the railway systems in India should be transferred to a Railway Board consisting of three persons, a Chairman and two Members. The Chairman of the Board was vested with the general control of all questions committed to the Railway Board with power to act on his own responsibility subject to confirmation by the Board. The Railway Board were authorised to delegate to the Chairman or a member the power of settling questions which might arise on any tour of inspection, such decision to be recorded subsequently as an act of the Railway Board. The Board was made subordinate and directly responsible to the Government of India in the Department of Commerce and Industry.

The Railway Board assumed office in March 1905 and were provided with the following establishment:—

1. Secretary.
2. Examiner of Accounts.
3. Under Secretary, Construction.
4. Under Secretary, Traffic.
5. Registrar.
6. Director of Railway Construction.

Certain changes were, however, made in the following year and the establishment then consisted of:—

- 1 Secretary.
- 3 Assistant Secretaries; one each for Establishment, Construction and Traffic.
- 1 Registrar.
- 1 Director of Railway Construction.
- 1 Railway Accounts Officer.

Sir Thomas Robertson had further suggested in his detailed recommendations that extended powers, both administrative and financial, should be delegated to Boards of Directors of Companies, that the appointments of Consulting Engineers should be abolished and that the work which they performed under the Railways Act should be entrusted to a body of Government Inspectors to be appointed for the purpose. These recommendations were given effect to in a modified form in 1908.

Within a short time after the constitution of the Railway Board, it was found that work was being hampered by having the Commerce and Industry Department between the Railway Board and the Governor General in Council and in October 1908 on the recommendations of the Railway Finance Committee presided over by Sir James Mackay (now Lord Inchcape), the following changes were introduced:—

- (1) The appointment of the Chairman of the Railway Board was changed into that of President of the Railway Board and enhanced powers were vested in the President.
- (2) The Board with its staff became collectively the Railway Department distinct from and independent of the Department of Commerce and Industry, though remaining under the administrative charge of the Hon'ble Member, Commerce and Industry Department, as the Railway Member.
- (3) The President of the Board was given direct access to the Viceroy as if he were a Secretary to the Government of India.

At the same time in consequence of the amalgamation of the Public Works Department Accounts and Civil Audit Establishments under the control of the Finance Member of the Government of India the appointment of Accountant General, Public Works Department, was abolished and the appointment of Accountant General, Railways, was revived.

In 1909 the post of Director of Railway Construction was abolished and the appointment of Chief Engineer with the Railway Board for the purpose of advising the Railway Board on technical matters connected with Civil Engineering was created.

In January 1914, it was decided that the importance of financial and commercial considerations in connection with the control of Indian railway policy justified a modification of the rule that the President and Members of the Railway Board should all be men of large experience in the actual working of railways. It was then decided that in future one member who equally with the others might be appointed President should be selected for commercial and financial experience and a member with the necessary qualifications was appointed.

This arrangement was, however, altered in 1920 when it was decided that all the three members of the Board should possess railway experience. To assist the Board however, in the consideration of financial questions, the post of Financial Adviser to Railway Board was created.

Owing to the expansion of railways in India and the increased work thrown on the Board a second Assistant Secretary, Engineering, was appointed in 1914, and in 1916 the duties of the Construction Branch were divided between one branch dealing with Projects under an Assistant Secretary and a second branch dealing with Way and Works which was sometimes under a separate officer and at other times under the Secretary or Chief Engineer. In 1922 the charge of the Way and Works branch was divided between the Assistant Secretary in charge of Projects and the Assistant Secretary in charge of Stores.

In November 1922, the Board's establishment was strengthened by the appointment of a Chief Mechanical Engineer. This appointment was created to enable the Board to have at headquarters a reliable adviser on matters connected with mechanical engineering.

During 1921 a Committee presided over by Sir William Acworth visited India and one of the questions referred to was the evolution of a satisfactory authority for the administration of the varied functions which the Railway Board had to perform as:—

- (a) the directly controlling authority of the three State-worked systems aggregating 9,028 miles,
- (b) representative of the predominant* owning partner in systems aggregating 22,949 miles,
- (c) the guarantor of many of the smaller companies,
- (d) the statutory authority over all railways in India.

The Acworth Committee recommended in their report:—

- (1) that a new Department of Communications responsible for railways, ports and inland navigation, road transport and posts and telegraphs under a Member of Council in charge of Communications should be created,
- (2) that under the Member of Council for Communications there should be a technical staff consisting on the railway side of a Chief Commissioner and four Commissioners and that of the four one should be in charge of finance and the organisation and staff of the office and the other three Commissioners should be in charge of three respective divisions, Western, Eastern and Southern,
- (3) that the technical staff attached to the Commission should be strengthened specially on the traffic side.

The Government of India, though they did not accept the first recommendation of the Acworth Committee, agreed to the re-organisation of the Railway Board being undertaken on the principles underlying the report of the Acworth Committee. The appointment of a Chief Commissioner was accordingly sanctioned in November 1922, and in accordance with the recommendations of the Acworth Committee he is solely responsible, under the Government of India, for arriving at decisions on technical questions and advising the Government of India on matters of Railway policy; he is not liable to be over-ruled, as the President was, by his colleagues in the Railway Board.

The first duty of the Chief Commissioner was to work out detailed proposals for the re-organisation of the Railway Board and as a first step he made recommendations to the Government of India for the immediate appointment of a Financial Commissioner. This recommendation was strongly endorsed by the Indian Retrenchment Committee and the appointment of the Financial Commissioner was made in April 1923 with the sanction of the Secretary of State. The further proposals of the Chief Commissioner for the re-organisation of the Railway Board were accepted by the Government of India and the Secretary of State and were introduced from the 1st April 1924. It was decided, however, for reasons connected with the present statutory position of the Railway Board, and to avoid confusion with the provisions for a Railway Commission under Chapter V of the Railways Act, to retain the name "Railway Board" for the headquarters organisation of the Railway Department instead of "Railway Commission" as recommended by the Acworth Committee.

The Railway Board as then reconstituted consisted of the Chief Commissioner as President, the Financial Commissioner and two Members, the Chief Commissioner being Secretary to the Government of India in the Railway Department. The proposal of the Acworth Committee that the Indian Railways should be sub-divided into three territorial divisions with a Commissioner in charge of each was not accepted, and the work of the Members of the Board was divided on the basis of subjects and not on a territorial basis. One Member dealt with technical subjects and the other with general administration, personnel and traffic subjects, the Financial Commissioner representing the Finance Department on the Board and dealing with all financial questions.

The re-organisation carried out in 1924 had for one of its principal objects the relief of the Chief Commissioner and the Members from all but important work so as to enable them to devote their attention to larger questions of railway policy and to enable them to keep in touch with Local Governments, railway administrations and public bodies by touring to a greater extent than they had been able to do in the past. This object was effected by placing a responsible Director at the head of each of the main branches of the Board's work, namely Civil Engineering, Mechanical Engineering, Traffic and Establishment. The former Chief Engineer and the Chief Mechanical Engineer who had been employed mainly in consultative work, became Directors and together with the Directors of Traffic and Establishment have been made responsible for the direct disposal of the work of their branches under the general orders of the Railway Board.

The posts of Joint Secretary and 4 Assistant Secretaries were replaced by 6 Deputy Directors working under the Directors and in charge of branches dealing with Establishment, Works, Projects, Stores, Statistics and Traffic. One Assistant Director was also added to supervise the Technical Branch and the Drawing Office. The disposal of the general work of the Railway Board was provided for by the continuance of the post of Secretary in whose name all letters and orders of the Board are issued. The position of the Board as a Department of Government of India has been maintained and it works under the Member for Commerce and Railways. As already stated the Chief Commissioner is the Secretary to the Government of India in the Railway Department and orders issued by the Board over the signature of the Secretary are orders of the Government of India.

Experience of the working of this organisation during 1924-25 and the decision agreed to by the Legislative Assembly in September 1924 to separate railway finances from the general finances of the country made it necessary to appoint a Deputy Director and an Assistant Director of Finance. An Assistant Director of Statistics was also added during that year. Later a Director of Finance was added to the establishment occupying, as regards disposal of work, the same position as the Directors referred to above.

Further experience of the reduction of work resulting from the large delegation of powers and responsibility to the Agents of State-managed Railways and the Board of Directors of Company-managed railways enabled a re-arrangement of work to be made during 1925-26 accompanied by a reduction in the staff. Under this re-arrangement the posts of 3 Deputy Directors, an Assistant Director and the Assistant Secretary were held in abeyance. The personnel work was transferred from the Director of Establishment to the Secretary and a temporary post of Deputy Secretary was created. Further a separate technical office was established to take charge of the technical work of the engineering branches. The Technical Officer also acted as *ex-officio* Secretary to the permanent Standardisation Committees which were appointed to deal progressively with all questions of standards of equipment.

This arrangement was found, however, to be inadequate. In addition to the general increase in work in the Railway Board's Office consequent on the taking over of the East Indian, Great Indian Peninsula and Burma Railways under State control labour problems had assumed such importance and were so rapidly increasing in number and complexity that it was not possible to deal with them effectively without the appointment of additional staff. Accordingly it was decided to create an additional post of Member of the Railway Board to deal with staff and labour questions; leaving the Member in charge of Traffic, who had hitherto been dealing with establishment matters, to devote his whole time to questions relating to the Transportation and Commercial aspects of Railway work.

It was also decided to revive the post of Deputy Director, Establishment, so as to free the Director of Establishment from this work, and thus enable him to give his time to the study of problems of railway labour. Of the two posts of Deputy Directors of Traffic and Statistics one was held in abeyance from 1925 and the two posts have since been amalgamated.

In October 1930 the compilation of statistical information which used previously to be done in the Board's office was entrusted to the Controller of Railway Accounts, and with the transfer of this work, the post of Assistant Director of Statistics was also transferred from the Railway Board's office to that of the Controller of Railway Accounts.

In 1931-32, in view of the decline in traffic earnings and in the number and magnitude of Engineering works owing to financial stringency, the possibility of making temporary reductions in the organisation of the Board was explored and as a result of this examination and with the approval of the Secretary of State for India the following superior posts have been held in abeyance with effect from the dates noted below:—

Member, Traffic—29th March 1932.

Member, Engineering—5th May 1932.

Director, Civil Engineering—4th December 1931.

Director, Mechanical Engineering—1st April 1932.

Deputy Secretary—1st March 1932.

Assistant Director of Finance—31st July 1931.

It was also decided, for so long as the post of Member Traffic, was held in abeyance, to create an additional temporary post of Deputy Director, Traffic, with effect from the 1st April 1932.

The re-organisation was complete in May 1932, and then the superior staff in the office of the Railway Board consisted of the Chief Commissioner, the Financial Commissioner, 1 Member, 3 Directors, 6 Deputy Directors and 1 Secretary.

Shortly after this, however, it was recognised that unless the work was to be seriously delayed, it would be impossible for the Chief Commissioner who had taken over the duties of the Member Engineering, after that post had been held in abeyance, to devote the time that was necessary for the disposal of Civil Engineering business in the Railway Board's office and it was accordingly decided to revive the post of Director of Civil Engineering, which was being held in abeyance since December 1931, with effect from November 1932, from which date the post of Deputy Director, Civil Engineering is being held in abeyance. It was also decided in October 1932 to convert the post of Chief Superintendent to that of Assistant Secretary. The post of Director, Mechanical Engineering has been revived with effect from the 1st April 1935.

The existing superior staff in the Railway Board's office consists of the Chief Commissioner, the Financial Commissioner, 1 Member, 5 Directors, 5 Deputy Directors, 1 Secretary and 1 Assistant Secretary.

For the conduct of the work connected with the production of standard designs and specifications for all classes of materials, plant and rolling-stock in use on Indian Railways, a Central Standards Office for Railways was formed in January 1930 for a period of 5 years as an experimental measure, the post of Technical Officer with the Railway Board, being abolished at the same time. The activities of this office towards the introduction of standard designs for railways on an all-India basis having proved successful, it was made permanent in 1935 with an addition to the existing staff, to carry out more extensive technical research to enable Indian Railways to keep abreast with modern development in railway practice.

APPENDIX D.

Resolution regarding the separation of railway from General Finances, adopted by the Legislative Assembly on the 20th September 1924.

" This Assembly recommends to the Governor General in Council that in order to relieve the general budget from the violent fluctuations caused by the incorporation therein of the railway estimates and to enable railways to carry out a continuous railway policy based on the necessity of making a definite return to general revenues on the money expended by the State on Railways.

(1) The railway finances shall be separated from the general finances of the country and the general revenues shall receive a definite annual contribution from railways which shall be the first charge on the net receipts of railways.

(2) The contribution shall be based on the capital at charge and working results of commercial lines, and shall be a sum equal to one per cent. on the capital at charge of commercial lines (excluding capital contributed by companies and Indian States) at the end of the penultimate financial year plus one-fifth of any surplus profits remaining after payment of this fixed return, subject to the condition that, if in any year railway revenues are insufficient to provide the percentage of one per cent. on the capital at charge surplus profits in the next or subsequent years will not be deemed to have accrued for purposes of division until such deficiency has been made good.

The interest on the capital at charge of, and the loss in working, strategic lines shall be borne by general revenues and shall consequently be deducted from the contribution so calculated in order to arrive at the net amount payable from railway to general revenues each year.

(3) Any surplus remaining after this payment to general revenues shall be transferred to a railway reserve; provided that if the amount available for transfer to the railway reserve exceeds in any year three crores of rupees only two-thirds of the excess over three crores shall be transferred to the railway reserve and the remaining one-third shall accrue to general revenues.

(4) The railway reserve shall be used to secure the payment of the annual contribution to general revenues; to provide, if necessary, for arrears of depreciation and for writing down and writing off capital; and to strengthen the financial position of railways in order that the services rendered to the public may be improved and rates may be reduced.

(5) The railway administration shall be entitled, subject to such conditions as may be prescribed by the Government of India, to borrow temporarily from the capital or from the reserves for the purpose of meeting expenditure for which there is no provision or insufficient provision in the revenue budget subject to the obligation to make repayment of such borrowings out of the revenue budgets of subsequent years.

(6) A Standing Finance Committee for Railways shall be constituted consisting of one nominated official member of the Legislative Assembly who should be chairman and eleven members elected by the Legislative Assembly from their body. The members of the Standing Finance Committee for Railways shall be *ex-officio* members of the Central Advisory Council, which shall consist, in addition, of not more than one further nominated official member, six non-official members selected from a panel of eight selected by the Council of State from their body and six non-official members selected from a panel of eight elected by the Legislative Assembly from their body.

The Railway Department shall place the estimate of railway expenditure before the Standing Finance Committee for Railways on some date prior to the date for the discussion of the demand for grants for railways and shall, as far as possible, instead of the expenditure programme revenue show the expenditure under a depreciation fund created as per the new rules for charge to capital and revenue.

(7) The railway budget shall be presented to the Legislative Assembly if possible in advance of the general budget and separate days shall be allotted for its discussion, and the Member in charge of Railways shall then make a general statement on railway accounts and working. The expenditure proposed in the railway budget, including expenditure from the depreciation fund and

the railway reserve, shall be placed before the Legislative Assembly in the form of demands for grants. The form the budget shall take after separation, the detail it shall give and the number of demands for grants into which the total vote shall be divided shall be considered by the Railway Board in consultation with the proposed Standing Finance Committee for Railways with a view to the introduction of improvements in time for the next budget, if possible.

- (8) These arrangements shall be subjected to periodic revision but shall be provisionally tried for at least three years.
- (9) In view of the fact that the Assembly adheres to the resolution passed in February 1923, in favour of State management of Indian Railways, these arrangements shall hold good only so long as the East Indian Railway and the Great Indian Peninsula Railway and existing State-managed railways remain under State management. But if in spite of the Assembly's resolution above referred to Government should enter on any negotiations for the transfer of any of the above railways to Company management such negotiations shall not be concluded until facilities have been given for a discussion of the whole matter in the Assembly. If any contract for the transfer of any of the above railway to Company management is concluded against the advice of the Assembly, the Assembly will be at liberty to terminate the arrangements in this Resolution.

Apart from the above convention this Assembly further recommends—

- (i) that the railway services should be rapidly Indianised, and further that Indians should be appointed as Members of the Railway Board as early as possible, and
- (ii) that the purchases of stores for the State Railways should be undertaken through the organisation of the Stores Purchase Department of the Government of India."

APPENDIX E.

Government of India, Railway Department, Resolution No. 2131-F., dated the 19th February 1925, on the subject of the financing of branch lines of Railways.

The Governor General in Council, with the sanction of His Majesty's Secretary of State for India, is pleased to issue the following orders on the subject of financing of Branch Lines, in supersession of all previous orders on the subject.

1. Branch and Feeder Lines are constructed under an agreement by which the State guarantees a minimum return on the capital, or alternatively, undertakes that the line shall receive, out of the earnings of the main line from traffic contributed by the branch, such a sum, known as a rebate, as will make up the total earnings of the branch to a given sum, while the branch in each case shares with the main line any profits exceeding the guaranteed minimum.

2. This method of encouraging the construction of lines originated 30 years ago simply because the Government of India was unable to furnish the necessary capital.

3. The Acworth Committee pointed out that this method, while enabling lines to be built which would otherwise not have been built, has no other merit. The financial terms usual before the war are now quite inadequate and if the system is to continue they will have to be revised. All the witnesses before the Committee who asked for a revision of the terms admitted that, if the main line were in a position to build a given branch itself, they would prefer that it should be done by the main line rather than that it should be done as a separate undertaking.

4. Amongst the disadvantages pointed out by the Committee are the following:—

- (i) The Branch Line Company is usually a fifth wheel to the coach. It implies in some cases a separate construction staff; it always implies a separate Board of Directors, and separate accounts.
- (ii) Where the branch is worked by the main line, if its Directors feel that the management is unsatisfactory, they not only make representations to the main line administration, but in the last resort can appeal to the Railway Board which does not make for harmony.
- (iii) Capital raised by a small private undertaking, even with a Government guarantee, will cost more than money raised by the State.
- (iv) Inconceivable confusion results from the multiplication of independent Railway Companies—each company, small or great, desires to reserve for itself a separate sphere of influence; and jealously demands that, if any new-comer intrudes into that sphere, he shall pay toll to the original concessionaire. This only complicates a situation which ought to be considered solely from the point of view of the public interest. New proposals for the extension or connection of lines by small independent companies are either refused owing to protests by the old company or only permitted on a basis of elaborate accounting between the new company and the old for the profits which hypothetically would have belonged to the old line had the new line not been opened.

5. The only arguments urged in favour of the Branch Line Companies were:—

- (i) That money had been raised which the Government of India was unable to furnish.
- (ii) That a claim was made that the Branch Line Company obtained from local sources money that would never be subscribed to a Government loan.
- (iii) That there may be cases of a Branch Line of smaller gauge *worked independently*, which the Branch Line Company can operate more economically than a main line.

6. The Acworth Committee, therefore, so far from approving of this system considered that the aim of the Government should be to reduce by amalgamation the number of existing companies and that it should only be in cases where the State cannot or will not provide adequate funds that private enterprise in the direction should be encouraged.

7. The disadvantages pointed out by the Acworth Committee required to be even further amplified. The existing Branch Line Companies have ceased for some time to raise additional capital for capital requirements. They have either obtained overdrafts from various Banks for this purpose at heavy rates of interest or issued debentures at special rates of interest (usually about 7 per cent.) or in several cases asked for money to be advanced to them by the Railway Board. So far, therefore, from reducing the amount

that the Government of India have to raise in the open market, they are at present increasing that amount.

8. Another serious disadvantage which is not mentioned by the Acworth Committee is that the main line usually works the Feeder or Branch Line for a remuneration which, in most cases, is limited to a maximum of a fixed percentage of the gross earnings of the Branch Line (usually 40 per cent. or 50 per cent.)—terms of remuneration which at present are grossly inadequate. The result of this arrangement is that many of the main lines whose working expenses are from 60 to 80 per cent. of the gross earnings are saddled with heavy expenditure which ought to have been debited to Branch Line Companies. Where the Branch Line Companies are "successful", that is, where the shares stand at a high figure, their profits are inflated owing to their working expenses being thus artificially reduced. Again, where in the case of less "prosperous" Branch Line Companies, the Government has to make a direct subsidy in order to make up the guaranteed interest on the capital, the amount paid by way of subsidy does not reveal the true loss of the Government in connection with the Branch Line Company. To this subsidy should be added also the additional loss incurred from the main line working the Branch Line at less than the actual cost. Even this, however, does not give a complete statement of the loss sustained by Government in connection with these Companies. These Companies have been supplied with land free of charge and the cost of such land is not taken into account either in the Capital or the Revenue Accounts of the Companies concerned.

9. The only real argument in favour of these Companies is that they must be utilised in cases where the Government itself is unable or declines to raise the necessary amount of capital for new constructions. It is doubtful whether such a position is likely to recur in the future. It is admitted that to use the agency of these Companies is a far more expensive method of raising money for the construction of railways than direct Government loans can ever be. The amount of assistance given by Branch Line Companies in the past has been trivial; the total amount of capital raised through the agency of Branch Line Companies has only been about Rs. 10½ crores—an amount which in itself is less than the lapse that occurred last year in the provision for capital expenditure in the Railway Budget.

10. The difficulties and complications now experienced in connection with these Branch Line Companies are out of all proportion to the insignificant financial facilities offered by the Companies. The Government of India have therefore decided that the Branch line policy should be abandoned and that an endeavour should be made to reduce the number of the existing Branch Line Companies. If on any occasion the Government of India should be unable to find funds for construction (which is not the case at present), and should it be considered advisable to tap fresh sources for subscription to railway loans by offering terms different from those given to the ordinary Government loans, that is, by offering not only a fixed rate of interest, but a share in the profits of a particular Branch Line, there appears to be no particular advantage of using a financial half-way house specially to float a loan on such terms; there appears to be no reason why the Government should not float the loan direct. But it will probably be found sufficient to raise short term debentures at a high rate of interest—to be liquidated when the loan market is favourable—a procedure adopted now by the Branch Line Companies, but at a higher rate of interest than would be necessary for the Government.

11. There remains the case of the District Board Railways for which some of the capital or the security for the capital is secured by a special cess levied by the District Board throughout the district.

The Acworth Committee pointed out that where a District Board was the promoter of a new Branch Line, considerations other than purely commercial came into play with the result of further complications and confusion. In a footnote to the report they referred to the views expressed by the Madras Government who had drawn attention to a case in which, although no short-circuiting was involved, there had been a delay of over 10 years in arriving at a decision in regard to the terms for working a District Board Railway by the South Indian Railway Company. The amount of capital raised by District Boards for such lines has been only Rs. 137 lakhs while the amount raised by Company lines subsidised by District Boards amounts to Rs. 2½ crores. These amounts are insignificant as compared with the total capital raised by the Government and it is clear that the relief afforded to the Government of India in raising the loans is quite disproportionate to the great complications which have resulted in the working of the railway administration. Loans raised direct by the District Boards do not relieve the market of the Government of India; the money is ultimately borrowed from the Government of India.

12. The legal position regarding the powers of District and Local Boards in the matter of railway construction and management depends in part on the Indian Railways Act, 1890, which, in the absence of express exclusion of its application, extends to all District Board railways and, in part on the nature of the provision made in the matter in the District or Local Boards Act of the province concerned. It is only in the

Madras Presidency that the question has assumed prominence and it will suffice to indicate briefly the nature of the provisions contained in the Madras Local Boards Act, 1920. Action under section 113 of that Act can only be taken "with the previous sanction of the Government of India". Having obtained such sanction, a District Board may either itself construct and maintain a railway within, or partly within, the local area under the control of the Board, or may subscribe to any debenture loan raised by the Government of India or by any other local authority or by any company for the construction or maintenance of any railway which the Board considers likely to be of benefit to the district, or may guarantee the payment from the district fund of such sums as it shall think fit as interest on capital expended on any such railway (that is, whether the railway is constructed by the Government of India or by any other local authority or by a Company).

Section 236 of the same Act provides that the accumulations of a local railway cess may be utilised for all or any of the purposes specified in section 113, including the guaranteeing of payment of interest on capital spent on a railway.

A District Board in Madras, therefore, can guarantee the payment from the district fund of the money sufficient to make up minimum interest on capital expended on a railway within its area whether such railway is constructed by the Government of India or by a Company, the only disadvantage attaching to this particular form of guarantee being that the Act does not make the payment of the guaranteed interest a first charge on the District Board Fund.

13. The Government of India could not reasonably use their powers under the Indian Railways Act, 1890, or under, *e.g.*, section 113 of the Madras Local Boards Act, 1920, to prevent a District Board or a local body from constructing a light railway or a tramway which had no physical connection with any existing main line and which that local body proposed to work itself or through a local company. But as things stand at present there is no reason for continuing the practice under which District Boards are allowed to make money out of Branch Lines connected with a main line when they themselves cannot make any arrangements for the working of the lines and require to have them run by the main lines.

14. These District Board railways must not be confused with the light and feeder railways which constitute a provincial subject under the Devolution Rules. The provincial subject in question comprises "light and feeder railways and extra-municipal tramways in so far as provision for their construction and management is made by provincial legislation". That is to say, it comprises only individual light or feeder railways or extra-municipal tramways for the construction and management of which specific provision has been made by an Act of the local legislature of the province concerned. Hitherto, no such legislation has been enacted with the result that the entry in question in the provincial schedule, as also the qualifying words to entry 5 (a)* in the central schedule, have no operation, and all existing railways of every description are included in the central subject defined in the last-named entry. It should also be observed that the provincial subject in question is "subject to legislation by the Indian Legislature in the case of any such railway or tramway which is in physical connection with a main line or is built on the same gauge as an adjacent line", the effect being that a provincial bill designed to provide for the construction of a light or feeder railway or extra-municipal tramway in physical connection with a main line or built on the same gauge as an adjacent main line would require the previous sanction of the Governor General under clause (f) of sub-section (3) of section 80-A of the Government of India Act; and it may be presumed that few occasions are likely to arise in which provision will be made by local legislation for the construction of a light or feeder railway not answering one or other of these descriptions.

15. The proposal set forth in this Resolution is not designed to evade the legitimate operation of the legal position described, in the case of District Board railways, in paragraph 12 and in the case of provincial light and feeder railways, in paragraph 14; but it follows from the proposal that Local Governments and District or Local Boards should not, in the absence of special circumstances, be encouraged to build branch or feeder lines. In other words, the normal procedure will be the construction by the Government of India, or at its cost, by a Company, of a branch line which a District Board or Local Government desires to have constructed and is prepared to guarantee. But, should the railway programme not permit the construction of such a line within a reasonable time, the possibility of permitting a District Board or Local Government to construct it from its own funds would require consideration.

Unremunerative Lines.

16. The above proposals relate to the procedure adopted in the past and the procedure which it is proposed to adopt in the future for the financing of the

* "Railways and extra-municipal tramways, in so far as they are not classified as provincial subjects under entry 6 (d) of Part II of this Schedule."

construction of branch or feeder lines expected to prove remunerative from the point of view of railway earnings only. But there are cases where the Local Governments or local authorities may desire that a line should be constructed which will not be remunerative on railway earnings and the construction of which is desired by them for purely local reasons on account of the administrative advantages it is likely to confer or for the development of a particular area. It is proposed that in future the Railway Board in such circumstances should have power to arrange for the construction of the line from railway funds if the Local Government or the local authority guarantees the Railway Board against loss. The guarantee would be to the effect that the local authority would make up the difference between the net earnings and the interest and other charges payable. As it is not desirable that the Central Government should make any profit out of such contributions by local authorities; it is also proposed that where contributions have been made by a local authority for this purpose the repayment of such contributions should be a first charge on any net profits subsequently realised from the line, should the line prove remunerative.

17. The Central Government must, however, retain the power to decide whether a line is to be built or not; the proposals in the preceding paragraph must not be taken to imply that a Local Government by giving a guarantee can require the Railway Board to construct a line. Proposals of a Local Government might run counter to the general railway policy or might take the form of short-circuiting railway traffic and so lead to a reduction of receipts from existing lines.

18. These proposals have been circulated to Local Governments and have been generally welcomed by them as affording a suitable method of reconciling central and local interests and of providing for local bodies and Local Governments a method of securing the construction of railways which may be required for purely local reasons, and which, while not likely to prove remunerative on purely railway earnings, are likely to provide such indirect benefits to Local Governments and local bodies as will more than repay the amount paid under the guarantee. Several such arrangements have already been made with Local Governments.

APPENDIX F.

I.—GAZETTED OFFICERS.

I.—Statement of Gazetted Officers and Officers of corresponding rank employed on Class I Railways, Railway Board and other Railway Offices (excluding H. E. H. the Nizam's State and Jodhpur Railways) on the 31st March 1936 as compared with 31st March 1935.

Item.	A. B.		B. N.		B. & N. W.		B., E. & C. I.		BURMA.		E. B.		E. I.		G. I. P.		M. & S. M.		N. W.		R. & K.		S. I.		Rly. Board and Miscellaneous officers.		TOTAL.		
	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	
I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
1. Agency Department—																													
1-01. Europeans	3	3	4	4	4	5	8	9	4	4	4	4	6	5	6	5	5	5	9	6	1	2	3	4	2	2	59	58	
1-02. Indians—																													
(a) Hindus	1	2	2	1	2	2	1	3	3	3	9	11
(b) Muslims	1	1	1	2	1
(c) Anglo-Indians and domiciled Europeans.	1	3	3	1	1	1	6	6
(d) Sikhs
(e) Indian Christians	1	1	..
(f) Other classes . . . . .	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
(g) Total . . . . .	..	1	3	2	..	..	1	..	1	1	3	2	4	6	..	..	..	..	2	2	..	..	4	4	..	..	18	18
1-03. GRAND TOTAL	3	4	7	6	4	5	9	9	5	5	7	6	10	11	6	5	5	5	11	8	1	2	7	8	2	2	77	76	
2. Accounts Department—																													
2-01. Europeans . . . . .	..	..	5	5	5	6	8	7	3	2	..	..	2	3	6	6	6	6	1	1	1	1	2	3	1	1	*40	41
2-02. Indians—																													
(a) Hindus . . . . .	..	..	4	4	2	2	2	2	..	1	*3	6	6	6	2	1	2	2	8	9	2	2	6	6	4	4	*41	46
(b) Muslims . . . . .	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	4	4	..	..	..	..	2	2	7	7
(c) Anglo-Indians and domiciled Europeans.	..	..	3	3	..	..	1	1	1	1	..	..	3	4	1	1	1	1	1	1	..	..	1	1	..	..	17	18
(d) Sikhs . . . . .	..	..	1	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	1	2	..	..	..	..	..	..	3	4
(e) Indian Christians . . . . .	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	1	1	..	..	..	2	2
(f) Other classes . . . . .	..	..	..	..	..	..	1	2	..	..	..	..	..	..	2	2	2	2	..	..	..	..	..	..	..	..	5	6
(g) Total . . . . .	..	..	8	8	2	2	6	6	1	2	*5	7	14	12	5	4	5	5	14	16	2	2	8	8	6	6	*75	78
2-03. GRAND TOTAL . . . . .	..	..	13	13	7	8	13	13	4	4	*6	7	16	15	11	10	11	11	15	17	3	3	10	11	7	7	*115	119
3. Engineering Department—																													
3-01. Europeans	9	11	*42	41	20	18	33	29	26	25	18	19	48	37	44	40	24	24	47	42	3	3	24	22	8	11	*346	322	
3-02. Indians—																													
(a) Hindus	5	6	10	10	4	4	16	16	9	4	12	12	31	31	3	3	16	17	43	47	..	..	14	14	2	2	164	172
(b) Muslims	3	3	1	2	2	2	..	..	..	..	2	2	5	4	5	5	..	..	6	8	2	2	1	..	..	..	29	28
(c) Anglo-Indians and domiciled Europeans.	2	1	*9	9	1	1	..	1	2	2	2	1	4	3	..	..	1	1	7	8	..	..	..	..	1	1	*29	28
(d) Sikhs	1	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	4	5	..	1	..	..	..	..	6	7
(e) Indian Christians . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	6	2	2	2	2	..	..	1	1	..	..	11	11
(f) Other classes . . . . .	..	..	1	1	..	..	2	1	1	1	..	..	2	2	3	3	1	..	..	..	..	..	..	..	..	..	10	6
(g) Total	11	11	*21	22	7	7	18	18	6	7	17	16	42	40	22	22	20	20	64	70	2	3	16	15	3	3	*249	254	
3-03. GRAND TOTAL	20	22	63	63	27	25	51	47	32	32	35	35	90	77	66	62	44	44	111	112	5	6	40	37	11	14	595	576	

*Revised figures.

APP. F. J. GAZETTED OFFICERS EMPLOYED ON CLASS I RAILWAYS. 111

APPENDIX F—contd.

I.—Statement of Gazetted Officers and Officers of corresponding rank employed on Class I Railways, Railway Board and other Railway Offices (excluding H. E. H. the Nizam's State and Jodhpur Railways) on the 31st March 1936 as compared with 31st March 1935—contd.

Item.	A. B.		B. N.		B. & N. W.		B., B. & C. I.		BURMA.		E. B.		E. I.		G. I. P.		M. & S. M.		N. W.		R. & E.		S. I.		Ry. Board and Miscellaneous officers.		TOTAL.		
	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
4. Transportation—																													
4-01. Europeans	8	7	24	24	12	12	25	24	17	16	15	14	36	35	50	49	10	18	*24	26	2	2	11	11	5	5	*248	248	
4-02. Indians—																													
(a) Hindus	3	3	16	14	1	1	7	7	..	..	12	13	14	10	9	9	6	7	12	12	..	..	12	12	2	2	94	90
(b) Muslims	1	1	7	7	2	1	2	4	..	..	3	4	7	6	4	4	..	..	9	7	1	1	1	1	2	1	39	37
(c) Anglo-Indians and domiciled Europeans.	2	2	3	2	1	1	1	1	2	2	4	5	6	3	4	3	8	3	*4	2	..	..	3	5	2	2	*37	31
(d) Sikhs . . . . .	..	..	1	1	..	..	1	1	..	..	..	..	1	1	..	..	1	1	1	1	..	..	..	..	..	..	6	6
(e) Indian Christians . . . . .	..	..	1	1	..	..	2	2	..	..	..	..	1	1	..	..	1	1	1	1	..	..	..	..	..	..	10	9
(f) Other Classes . . . . .	..	..	..	..	..	..	2	2	6	5	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..
(g) Total	6	6	28	25	4	3	15	17	8	8	19	22	29	21	18	17	13	13	*30	26	1	1	19	18	6	5	*195	182	
4-03. GRAND TOTAL	14	13	52	49	16	15	40	41	25	24	34	36	65	56	68	66	32	31	54	52	3	3	29	29	11	10	443	425	
5. Commercial—																													
5-01. Europeans	1	1			1	1							7	6	12	12							4	2	..	..	25	22
5-02. Indians—																													
(a) Hindus . . . . .	..	..			..	..							8	6	10	10							6	5	..	..	19	21
(b) Muslims	1							..	1	1	1						1	3
(c) Anglo-Indians and domiciled Europeans.			1	..							4	2	2	1						7	8
(d) Sikhs
(e) Indian Christians
(f) Other Classes
(g) Total			1	1							7	9	14	13						6	5	28	28
5-03. GRAND TOTAL	1	1			2	2							14	15	26	25						10	7	53	50
6. Mechanical Engineering—																													
6-01. Europeans	7	8	*22	21	14	14	27	27	20	20	15	15	35	33	22	20	21	18	44	45	2	2	16	16	3	3	*248	242	
6-02. Indians—																													
(a) Hindus	2	2	5	5	..	..	3	5	..	..	7	7	13	15	3	3	2	5	5	6	..	..	5	5	..	..	45	53
(b) Muslims	1	1	1	..	..	..	1	1	..	..	..	1	3	3	..	..	..	..	3	4	..	..	..	..	..	..	9	10
(c) Anglo-Indians and domiciled Europeans.	1	1	*1	1	..	..	..	..	2	2	1	1	3	2	1	1	..	..	1	1	..	..	1	1	..	..	*10	9
(d) Sikhs . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1	..	..	1	1	..	..	1	2
(e) Indian Christians . . . . .	..	..	..	..	..	..	..	..	..	..	1	1	1	2	1	1	..	..	2	2	..	..	1	1	..	..	3	5
(f) Other Classes . . . . .	..	..	1	1	..	..	..	..	..	..	1	..	..	1	1	1	1	1	..	..	..	..	5	5	1	1	*74	86
(g) Total	4	4	*8	7	..	..	4	6	2	3	9	10	20	24	6	6	3	6	12	14	..	..	21	21	4	4	322	328
6-03. GRAND TOTAL	11	12	30	28	14	14	31	33	22	23	24	25	55	57	28	26	24	24	56	59	2	2	21	21	4	4	322	328	

*Revised figures.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
7. Stores Department—																													
7-01. Europeans	1	2	5	5	2	1	6	7	2	1	3	2	7	7	5	5	5	5	5	5	—	—	4	3	—	—	—	45	48
7-02. Indians—																													
(a) Hindus	—	—	1	2	—	—	2	1	—	—	2	2	3	4	—	—	2	2	4	3	—	—	1	1	—	—	—	15	15
(b) Muslims	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	—	—	1	1	—	—	—	—	—	—	—	3	3
(c) Anglo-Indians and domiciled Europeans.	—	—	2	2	—	—	—	—	1	1	2	2	2	1	1	1	—	—	—	—	—	—	2	2	—	—	—	10	9
(d) Sikhs	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
(e) Indian Christians	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(f) Other Classes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	1	1
(g) Total	—	—	3	4	—	—	2	2	1	1	4	4	6	6	3	3	3	3	5	4	—	—	3	3	—	—	—	30	29
7-03. GRAND TOTAL	1	2	8	9	2	1	8	9	3	2	7	6	13	13	8	8	8	8	10	9	—	—	7	6	—	—	76	72	
8. Other Departments—																													
8-01. Europeans	7	7	*13	14	3	3	12	13	6	6	1	1	23	26	5	4	*12	12	2	3	1	—	5	6	20	20	115	115	
8-02. Indians—																													
(a) Hindus	5	5	3	3	—	—	3	4	—	—	5	5	12	14	4	3	2	2	2	3	—	—	3	3	9	8	48	50	
(b) Muslims	—	—	—	—	—	—	1	1	—	—	—	—	2	2	—	—	—	—	2	2	—	—	—	—	—	1	1	6	6
(c) Anglo-Indians and domiciled Europeans.	2	3	*3	3	—	—	—	—	1	1	—	1	7	6	1	1	—	—	1	—	—	—	—	—	—	2	3	*17	18
(d) Sikhs	—	—	—	1	—	—	—	—	—	—	—	—	1	1	—	—	—	—	1	2	—	—	—	—	—	—	1	2	5
(e) Indian Christians	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	1	2	2	—	—	—	—	—	—	—	1	1	4	5
(f) Other Classes	—	—	—	—	—	—	3	3	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	4	4
(g) Total	7	9	*6	7	—	—	7	8	1	1	5	6	22	23	7	6	4	4	6	7	—	—	3	3	13	14	*31	33	
8-03. GRAND TOTAL	14	16	*19	21	3	3	19	21	7	7	6	7	50	49	12	10	*16	16	8	10	1	—	8	9	33	34	*106	108	
9. Total—																													
9-01. Europeans	26	30	*115	114	61	60	119	116	73	74	*56	55	169	152	150	141	*92	88	*132	128	10	10	69	67	39	42	*1,123	1,086	
9-02. Indians—																													
(a) Hindus	15	17	41	40	7	7	34	35	3	5	*43	47	33	31	36	34	30	35	74	60	2	2	50	49	17	16	*435	453	
(b) Muslims	5	5	9	9	4	4	5	7	—	—	6	7	17	16	12	12	—	—	23	27	3	3	2	1	5	4	96	95	
(c) Anglo-Indians and domiciled Europeans.	7	7	*22	20	3	2	2	3	9	9	9	10	37	24	10	3	5	5	*14	13	—	—	9	9	5	6	*122	116	
(d) Sikhs	1	1	2	3	—	—	1	1	—	—	2	1	3	4	—	—	2	2	11	14	—	1	—	—	—	1	22	23	
(e) Indian Christians	—	1	1	1	—	—	2	2	—	—	2	2	2	3	9	9	5	5	6	5	—	—	2	2	2	2	81	82	
(f) Other Classes	—	—	2	2	—	—	3	3	3	3	—	—	2	3	3	3	6	4	—	—	—	—	—	—	—	—	34	34	
(g) Total	28	31	*77	75	14	13	52	53	20	23	*62	67	144	141	75	71	48	51	*133	130	5	6	63	61	29	29	*750	763	
9-03. GRAND TOTAL	64	70	*192	189	75	73	171	172	93	97	*118	122	313	293	225	212	*140	139	265	267	15	16	132	128	68	71	*1,876	1,849	
9-04. Grand Total including staff on loan from the Indian Audit and Accounts Service (Department).	64	70	*192	189	75	73	171	172	100	99	*121	124	313	293	225	213	*140	139	270	271	15	16	132	128	—	—	—	—	

* Revised figures.

APPENDIX F—contd.

I.—Statement of Gazetted Officers and Officers of corresponding rank employed on Class I Railways, Railway Board and other Railway Offices (excluding H. E. H. the Nizam's State and Jodhpur Railways) on the 31st March 1936 as compared with 31st March 1935—concl'd.

Item.	A. B.		B. N.		B. & N. W.		D., B. & C. I.		BURMA.		E. B.		E. I.		G. I. P.		M. & S. M.		N. W.		B. & K.		S. I.		Rly. Board and Miscellaneous officers.		TOTAL.	
	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
10. Increase (+) and Decrease (-)																												
10-01. Europeans . . . . .	..	+3	..	-1	..	-1	..	-3	..	-4	..	-1	..	-1	..	-0	..	-4	..	-4	..	..	..	-2	..	+3	..	-40
10-02. Indians—																												
(a) Hindus . . . . .	..	+2	..	-1	..	..	..	+1	..	+2	..	+3	..	+3	..	-2	..	+5	..	+6	..	..	..	-1	..	-1	..	+22
(b) Muslims . . . . .	..	..	..	..	..	..	..	+2	..	..	..	+1	..	-1	..	..	..	..	..	-1	..	..	..	-1	..	-1	..	-1
(c) Anglo-Indians and domiciled Europeans . . . . .	..	..	..	-2	..	-1	..	+1	..	..	..	+1	..	-13	..	-2	..	..	..	-1	..	..	..	..	..	+1	..	-16
(d) Sikhs . . . . .	..	..	..	+1	..	..	..	..	..	..	..	-1	..	+1	..	..	..	..	..	+3	..	+1	..	..	..	+1	..	+6
(e) Indian Christians . . . . .	..	+1	..	..	..	..	..	..	..	..	..	..	..	+1	..	..	..	..	..	-1	..	..	..	..	..	..	..	+1
(f) Other Classes . . . . .	..	..	..	..	..	..	..	..	..	+1	..	..	..	+1	..	..	..	-2	..	..	..	..	..	..	..	..	..	..
(g) Total . . . . .	..	+3	..	-2	..	-1	..	+4	..	+3	..	+4	..	-3	..	-4	..	+3	..	+6	..	+1	..	-2	..	..	..	+12
10-03. GRAND TOTAL . . . . .	..	+6	..	-3	..	-2	..	+1	..	-1	..	+3	..	-20	..	-13	..	-1	..	+2	..	+1	..	-4	..	+3	..	-28
11. Percentage of Total—																												
11-01. Europeans	56.3	55.7	*59.0	60.8	81.8	82.2	69.6	67.4	79.6	76.8	47.1	45.2	54.0	51.9	66.7	66.5	*65.7	63.3	*40.8	47.9	66.7	62.5	52.3	52.3	57.3	59.2	*60.0	58.7
11-02. Indians—																												
(a) Hindus	23.4	24.3	*21.4	21.2	9.3	9.6	19.9	20.3	3.1	5.1	37.2	38.7	26.5	31.1	16.0	16.0	*21.4	25.2	27.9	30.0	13.3	12.5	37.9	38.3	25.0	22.5	23.3	24.3
(b) Muslims	7.8	7.2	4.7	4.8	5.4	5.5	2.9	4.1	..	..	5.0	5.6	5.4	5.5	5.3	5.7	..	..	10.6	10.1	20.0	13.3	1.5	0.8	7.4	5.6	5.1	5.1
(c) Anglo-Indians and domiciled Europeans	10.9	10.0	*11.5	10.3	4.0	2.7	1.2	1.3	0.2	0.3	7.4	8.1	11.6	8.2	4.4	3.8	3.6	3.6	*5.3	4.9	..	..	6.3	7.0	7.3	3.5	*7.0	6.3
(d) Sikhs	1.6	1.4	*1.0	1.6	..	..	0.6	0.6	..	..	1.7	0.8	1.0	1.3	..	..	1.4	1.4	4.1	5.2	..	0.2	..	..	..	1.4	1.2	1.5
(e) Indian Christians . . . . .	..	1.4	0.5	0.5	..	..	1.1	1.2	..	..	1.6	1.6	0.6	1.0	4.0	4.2	3.6	3.6	2.3	1.9	..	..	1.5	1.6	3.0	2.3	1.6	1.7
(f) Other Classes . . . . .	..	..	1.0	1.0	..	..	4.7	4.6	3.1	9.3	..	..	0.7	1.0	3.6	3.3	4.3	2.9	..	..	..	..	..	..	..	..	1.3	1.9

II—Statement of Subordinates, drawing Rs. 250 per mensem and over or on scales of pay rising to Rs. 250 per mensem and over employed on Class I Railways, Railway Board and other Railway Offices (excluding H. E. H. the Nizam's State and Jodhpur Railways) on 31st March 1936 as compared with 31st March 1935.

Item.	A. B.		B. N.		B. & N. W.		B. B. & C. I.		BURMA.		H. B.		E. I.		G. I. P.		M. & S. M.		N. W.		R. & K.		S. I.		TOTAL.		
	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
1. Agency Department—																											
1-01. Europeans	1	1	3	4	2	2	6	7
1-02. Indians—																											
(a) Hindus	1	..	6	6	1	1	10	10	4	4	11	12	11	10	3	3	3	3	6	7	1	1	3	3	60	60	
(b) Muslims . . . . .	..	..	..	..	..	..	4	3	1	1	..	..	..	..	..	..	..	..	1	1	..	..	..	..	6	5
(c) Anglo-Indians and domiciled Europeans	1	1	1	1	1	1	4	4	2	2	..	1	2	2	..	..	1	1	1	1	..	..	1	1	14	15
(d) Sikhs . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..
(e) Indian Christians . . . . .	..	..	..	..	..	..	2	2	1	1	..	..	..	..	2	3	..	..	2	2	..	..	..	..	3	3
(f) Other classes . . . . .	..	..	..	..	..	..	3	3	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	5	5
(g) Total	2	1	7	7	2	2	23	22	9	9	11	13	13	12	7	7	4	4	11	11	1	1	4	4	94	93	
1-02. GRAND TOTAL	2	1	7	7	2	2	23	22	9	9	12	14	16	16	9	9	4	4	11	11	1	1	4	4	100	100	
2. Accounts Department—																											
2-01. Europeans	2	3	4	1	..	7	8	5	6	18	18
2-02. Indians—																											
(a) Hindus . . . . .	..	..	21	22	6	6	25	23	9	9	20	20	59	59	19	14	7	8	52	53	..	..	10	13	246	241
(b) Muslims . . . . .	..	..	..	1	2	2	1	1	..	..	..	..	6	7	..	..	..	..	19	19	..	..	1	1	29	31
(c) Anglo-Indians and domiciled Europeans	..	..	20	22	6	6	13	13	7	8	3	4	10	8	10	11	11	10	2	2	..	..	3	3	85	87
(d) Sikhs . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	..	..	10	8	..	..	..	..	12	10
(e) Indian Christians . . . . .	..	..	..	..	1	1	1	1	1	1	..	..	..	..	4	3	..	..	1	1	..	..	..	..	8	7
(f) Other classes . . . . .	..	..	..	..	..	..	3	3	..	..	..	..	..	..	5	4	1	2	1	..	..	..	..	..	15	14
(g) Total . . . . .	..	..	41	45	15	15	48	46	17	18	22	24	76	75	39	33	19	20	85	82	..	..	23	22	395	390
2-02. GRAND TOTAL . . . . .	..	..	43	45	15	15	51	50	17	18	23	24	82	83	44	39	19	20	85	82	..	..	23	22	418	408
3. Engineering Department—																											
3-01. Europeans	1	..	4	4	1	1	9	10	1	1	4	5	20	22	23	22	9	7	18	16	1	1	3	3	104	102	
3-02. Indians—																											
(a) Hindus	11	13	55	60	5	5	66	65	23	24	36	37	105	100	54	57	21	22	104	101	..	..	9	10	499	500
(b) Muslims	3	4	5	5	2	3	16	14	2	2	1	3	6	8	15	13	..	1	61	60	2	2	1	2	115	116	
(c) Anglo-Indians and domiciled Europeans	4	6	35	33	15	14	8	7	30	29	17	18	105	94	51	55	22	23	53	47	1	1	10	10	351	337	
(d) Sikhs	2	2	2	2	1	1	1	1	3	3	1	3	9	7	7	11	..	..	32	31	..	..	..	..	58	60
(e) Indian Christians . . . . .	..	..	2	4	..	..	3	5	3	3	1	1	2	7	11	12	1	1	..	3	..	..	3	1	32	37
(f) Other classes . . . . .	..	..	..	..	..	..	22	23	3	3	..	..	..	..	13	15	1	1	2	4	..	..	..	..	41	45
(g) Total	20	25	100	110	24	23	121	115	64	64	56	61	227	216	151	163	45	48	252	245	3	3	23	23	1,086	1,086	
3-02. GRAND TOTAL	21	25	104	114	25	24	130	125	65	65	60	66	257	248	174	185	54	56	270	261	4	4	26	26	1,190	1,188	

APPENDIX F—contd.

II.—Statement of Subordinates, drawing Rs. 250 per mensem and over or on scales of pay rising to Rs. 250 per mensem and over employed on Class I Railways, Railway Board and other Railway Offices (excluding H. E. H. the Nizam's State and Jodhpur Railways) on 31st March 1936 as compared with 31st March 1935—contd.

Item.	A. B.		B. N.		B. & N. W.		B. D. & C. I.		BURMA.		E. D.		E. L.		G. I. P.		M. & S. K.		N. W.		R. & K.		S. I.		TOTAL.		
	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
4. Transportation—																											
4-01. Europeans . . . . .	..	..	19	18	3	3	28	31	3	3	16	15	85	78	139	128	..	..	107	98	..	1	9	8	409	378
4-02. Indians—																											
(a) Hindus	6	6	66	71	5	5	106	114	11	12	80	82	68	48	84	86	3	3	88	70	..	1	12	10	469	464	
(b) Muslims . . . . .	..	..	10	10	1	1	6	7	1	1	1	1	6	9	13	18	..	1	38	34	..	..	1	1	74	83
(c) Anglo-Indians and domiciled Europeans	12	13	57	57	15	13	37	31	69	66	49	50	186	178	424	420	30	31	66	82	6	5	19	16	970	957	
(d) Sikhs . . . . .	..	..	6	6	..	..	..	..	..	..	2	2	2	2	..	3	..	..	11	16	..	..	..	..	21	28
(e) Indian Christians . . . . .	..	..	3	3	..	..	17	17	..	2	1	1	3	1	52	58	..	..	5	6	..	..	..	..	81	88
(f) Other classes	1	2	..	..	..	..	40	39	18	18	1	..	1	1	34	32	..	..	18	17	..	..	..	..	113	109
(g) Total	19	21	142	147	21	19	206	208	99	99	84	86	268	284	607	617	33	35	216	230	6	6	32	27	1,728	1,729	
4-03. GRAND TOTAL	19	21	161	165	24	22	234	239	102	102	100	101	348	312	745	745	33	35	*323	323	6	7	41	35	2,137	2,107	
5. Commercial—																											
5-01. Europeans . . . . .	..	..			..	..							1	2	5	6			5	2					11	10
5-02. Indians—																											
(a) Hindus	3	3			..	..							15	14	23	27			16	18			7	7	69	69
(b) Muslims . . . . .	..	..	Included under Transportation.		1	1							1	2	3	3			3	2			..	..	3	3
(c) Anglo-Indians and domiciled Europeans	..	..			..	1			Included under Transportation.				5	5	10	11			1	3			..	..	16	20
(d) Sikhs . . . . .	..	..			..	..							..	..	..	..			5	6			..	..	5	6
(e) Indian Christians . . . . .	..	..			..	..							..	..	10	6			..	1			..	..	10	7
(f) Other Classes . . . . .	..	..			..	..							..	..	..	1			..	..			..	..	..	1
(g) Total	3	3			1	2							21	21	51	48			25	30			7	7	108	111	
5-03. GRAND TOTAL	3	3			1	2							22	23	56	54			30	32			7	7	119	121	
6. Mechanical Engineering—																											
6-01. Europeans	11	9	110	56	8	9	70	64	18	18	84	82	210	174	54	55	52	49	114	120	4	5	23	18	708	607	
6-02. Indians—																											
(a) Hindus	3	3	16	15	..	..	52	53	11	12	29	36	127	129	25	28	5	7	66	68	..	..	33	34	367	385
(b) Muslims	1	1	4	4	..	..	7	9	1	1	3	3	18	19	2	2	..	..	61	61	..	..	1	1	98	101
(c) Anglo-Indians and domiciled Europeans	12	15	247	292	14	14	240	243	109	104	88	85	595	605	102	99	101	98	257	235	3	3	111	107	1,879	1,900	
(d) Sikhs . . . . .	..	..	5	5	..	..	2	2	4	3	..	1	7	7	2	2	1	1	35	33	..	..	..	..	56	54
(e) Indian Christians . . . . .	..	..	3	3	..	..	7	12	2	2	1	1	2	2	11	12	..	..	19	15	..	..	5	5	50	52
(f) Other classes	2	2	5	4	..	..	37	35	11	11	3	..	4	4	9	8	2	1	7	8	..	..	..	..	79	73
(g) Total	18	21	280	323	14	14	345	354	138	133	123	126	753	766	151	151	109	107	445	420	3	3	150	147	2,529	2,505	
6-03. GRAND TOTAL	29	30	390	379	22	23	415	418	156	149	157	158	963	940	205	206	161	156	559	540	7	8	173	165	3,237	3,172	

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
7. Stores Department—																											
7-01. Europeans . . . . .	..	..	..	..	..	..	2	..	..	..	..	..	4	3	3	2	1	1	7	9	..	..	1	1	18	16
7-02. Indians—																											
(a) Hindus	1	1	8	9	..	..	8	9	8	8	11	9	17	15	4	6	1	1	19	18	..	..	2	2	74	73
(b) Muslims . . . . .	..	..	..	..	..	..	1	1	..	..	..	..	3	3	..	..	..	..	9	9	..	..	..	..	18	18
(c) Anglo-Indians and domiciled Europeans	1	1	11	11	..	..	..	..	..	..	2	3	24	22	..	..	3	3	9	7	..	..	1	1	51	48
(d) Sikhs . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	4	..	..	..	..	4	4
(e) Indian Christians . . . . .	..	..	2	2	..	..	2	2	..	..	..	..	..	..	1	1	..	..	1	1	..	..	..	..	6	6
(f) Other classes . . . . .	..	..	..	..	..	..	1	2	..	..	..	..	..	..	3	2	..	..	1	1	..	..	..	..	5	5
(g) Total	2	2	21	22	..	..	12	14	8	8	13	12	44	40	8	9	4	4	43	40	..	..	3	3	158	149
7-02. GRAND TOTAL	2	2	21	22	..	..	14	14	8	8	13	12	48	43	11	11	6	5	50	49	..	..	4	4	171	165
8. Other Departments—																											
8-01. Europeans	8	4	35	26	2	1	11	12	..	..	..	1	33	34	1	1	*3	3	3	4	..	..	1	1	*94	87
8-02. Indians—																											
(a) Hindus	9	11	37	34	4	4	34	36	21	20	11	12	76	83	2	7	*20	20	9	10	..	1	3	3	*231	241	
(b) Muslims . . . . .	..	..	*2	1	..	..	1	..	3	2	2	2	*6	9	..	..	..	..	6	4	..	..	1	1	*21	19
(c) Anglo-Indians and domiciled Europeans	6	8	*36	45	8	8	17	16	3	4	3	2	56	51	5	4	*15	15	7	6	1	..	3	4	*189	198	
(d) Sikhs . . . . .	..	..	4	4	..	..	..	..	4	4	..	..	1	..	..	..	*1	1	2	1	..	..	..	..	*12	10
(e) Indian Christians . . . . .	..	..	..	1	..	..	3	2	5	5	..	..	2	2	1	2	2	2	3	3	..	..	2	2	18	19
(f) Other classes . . . . .	..	..	3	2	..	..	9	8	3	6	..	..	1	1	10	7	..	..	..	..	..	..	1	1	80	25
(g) Total	14	19	*82	87	12	12	64	62	42	41	16	16	*171	176	24	20	*33	33	27	24	1	1	10	11	*501	507	
8-02. GRAND TOTAL	19	23	*117	113	14	13	75	74	42	41	16	17	*204	210	25	21	*41	41	80	28	1	1	11	12	*595	594	
9. Railway Board and other Railway office—																											
9-01. Europeans	*2	2
9-02. Indians—																											
(a) Hindus
(b) Muslims
(c) Anglo-Indians and domiciled Europeans	18	13
(d) Sikhs	*4	5
(e) Indian Christians	1	1
(f) Other classes	214	223
(g) Total	*216	225
9-02. GRAND TOTAL	*216	225

* Revised figures.

II.—Statement of Subordinates, drawing Rs. 250 per mensem and over or on scales of pay rising to Rs. 250 per mensem and over employed on Class I Railways, Railway Board and other Railway Offices (excluding H. E. H. the Nizam's State and Jodhpur Railways) on 31st March 1936 as compared with 31st March 1935—concl'd.

Item.	A. B.		B. N.		B. & N. W.		B. B. & C. L.		BURMA.		E. B.		E. I.		G. I. P.		M. & S. M.		N. W.		R. & K.		S. I.		TOTAL.		
	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.	
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
10. Total—																											
10-01. Europeans	17	18	170	104	14	14	123	121	22	20	56	54	378	385	232	222	*65	60	254	244	5	7	37	31	*1,370	1,227	
10-02. Indians—																											
(a) Hindus	34	37	209	223	21	21	301	310	32	34	157	168	472	458	225	228	*60	64	355	350	1	3	33	37	*2,148	2,185	
(b) Muslims	4	5	*21	21	7	7	36	35	8	7	7	9	*48	57	33	36	..	2	193	189	2	2	5	6	*391	403	
(c) Anglo-Indians and domiciled Europeans	35	44	*407	431	59	57	319	314	220	213	162	163	1,013	990	602	600	*133	131	396	383	11	9	143	142	*3,531	3,577	
(d) Sikhs	2	2	17	17	1	1	8	8	11	10	3	5	20	17	10	17	*2	2	100	98	..	..	..	..	*132	135
(e) Indian Christians . . . . .	..	..	11	13	1	1	40	41	12	14	3	3	9	12	93	97	3	3	31	32	..	..	10	8	*217	229
(f) Other classes	3	4	8	6	..	..	120	113	39	39	3	..	6	6	76	70	4	4	29	30	..	..	1	1	239	279
(g) Total	73	92	*373	741	89	87	319	321	372	367	335	343	*1,563	1,540	1,033	1,043	*252	256	1,104	1,032	14	14	252	244	*6,303	6,363	
10-03. GRAND TOTAL	95	105	*343	345	103	101	342	342	394	387	391	402	*1,941	1,875	1,270	1,270	*317	316	1,358	1,326	19	21	289	275	*3,173	3,090	
11. Increase + Decrease—																											
11-01. Europeans . . . . .	..	-4	..	-66	..	..	..	-2	..	-2	..	-2	..	-33	..	-10	..	-5	..	-10	..	+2	..	-6	..	-143
11-02. Indians—																											
(a) Hindus . . . . .	..	+3	..	+14	..	..	..	+9	..	+2	..	+11	..	-14	..	+3	..	+4	..	-5	..	+2	..	-1	..	+37
(b) Muslims . . . . .	..	+1	..	..	..	..	..	-1	..	-1	..	+2	..	+9	..	+3	..	+2	..	-4	..	..	..	+1	..	+17
(c) Anglo-Indians and domiciled Europeans	..	+9	..	+54	..	-2	..	-5	..	-7	..	+1	..	-23	..	-2	..	-2	..	-13	..	-2	..	-6	..	+3	
(d) Sikhs . . . . .	..	..	..	..	..	..	..	..	..	-1	..	+2	..	-3	..	+7	..	..	..	-2	..	..	..	..	..	+12
(e) Indian Christians . . . . .	..	..	..	+2	..	..	..	+1	..	+2	..	..	..	+3	..	+4	..	..	..	+1	..	..	..	-2	..	+10
(f) Other classes . . . . .	..	+1	..	-2	..	..	..	-2	..	..	..	-3	..	..	..	-5	..	..	..	+1	..	..	..	..	..	-10
(g) Total . . . . .	..	+14	..	+68	..	-2	..	+2	..	-5	..	+13	..	-23	..	+10	..	+4	..	-22	..	..	..	-3	..	+55
11-03. GRAND TOTAL . . . . .	..	+10	..	+2	..	-2	..	..	..	-7	..	+11	..	-33	..	..	..	-1	..	-32	..	+2	..	-14	..	-88
12. Percentage of total—																											
12-01. Europeans	17.9	12.4	20.2	13.3	13.6	13.9	13.1	12.9	5.6	5.2	14.3	13.4	19.2	17.9	18.3	17.5	*20.5	19.0	18.7	18.4	20.3	33.3	12.3	11.3	*16.7	15.2	
12-02. Indians—																											
(a) Hindus	35.3	35.2	*24.3	26.4	20.4	20.3	32.0	32.9	20.3	21.7	40.2	41.3	24.3	24.4	17.7	18.0	*18.9	20.2	20.1	26.4	5.3	14.3	30.4	31.6	*26.3	27.6	
(b) Muslims	4.2	4.3	*2.5	2.5	6.3	6.9	3.6	3.7	2.0	1.3	1.3	2.3	2.5	3.1	2.6	2.3	..	0.6	14.2	14.3	10.5	9.5	1.7	2.2	4.3	5.0	
(c) Anglo-Indians and domiciled Europeans	26.3	41.9	43.3	54.6	57.2	56.4	33.9	33.3	55.3	55.0	41.4	40.5	52.2	52.3	47.4	47.3	*57.7	57.3	29.2	28.9	57.9	42.9	51.2	51.6	43.3	44.2	
(d) Sikhs	2.1	1.9	2.0	2.0	1.0	1.0	0.3	0.3	2.3	2.6	0.3	1.2	1.0	0.9	0.3	1.3	*0.6	0.6	7.4	7.4	..	..	..	..	2.2	2.3
(e) Indian Christians . . . . .	..	..	1.3	1.5	1.0	1.0	4.2	4.4	3.1	3.6	0.7	0.3	0.5	0.5	7.3	7.6	1.0	1.0	2.3	2.4	..	..	3.5	2.9	2.7	2.3
(f) Other classes	3.2	3.3	0.9	0.7	..	..	12.7	12.5	9.9	10.1	0.3	..	0.3	0.3	5.9	5.5	1.3	1.3	2.1	2.2	..	..	0.4	0.4	3.5	3.5

APPENDIX G—contd.

Statement showing the number of appointments made to the Superior Services on State Railways and of corresponding rank on Companies' Railways (Class I) excluding H. E. H. the Nizam's State and Jodhpur Railways during 1935-36—contd.

Departments.	No. of vacancies actually filled.	FILLED BY								Total.
		INDIANS.								
		Europeans.	Hindus.	Muslims.	Anglo-Indians and converted Europeans.	Sikhs.	Indian Christians.	Other classes.		
1	2	3	4	5	6	7	8	9	10	
Bengal and North-Western Railway.										
1. Agency	1	1	..	..	..	..	..	..	..	1
2. Accounts	1	..	..	..	..	..	..	..	..	1
3. Engineering	1	..	1	..	..	..	..	..	..	1
4. Transportation and Commercial . . . . .	..	..	..	..	..	..	..	..	..	..
5. Mechanical . . . . .	..	..	..	..	..	..	..	..	..	..
6. Stores . . . . .	..	..	..	..	..	..	..	..	..	..
7. Other Departments . . . . .	..	..	..	..	..	..	..	..	..	..
8. TOTAL—										
1935-36	8	1	2	..	..	..	..	..	..	8
1934-35	5	5	..	..	..	..	..	..	..	5
9. Percentage of Europeans to number of vacancies filled—										
1935-36	87.5	..	..	..	..	..	..	..	..	..
1934-35	100.0	..	..	..	..	..	..	..	..	..
10. Percentage of Indians to number of vacancies filled—										
1935-36	66.7	..	..	..	..	..	..	..	..	..
1934-35	0.00	..	..	..	..	..	..	..	..	..
Bengal Nagpur Railway.										
1. Agency	2	..	..	..	..	..	..	..	..	2
2. Accounts	1	..	..	..	..	..	..	..	..	1
3. Engineering	1	..	..	1	..	..	..	..	..	1
4. Transportation and Commercial . . . . .	..	..	..	..	..	..	..	..	..	..
5. Mechanical . . . . .	..	..	..	..	..	..	..	..	..	..
6. Stores	1	..	1	..	..	..	..	..	..	1
7. Other Departments	3	1	1	..	..	1	..	..	..	3
8. TOTAL—										
1935-36	7	1	2	1	2	1	..	..	..	7
1934-35	0	..	1	1	2	..	..	..	..	0
9. Percentage of Europeans to number of vacancies filled—										
1935-36	14.3	..	..	..	..	..	..	..	..	..
1934-35	0.00	..	..	..	..	..	..	..	..	..
10. Percentage of Indians to number of vacancies filled—										
1935-36	85.7	..	..	..	..	..	..	..	..	..
1934-35	100.0	..	..	..	..	..	..	..	..	..
Bombay, Baroda and Central India Railway.										
1. Agency	1	..	..	..	..	..	..	..	..	1
2. Accounts	1	..	..	..	..	..	..	..	..	1
3. Engineering	2	..	1	..	..	..	..	..	..	2
4. Transportation and Commercial	2	..	..	..	..	..	..	..	..	2
5. Mechanical	2	..	1	..	..	..	..	..	..	2
6. Stores	1	1	..	..	..	..	..	..	..	1
7. Other Departments . . . . .	..	..	..	..	..	..	..	..	..	..
8. TOTAL—										
1935-36	10	1	4	2	1	..	1	1	..	10
1934-35	9	1	5	2	..	..	..	..	..	9
9. Percentage of Europeans to number of vacancies filled—										
1935-36	10.0	..	..	..	..	..	..	..	..	..
1934-35	14.3	..	..	..	..	..	..	..	..	..
10. Percentage of Indians to number of vacancies filled—										
1935-36	90.0	..	..	..	..	..	..	..	..	..
1934-35	85.7	..	..	..	..	..	..	..	..	..

* Revised figures.

APPENDIX H.

Officers of the Railway Department (Railway Board) and attached offices on 31st March 1936.

The Hon'ble Sir MUHAMMAD ZAFRULLAH KHAN, Kt., Bar.-at-Law
Member of Council of the Governor-General.

Railway Board.

The Hon'ble Sir Guthrie Russell, Kt.	Chief Commissioner of Railways.
Mr. P. R. Rau	Financial Commissioner of Railways.
Mr. A. E. Tylden-Pattenson	Member (<i>on leave</i>).
Mr. J. C. Highet, F.C.H.	Member (<i>Offg.</i>).
Col. H. L. Woodhouse, M.C.	Director of Civil Engineering.
Mr. T. S. Sankara Aiyar, B.A., B.E.	Director of Finance.
Diwan Bahadur Mathra Das	Director of Establishment.
Mr. F. D'Souza	Director of Traffic.
Mr. E. Ingoldby	Director of Mechanical Engineering (<i>on leave</i>).
Mr. L. H. Kirkness, D.S.O., O.B.E., V.D.	Secretary.
Khan Bahadur Barkat Ali	Deputy Director, Finance.
Khan Sahib Z. H. Khan	Deputy Director, Establishment (I).
Mr. K. M. Hassan	Deputy Director, Establishment (II) (Temporary).
Mr. H. M. Jagtiani	Deputy Director, Traffic (Commercial) (<i>Offg.</i>).
Mr. R. C. Paranjoti, B.A., B.Sc. (London), A.M.I.L.E.	Deputy Director, Mechanical Engineering (<i>Offg.</i>).
Mr. J. W. C. Holt	Deputy Director, Traffic (Transportation) (<i>Offg.</i>).
Mr. E. C. Rundlett	Assistant Secretary.

Attached Officer.

Mr. C. W. Scott, O.B.E., D.F.C., B.Sc., I.F.S.	Joint Timber Advisory Officer, Railway and Defence Departments.
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Attached Offices.

Lt.-Col. H. W. Wagstaff, M.C., R.E.	Supervisor of Railway Labour.
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Central Standards Office for Railways.

Mr. J. M. D. Wrench, C.I.E.	Chief Controller of Standardization.
Mr. L. H. Swain	Deputy Chief Controller (Civil).
Mr. T. G. Creighton	Deputy Chief Controller (Mechanical).
Mr. T. T. Lambe	Assistant Chief Controller (Mechanical).
Mr. J. V. Stuart-Edwards	Assistant Chief Controller (Civil).
Mr. A. Vasudevan	Assistant Chief Controller (Specifications and Records).
Mr. W. E. Gelson	Officer on Special Duty (I).
Mr. E. A. Blackwood	Officer on Special Duty (II).

Central Publicity Bureau.

Mr. G. T. Tait, B.Sc.	Central Publicity Officer.
Mr. P. W. Sullivan	Assistant Publicity Officer.

Overseas Bureaux.

Mr. N. S. Sen	Resident Manager, Indian Railways Bureau, New York, U. S. A.
Mr. V. P. Bhandarkar	Manager, Indian Railways Bureau, London.

Office of the Controller of Railway Accounts.

Mr. V. S. Sundaram	Controller of Railway Accounts.
Mr. Rangbihari Lal	Deputy Controller of Railway Accounts.
Mr. K. Ubaidullah	Assistant Controller of Railway Accounts.