

GOVERNMENT OF INDIA
RAILWAY DEPARTMENT
(RAILWAY BOARD)

REPORT
BY THE
RAILWAY BOARD
ON
INDIAN RAILWAYS
FOR
1925-26

Volume I



CALCUTTA: GOVERNMENT OF INDIA
CENTRAL PUBLICATION BRANCH
1926

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A complete list of the papers can be obtained *gratis* from the Secretary, Railway Board. A few of the more important Technical papers are mentioned below:—

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Statistics of railway working expenditure	G. DEUCHARS.
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Rules for the preparation of railway projects
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The Hardinge Bridge over the Lower Ganges at Sara	SIR ROBERT GALES.
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Panoramic view of Simla with Railway Board's office in left foreground.

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CHAPTER I.

GENERAL ADMINISTRATION.

General Review.—This report deals with Indian Railways in the financial year 1925-26. The monsoon, an all important factor in railway working in India, was strong in northern India till August 15th, 1925, when it disappeared entirely from the north-west. It was somewhat weak in the Deccan throughout the season. Over the plains of India as a whole the aggregate rainfall was 4 per cent. below normal. The wheat crop depending very largely on the previous monsoon and winter rains was 10 per cent. below that in the previous year and there was little or no movement for export. This was the main reason for a drop in the goods earnings of the year by nearly 2 crores—a loss which was only partially made good by a general improvement in coaching traffic.

2. Great progress was made during the year in the many schemes of improvement directed towards the better working of traffic and increased capacity of the main trunk lines. The construction of new lines proceeded according to the programme laid down, and about 340 miles were added in the year. The work of surveying new projects and re-examining projects formerly surveyed but not constructed which had commenced in the previous year was continued intensively, and at the close of the year the construction projects in hand or about to be undertaken amounted to nearly 2,500 miles.

3. The following events during the year were perhaps of outstanding public interest. The transfer of the Great Indian Peninsula Railway to State management took place on 1st July 1925 and involved the disappearance of the Company which had managed the railway since 1853 when it opened the first section of railway constructed in India. The amalgamation of the East Indian Railway and Oudh and Rohilkhand Railway on the same date eliminated a long familiar name in Indian Railway History. The formal opening of the Khyber Railway by the Hon'ble Sir Charles Innes, Member of Council for Railways, in the unavoidable absence of His Excellency the Viceroy, took place on 2nd November 1925. The construction of this railway which traverses the ancient trade route through the Khyber Pass presented engineering difficulties of an unusual nature, and its completion within five years of commencement of work was looked upon as a notable achievement.

For the second time since the separation of Railway Finances from the General Finances the Railway Budget was presented to the Legislature in advance of the general budget and was considered and voted on by the Legislative Assembly separately.

A number of delegates from Indian Railways including official representatives of the Railway Board, attended the International Railway Conference held in London in June 1925.

4. **Termination of the contract with the Great Indian Peninsula Railway and the amalgamation of East Indian and Oudh and Rohilkhand Railways.**—Last year's report mentioned the amalgamation of the East Indian and Oudh and Rohilkhand Railways, the impending termination of the contract with the Great Indian Peninsula Railway Company, and the territorial adjustments which it was then proposed to make in the areas served by the East Indian, the Great Indian Peninsula and the North Western Railways.

The process of amalgamation of the East Indian and Oudh and Rohilkhand Railways was facilitated by the prior reorganisation of those railways on the Divisional System, a reference to which was made in last year's report. The Oudh and Rohilkhand Railway had been formed into two Divisions which on the amalgamation took their place in the combined system administered from Calcutta along with the four previously constituted East Indian Railway Divisions. In consequence of these arrangements the

amalgamation was carried out smoothly and without any dislocation of the ordinary business of the railway.

Arrangements made in advance in regard to the transfer of the staff and the examination of stores and other details enabled the Great Indian Peninsula Railway to be taken under the direct control of the Railway Board on 1st July 1925 with the same facility as was experienced in the case of the East Indian Railway on 1st January in that year.

Previously on the 1st April 1925 the Delhi-Ghaziabad Section of the East Indian Railway was transferred to the North Western Railway with running powers to Delhi for the East Indian Railway, and the North Western Railway also took over the working agency of the Delhi-Umballa-Kalka Railway. The Naini-Jubbulpore Section of the East Indian Railway was transferred to the Great Indian Peninsula Railway on the 1st October 1925.

As one result of the territorial adjustments referred to above there has been a large reduction in the number of junctions between different railway administrations in the north of India with corresponding economies of time and money in the matter of transfer of traffic and rolling stock from one administration to another. The number of junctions where two or more State-managed railway administrations meet has in fact been reduced from 18 to 7 by these adjustments. Each of the State-managed systems now serves a well defined geographical area, and certain advantages have been obtained in working from the fact that former competitive routes are now controlled by one administration within each area.

5. Powers of the Government of India in Railway Matters.—It had, for some time, been generally accepted that existing rules and orders imposed restraints on the powers of the Government of India which hampered them in the efficient management of railways; and both the Acworth and Inchcape Committees expressed their view that a revision of the powers reserved to the Secretary of State in respect of railway management was overdue. On a representation which the Government of India made to him in June 1925 the Secretary of State for India in Council has agreed to a large enhancement of financial powers in railway matters. Perhaps the most noteworthy point in the delegation is that the Government of India can now sanction capital expenditure on new and open lines up to Rs. 150 lakhs instead of Rs. 12½ lakhs on new lines and Rs. 20 lakhs on open lines, as previously. This extension of powers will greatly facilitate the conduct of railway business.

6. Purchase of the Delhi-Umballa-Kalka Railway.—During the year negotiations for the purchase of the Delhi-Umballa-Kalka Railway were brought to a successful issue. Under the contract with the Delhi-Umballa-Kalka Railway Company the Delhi-Umballa-Kalka Railway could only be acquired by the Secretary of State (on the 31st December 1926 or on the 31st December of any subsequent tenth year) on payment of a sum equal to twenty-five times fifty per cent. of the average yearly gross earnings of the railway during the five years preceding the purchase. It was obvious that, so long as money could only be borrowed at over 4 per cent., the acquisition of the railway under these conditions could not be financially profitable, while with increasing traffic the loss to the State from working the line for a remuneration much below the present operating cost would be bound to increase. Negotiations were therefore opened with the Board of Directors of the Delhi-Umballa-Kalka Railway Company for the purchase of the railway outside the terms of the contract, and eventually the line was purchased on the 31st March 1926 for a cash payment to the Company of £3,000,000 or about Rs. 4,00,00,000. Had the line been purchased under the terms of the contract the cost would have amounted to Rs. 687 lakhs.

The railway since its construction had been worked by the East Indian Railway Company, and as already stated the working agency was transferred to the North Western Railway at the commencement of the financial year. The purchase did not, therefore, involve any change in the arrangements under which the line was worked.

7. Separation of Audit and Accounts on Railways.—In furtherance of one of the proposals on which the Acworth Committee had laid considerable stress, namely that the responsibility for its own accounts should be placed on the Railway Department, the following Resolution was passed by the Legislative Assembly on the 15th September 1925 :—

“ This Assembly recommends to the Governor General in Council that with a view to improving the system of audit and accounting on railways, a reorganisation in the direction stated below be introduced forthwith as an experimental measure on the East Indian Railway—

- (a) The Auditor General shall, in future, be responsible for audit alone. He should no longer be required to maintain the accounts of the railways or to control their accounts staff. Such control should pass, not to the Railway Board as such, but to the Financial Commissioner of Railways. On each railway system the accounting staff will be under the orders of the Financial Commissioner of Railways for the purpose of appointments, promotions, transfers, etc., reporting, however, to the Financial Commissioner any differences that may arise from time to time between himself and the Agent. Such differences shall in due course be made available for inspection by the Standing Finance Committee for Railways.
- (b) The accounts staff under the Financial Commissioner of Railways shall perform duties practically identical with those hitherto undertaken on State-worked railways by the accounts and audit staff under the Auditor General. Where the latter exercised an audit properly so called, the new agency will conduct an “ internal check ”; but the nature and extent of the scrutiny will be approximately the same in both cases.
- (c) The Auditor General shall, in order to enable him to fulfil his statutory responsibilities, be provided with a sufficient staff to make a satisfactory audit of the work of the accounts offices.”

This Resolution was accepted by the Governor General in Council and the re-organisation contemplated therein has been introduced on the East Indian Railway with effect from the 1st December 1925 as an experimental measure.

8. Establishment of an experimental Clearing House for Indian Railways.—The question of establishing a Clearing House in India in order to simplify the present detailed method of apportionment among individual railways of the earnings from traffic carried over two or more lines has often been canvassed, and the Indian Railway Conference Association has had the matter under consideration at intervals of many years. Amongst the difficulties which had been found to stand in the way of adopting a similar method to that which has been evolved in Great Britain were the great distances of some parts of the railway systems from any centre which could be selected and the varieties in the methods of charging and rating in force on the different railways. The work of simplification of the Tariff has been slow and progress towards the conditions which would permit of the introduction of Clearing House methods as generally understood seemed to be indefinitely delayed. In the year under review however an Audit Officer was placed on special duty to test the practicability of a method, which he himself had suggested, of introducing the Clearing House principles of apportioning through traffic on Indian railways.

In the course of this experiment an entirely new method was evolved which promises to secure the same results as the existing system with a substantial reduction in the cost of clerical establishment. The new method has been put into force in regard to the apportionment of the traffic between two important State-worked railways and will be extended if the results of the experiment justify it.

9. Railways and the Legislature.—In the Council of State and the Legislative Assembly continued and lively interest has been shown in the working of railways. Out of 3,836 questions asked 1,022 or over 26 per cent. referred to railway subjects. The progress of Indianisation, the arrangements for recruiting and training employes, matters affecting the well-being of the staff and of lower class passengers, reduction of rates and fares, and the representations of the various communities in the railway services were the main subjects on which information was sought.

10. Railway Budget.—In accordance with the procedure which the separation of railway finance from the general finance of the country rendered possible, the railway budget was introduced on the 18th of February 1926, separately from, and in advance of, the general budget. Before presentation to the Legislature, the railway budget was discussed in great detail with the Standing Finance Committee for Railways. In both Houses a separate day was allotted for the general discussion of the railway budget, and in the Assembly 4 days (February 24th to 27th) were set aside for the discussion of the demands for grants.

The budget on the whole was well received. In the course of the discussion on the demands for grants, criticism was mainly directed against the proposal to extend the concessions granted to State Railway Officers in accordance with the recommendations of Lord Lee's Commission to Company-managed railways, the non-appointment of an Indian to the Railway Board, the progress made with the Indianisation of the services, provision of facilities for lower class passengers and the appointment of a Rates Advisory Committee instead of a Rates Tribunal. Among other matters discussed in the course of voting on demands were: grievances of railway employes, further reduction of coal freights, methods of preventing railway accidents, powers of the Public Accounts Committee, the stores purchase policy and claims for loss of or damage to goods.

Among the motions for reduction which were carried, the most important were the motion for omitting the demand for the Railway Board and the motion for reducing the demand for working expenses by Rs. 20 lakhs. The arguments in support of the first motion were based on various grounds, such as, the slow progress of Indianisation, the extension of the Lee Concessions to officers of Company-managed railways, the non-appointment of an Indian to the Railway Board. The second motion was definitely directed against the extension of the concessions referred to above to officers of the Company-managed railways. Both these demands were restored by the Governor General in Council. Many other nominal reductions under various demands were moved to draw attention to particular matters and, apart from those already mentioned, the only other important matter was the demand for a further reduction of third class railway fares.

Only the first 4 of the 15 demands for grants were discussed in detail in the Assembly, the rest being passed without discussion on the last day allotted for discussion of the demands.

11. Central Advisory Council for Railways.—During the year 1925-26 two meetings of the Central Advisory Council were held, one in the Simla Session of the Legislature on the 22nd of August 1925 and the other in the Delhi Session on the 23rd of March 1926.

The August meeting was devoted to a discussion of the Railway Board's scheme on the Recruitment and Training of Railway Officers in India with reference to the following services:—

- (i) Transportation.
- (ii) Civil Engineering.
- (iii) Mechanical Engineering.
- (iv) Stores.

As a result of that discussion and the subsequent discussion which the Railway Board had with the Agents of State-managed Railways, the scheme

AJMERE GATE ROAD OVERBRIDGE AT DELHI, NORTH WESTERN RAILWAY.



A view of the completed bridge.

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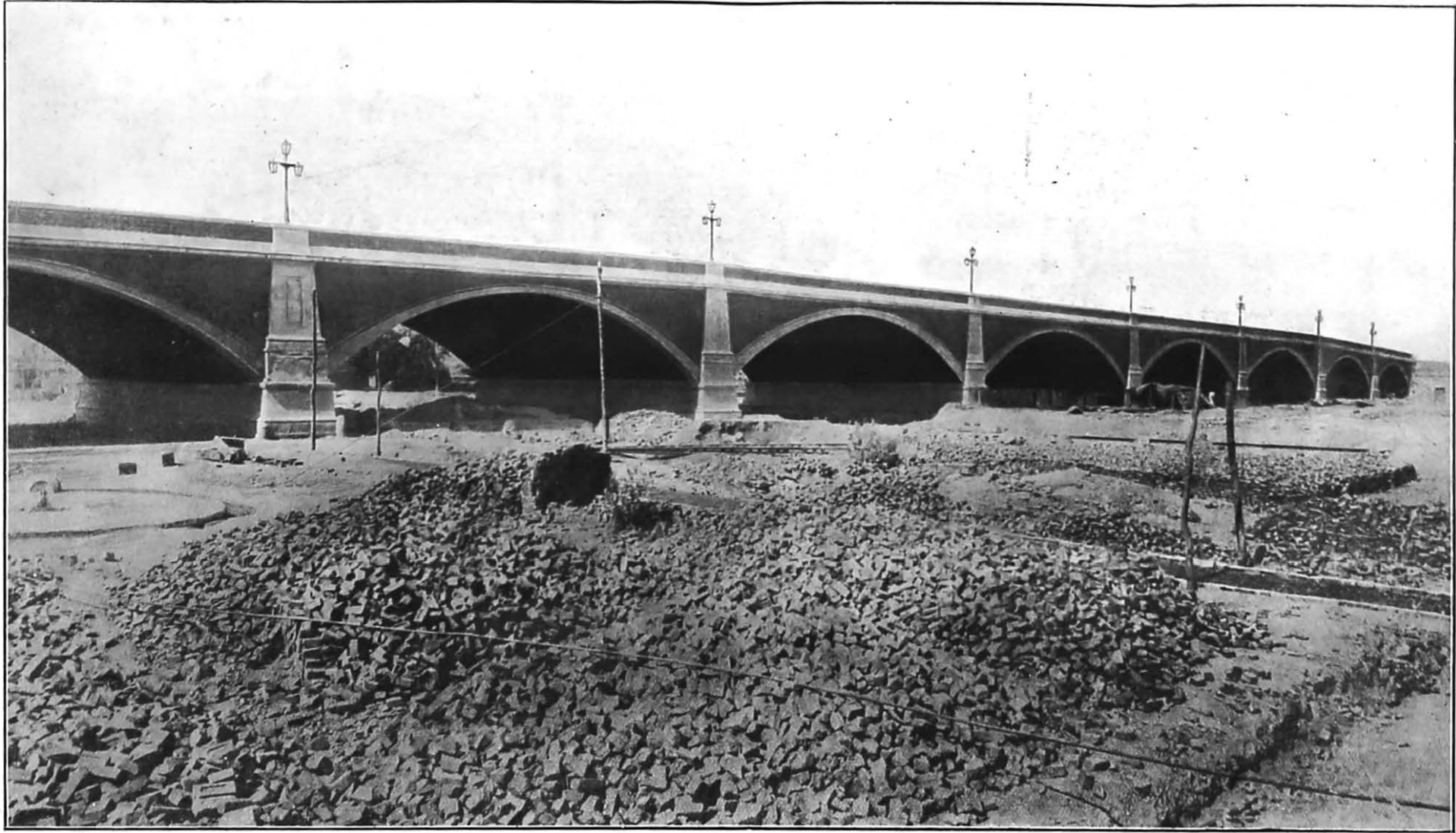
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A view of the completed bridge.

was expanded and many of the suggestions made by the Central Advisory Council were incorporated in it. It was submitted to the Secretary of State for his approval in November 1925.

In the March meeting the Central Advisory Council discussed a proposal to revise the State Railway Provident Fund Rules, in accordance with the provisions of the amended Provident Fund Act, relating to the forfeiture of bonus. The revision was agreed to by the Council.

The other subject discussed was that relating to the proposal to amend the Indian Railways Act to make travelling without tickets or with improper tickets a cognizable offence. The Chairman explained to the Members of the Central Advisory Council that in spite of the steps which had been taken to check this evil, over a million passengers had been detected travelling without tickets in the first six months of the year 1925. Various remedial measures were suggested, notably one involving legislation. It was decided however to postpone further consideration till the next meeting of the Council and meanwhile to circulate the suggestions made by Members of the Central Advisory Council to the Railway Administrations for consideration.

12. Medical and sanitary arrangements on Indian Railways.—It was mentioned in last year's Report that Colonel Needham, C.I.E., D.S.O., J.M.S., had been placed on special duty to examine the medical and sanitary arrangements on the North Western Railway with a view to placing them on a more efficient basis. He has now completed his investigation and submitted his report. The scheme advocates the creation of a separate medical department for the Railway in place of the present system which is worked through the agency of the Provincial medical organisations. It is under the consideration of the Railway Board.

The question of affording further encouragement to the staff to acquire a knowledge of first-aid and efficiency in ambulance work has been under the consideration of the Railway Board. They appreciate fully the value of such training in the case of railway accidents and the obligation which rests upon railway administrations in their relation with the public and their own staff so to develop their organisations as to ensure that staff trained in such work are available on running trains, at large stations and in workshops. The matter has been referred to the Standing Committee of Railway Medical Officers, a Committee recently established with the object of advising the Railway Board on questions relating to the health of the staff, methods of sanitation, etc., and their recommendations are awaited.

Another matter which is also receiving the attention of the Railway Board is the adoption of a uniform hospital policy on Indian Railways and the expansion of facilities for indoor treatment to railway employes.

13. Rates Advisory Committee.—In their terms of reference the Acworth Committee were directed to report *inter alia* "whether the present system of control by Government of rates and fares and the machinery for deciding disputes between Railways and trades are satisfactory, and if not to advise what modifications are desirable." The Committee recommended the establishment of a Rates Tribunal to adjudicate upon disputes between Railways and the public in the matter of rates and fares levied by the former. After careful consideration in consultation with the Central Advisory Council for Railways it has been decided with the sanction of the Secretary of State to set up a Rates Advisory Committee consisting of a President, one Member representative of Commercial interests and one Member representative of Railway interests. The Committee is expected to be able to take up its duties by the beginning of April 1926 and its functions will be to investigate and report to the Government of India on the following subjects:—

- (1) Complaints of undue preference [Section 42 (2) of the Indian Railways Act 1890].
- (2) Complaints that rates are unreasonable in themselves.
- (3) Complaints or disputes in respect of terminals (Section 46 of the Railways Act).

- (4) The reasonableness or otherwise of any conditions as to the packing of article specially liable to damage in transit or liable to cause damage to other merchandise.
- (5) Complaints in respect of conditions as to packing attached to a rate.
- (6) Complaints that Railway Companies do not fulfil their obligations to provide reasonable facilities under Section 42 (3) of the Indian Railways Act.

14. Standing Finance Committee.—The Standing Finance Committee for Railways met 14 times in the course of the year. The first two meetings were held at Bombay on the 29th and 30th June 1925. At these meetings the Committee discussed the question of the re-organisation of audit and accounts on railways, considered the Railway Board's observations on Mr. Rama Ayyangar's articles on railway expenditure, and discussed the question of the adjustments in the accounts to be made in connection with the revaluation of stores.

The next meeting was held at Calcutta on the 20th July 1925 where the Committee considered the rules proposed to be laid down by the Railway Board relating to English grants and the certification of indents for imported stores. They also discussed the cost of the super audit establishment in connection with the re-organisation of audit and accounts, and agreed to the creation of the appointment of Director of Finance on the Railway Board.

The 4th and 5th meetings were held at Simla on the 4th and 11th September 1925. The Committee examined at these meetings proposals for various important items of new construction, such as the electrification of the Great Indian Peninsula Railway, the provision of railway facilities for New Delhi, and the remodelling of the Victoria Terminus. They also considered the proposals of the Railway Board for the reduction in the cost of establishment of the Railway Board.

The Committee met 3 times in November—on the 12th, 13th and 14th—in Calcutta, when they considered certain proposals for new works, in addition to the quinquennial programmes of the more important railways, as also the general question of the programme of capital expenditure and expenditure from the depreciation fund. They also discussed and approved of the proposal to carry out an experiment to ascertain the feasibility of establishing a Clearing House for Indian Railways.

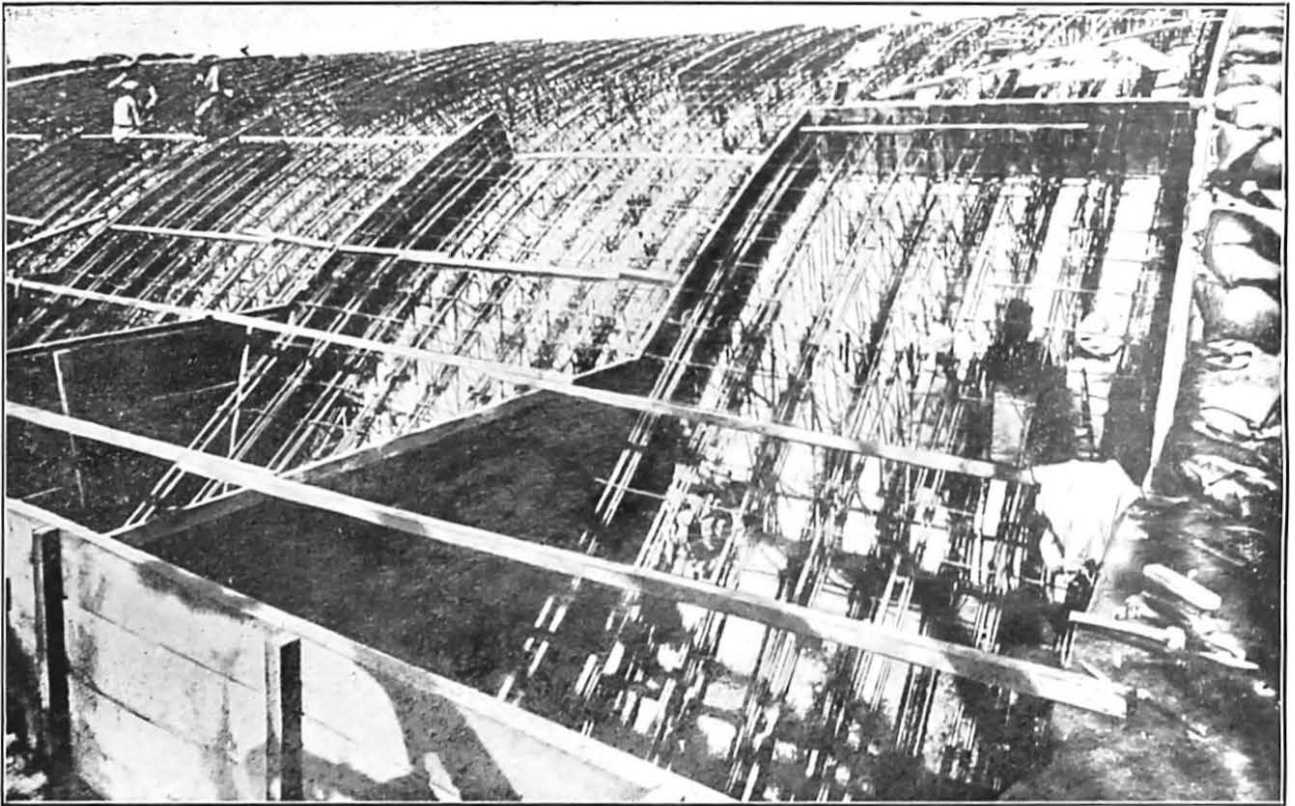
The Committee met next in Bombay on the 7th and 8th December, where they considered the quinquennial programmes of the railways left over from the November meeting, and discussed the introduction of an improved overland mail service between Bombay and Calcutta.

The next meetings of the Committee were in Delhi on the 18th, 19th and 20th January 1926, when they discussed the budget proposals of the Railway Board for the year 1926-27, and the proposals for supplementary grants for the year 1925-26. They also considered the question of the reduction in passenger fares and expressed their gratification at the start that had been made in the reduction of rates and fares.

The last meeting of the Committee during the year 1925-26 was held at Delhi on the 17th February. The questions discussed included the construction of new lines and the purchase and dismantlement of the Arakan Light Railway.

15. Meetings with Agents and visits to Local Governments and Railways.—The Railway Board held general meetings in October 1925 and March 1926 with the Agents of the principal railways for the discussion of important subjects. During the year 21 visits were paid either by the Chief Commissioner or a Member of the Board to Local Governments and 51 to Railway headquarters. In addition several Agents paid individual visits to the Railway Board. Close contact has thus been maintained by the Railway Board with the Local Governments, the Railway Administrations and public bodies, such as Chambers of Commerce who are invited beforehand to bring forward matters of interest for discussion. In the course of these visits the

AJMERE GATE ROAD OVERBRIDGE AT DELHI, NORTH WESTERN RAILWAY.



Arch skeleton being divided up into sections by means of wooden bulk heads for convenience of casting.

Chief Commissioner and the Members have travelled on inspection over most of the main lines of the principal railways in company with the Agents and principal officers.

16. Indian Railway Conference Association.—At the 1925 session of the Indian Railway Conference Association the question of the future functions and activities of the Association was taken into consideration at the instance of the Railway Board. In a letter to the Association the Railway Board had invited attention to the fact that as a result of the Great Indian Peninsula and East Indian Railways being brought under State management, most of the larger junctions in India would be those between State railways, and that the simplification resulting from the new configuration would eliminate much of the work of the Conference in relation to the State-managed railways. They pointed out further that it was necessary for the State as Owner and Manager of the majority of the broad gauge railways to take direct charge of the standardisation of equipment, such as locomotives, rolling stock, track and bridges, subjects which had been dealt with from time to time by the Conference Association. On the other hand it was pointed out that there were many directions in which the Railway Conference Association could be of great assistance both to the State and to Railways as a whole, and it was suggested that the Association should consider the advisability of defining the range of its future activities in view of the altered conditions referred to. The whole question was discussed by the Conference at their meeting in October 1925 and again at a Special meeting held in March 1926 and as a result of their deliberations a number of important changes were decided on. The principle underlying these changes was the recognition of the separate functions of the Association acting on the one hand as a body dealing with interchange of traffic and on the other as a medium for the interchange of ideas on technical railway subjects. Of the changes decided on the principal were the formation of an Operating Committee for Interchange to deal with all questions affecting the movement and interchange of rolling stock and cognate matters; the abolition of the Locomotive and Carriage Superintendents' Committee and the formation of a Mechanical Section and an Engineering Section to report in an advisory capacity on questions relating to Mechanical and Engineering subjects. The formation of other sections to deal with statistical, administrative, stores and other questions was also considered but it was decided to hold these in abeyance until experience had been gained of the working of the Mechanical and Engineering Sections. Minor alterations were also made in the rules of the Association with a view to obtaining decisions more expeditiously than has hitherto been possible.

The Indian Railway Conference Association has a long and useful history behind it and it is believed that the extension of its functions in the manner indicated will admit of a more intensive and useful study of the technical problems of Indian Railways.

CHAPTER II,

FINANCIAL RESULTS OF THE YEAR'S WORKING.

17. The principal results of the working of railways are summarised in the table below :—

—	Class I Railways.	Other Railways.	Total of all Railways.	
(i) Total route mileage open for traffic.	1924-25	34,425	3,845	38,270
	1925-26	34,636	3,883	38,579
(ii) Number of passengers originating.	1924-25	543,982,100	32,363,300	576,345,400
	1925-26	564,708,000	34,326,800	599,034,800
(iii) Number of passenger miles.	1924-25	19,102,445,000	807,905,000	19,910,350,000
	1925-26	19,512,534,000	818,899,000	20,331,433,000
(iv) Tons originating	1924-25	74,628,000	3,168,000	77,796,000
	1925-26	76,416,000	3,201,000	79,617,000
(v) Number of ton miles	1924-25	21,063,684,000	205,007,000	21,268,691,000
	1925-26	19,661,723,000	237,156,000	19,898,879,000

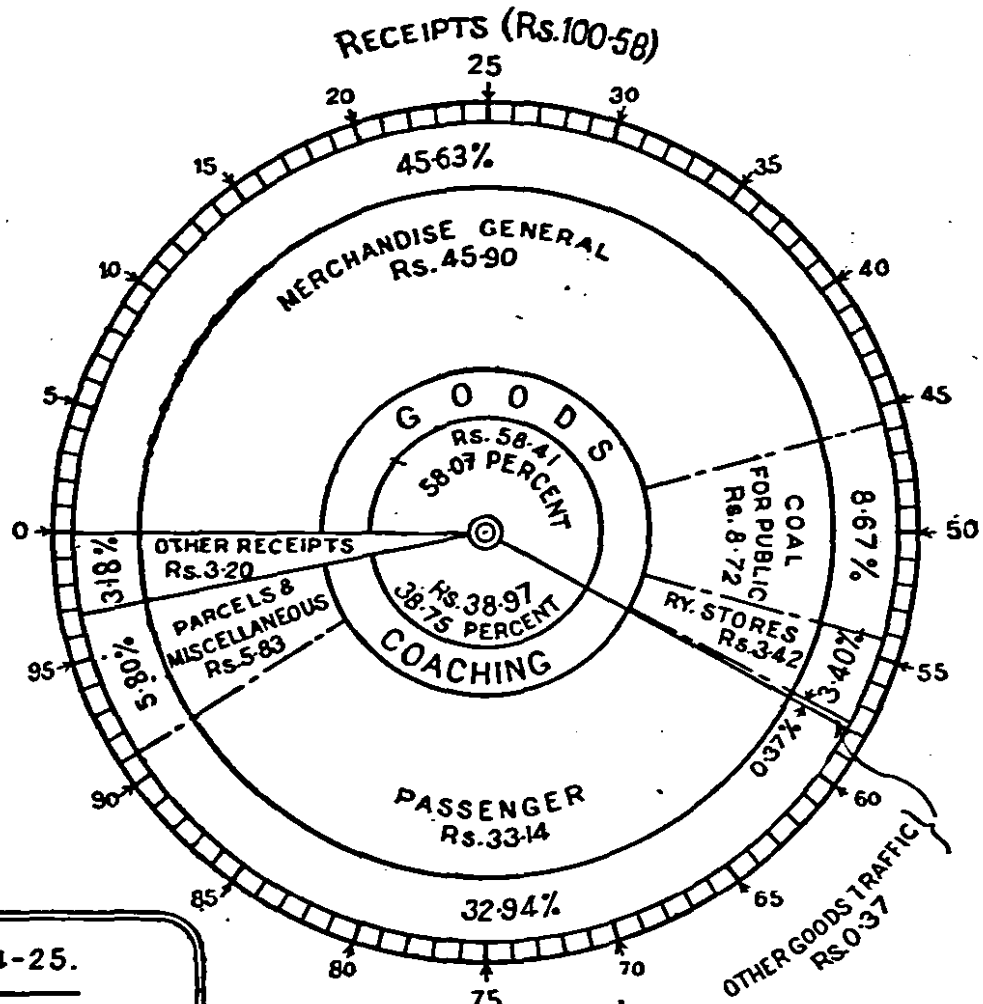
18. **Trade Review.**—The chief feature of the monsoon of 1925 was its early incidence in North-West India and its complete withdrawal from that area after the middle of August. Averaged over the plains of India, the rainfall during the monsoon period was in defect by 4 per cent. Taking the year as a whole, the rainfall was within 25 per cent. of the normal except in Orissa and the Madras Coast North where it was in moderate excess and in Baluchistan, Sind, Rajputana, and Gujrat where it was in large defect.

Exports of Indian merchandise which reached the record figure of Rs. 385 crores in 1924-25 fell to Rs. 375 crores in 1925-26. The exports of raw cotton during the year increased from 594,000 tons in the preceding year to 745,000 tons although there was a slight decrease in production, while the value of cotton manufactures exported showed a decrease of Rs. 1,63 lakhs chiefly on account of reduced exports of cotton yarn and piecegoods. The outturn of the jute crop was 3 per cent. less than in 1924-25 and the exports of raw jute dropped by 49,000 tons to 647,000 tons but higher prices accounted for an increase in value of Rs. 9 crores. The yield of the wheat crop of 1924-25 which was mostly moved during 1925-26 was less than that of the preceding year by 10 per cent. and the exports of wheat fell from 1,112,000 tons in 1924-25 to 212,000 tons in 1925-26, while the exports of rice, notwithstanding a small decrease in production, rose by 276,000 tons to 2,577,000 tons. The yield of the winter oilseeds crop was better than in the preceding year, but the exports declined slightly.

Imports of private merchandise also showed a decrease of Rs. 20½ crores to Rs. 226 crores, the largest decrease being in cotton yarn and manufac-

RAILWAY RECEIPTS AND EXPENDITURE ON STATE OWNED LINES IN INDIA IN 1925-26.

FIGURES IN CRORES.

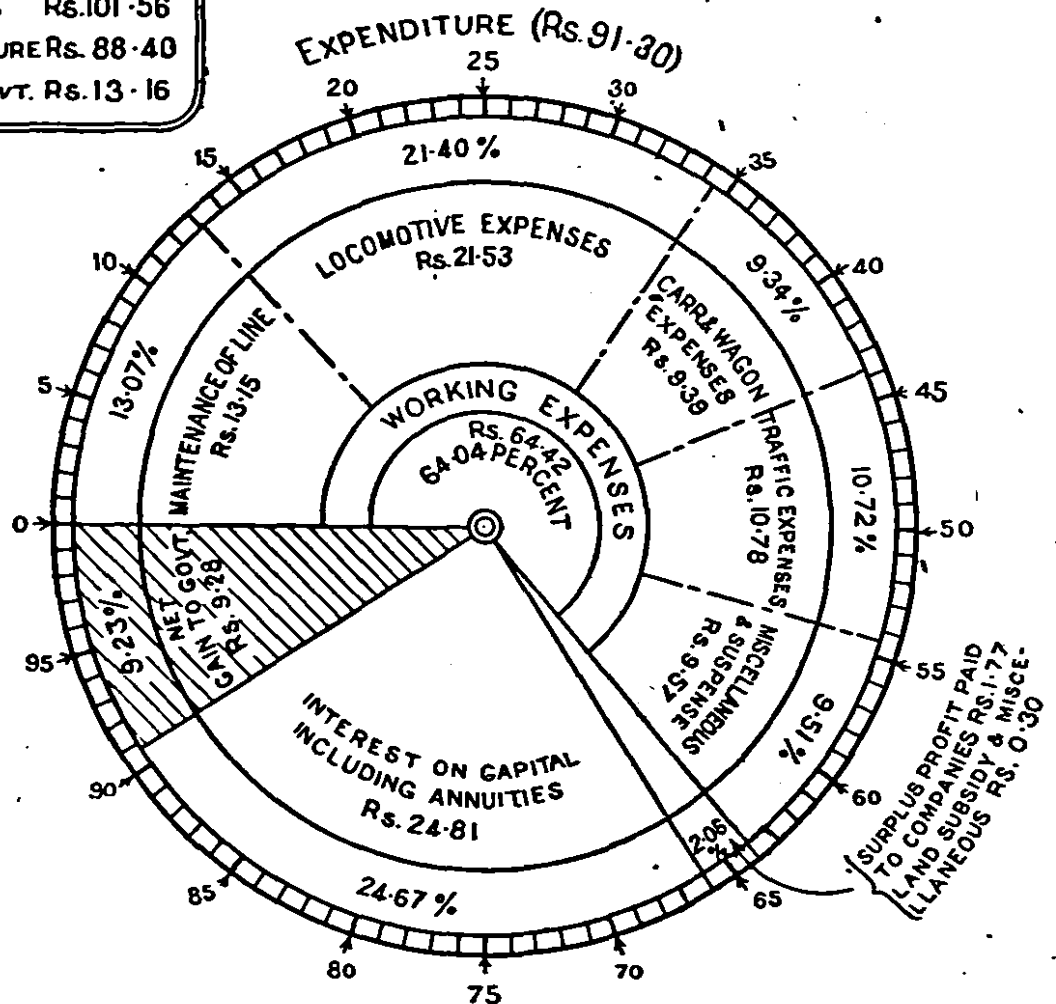


IN 1924-25.

TOTAL RECEIPTS Rs.101.56

TOTAL EXPENDITURE Rs. 88.40

NET GAIN TO GOVT. Rs.13.16



tures (Rs. 16½ crores), sugar (Rs. 5 crores), iron and steel and aniline and alizarine dyes (Rs. 1 crore each). There were, however, increases in the imports of motor vehicles (Rs. 1.24 crores) and mineral oil (Rs. 70 lakhs). The visible balance of trade as measured by statistics of merchandise and treasure was Rs. 109 crores in favour of India as compared with Rs. 61 crores a year ago.

19. **Financial Results of working.**—The record of 1925-26 is again one of considerable railway activity in India. The beneficial effects of the convention inaugurating the separation of railway from general finances, which had been established a few months earlier, began to be reflected in the operations of the year. -

The following table exhibits the financial results of working the railways in 1925-26 as compared with the year 1924-25. It embraces the transactions of those railways only which are known as "Budget Lines" administered from funds under the direct control of the Central Government:—

		(Figures in thousands.)	
		1924-25.	1925-26.
		Rs.	Rs.
(i)	(a) Gross earnings	1,01,04,56	99,70,00
	(b) Interest on Depreciation and Reserve Funds	21,29	53,39
	(c) Surplus profits from subsidised companies railways	30,16	35,07
TOTAL RECEIPTS		1,01,56,01	1,00,58,46
(ii)	(a) Working expenses including Depreciation	62,90,78	64,41,96
	(b) Surplus profits paid to Companies	1,42,28	1,77,42
	(c) Interest	23,90,15	24,81,12
	(d) Land and subsidy to Companies	3,09	4,38
	(e) Miscellaneous	13,22	25,93
TOTAL EXPENDITURE		88,39,52	91,30,81
(iii)	Net gain	13,16,49	9,27,65
(iv)	(a) Contribution from railway to general revenues	6,78,42	5,48,80
	(b) Surplus railway revenues transferred to Railway Reserve Fund	6,38,07	3,78,85
TOTAL		13,16,49	9,27,65

It will be observed from the foregoing table that the net gain to the Central Government from its Budget Lines after meeting all charges exceeded 9½ crores in 1925-26, of which nearly 5½ crores were appropriated by General Revenues in terms of the convention, while the balance was transferred to the Railway Reserve Fund.

20. In 1925-26 there was a falling off of Rs. 3,88,84,000 in the net gain from the working of State-owned Railways due principally to a decline in earnings of Rs. 1,34,56,000, an increase of Rs. 1,51,18,000 in working expenses and to enhanced interest charges of Rs. 90,97,000.

21. The decrease of 134.56 lakhs in gross earnings is chiefly due to a falling off in earnings from Goods traffic on the North Western, East Indian and Great Indian Peninsula Railways.

The decline in the earnings on the North Western Railway is due to the heavy drop in the export of grains through Karachi. This loss of long distance traffic is reflected in the North Western Railway figures of ton miles of general merchandise which dropped from 2,412 millions in 1924-25 to 1,648 millions in 1925-26 and it is the falling off in this class of traffic that has brought about the large decrease in ton miles on Indian Railways, notwithstanding an increase in the number of tons carried.

The earnings of the East Indian Railway also show a falling off, but this is principally due to the transfer of the Delhi-Umballa-Kalka Railway to the North Western Railway from the 1st April 1925, and of the Naini-Jubbulpore Section to the Great Indian Peninsula Railway on the 1st October 1925.

22. The rise of Rs. 151.18 lakhs in working expenses is not real. The working expenses of 1924-25 benefitted to the extent of Rs. 140.96 lakhs on account of the Privy Council decision exempting railway companies from the payment of customs duty on stores imported by them for the working of State Railways and of Rs. 38.29 lakhs on account of the adjustment by credit to Working Expenses and debit to the Railway Reserve of the difference between the book and the market value of stores. This adjustment was effected in accordance with a decision of the Legislative Assembly. If these adventitious gains are disregarded, the working expenses of 1924-25 would have been Rs. 61.70.03 lakhs against Rs. 62.90.78 lakhs shown as having been incurred in 1924-25. The working expenses of 1925-26 are Rs. 64,41.96 lakhs or a decrease of Rs. 28.07 lakhs when compared with the real expenditure of 1924-25.

23. The following table compares the real expenditure of 1924-25 and 1925-26 under the major heads for which grants are voted by the Assembly:—

(Figures in thousands.)

	1924-25.	1925-26.	Difference.
	Rs.	Rs.	Rs.
1. General Administration	12,32,70	12,95,95	+ 63,25
2. Repairs and Maintenance and Operation	45,72,78	44,37,37	—1,35,41
3. Appropriation to Depreciation Fund	10,35,00	10,66,88	+ 31,88
TOTAL	68,40,48	68,00,20	—40,28
<i>Deduct worked lines</i>	3,70,45	3,58,24	—12,21
TOTAL WORKING EXPENSES	64,70,03	64,41,96	—28,07

The increase of Rs. 63.25 lakhs under General Administrations is partly due to the larger establishments employed consequent on the addition to open mileage of railways, partly to annual increments to the staff, and to the payment of the Lee Commission Concessions to the officers of the Company-worked Railways and the East Indian and Great Indian Peninsula Railways with retrospective effect from the 1st April 1924

The reduction of Rs. 135.41 lakhs under "Repairs and Maintenance and Operation" is due principally to the following:—

- (a) Reduced operating expenses consequent on the falling off in the amount of Goods traffic handled;
- (b) Less expenditure on repairs; partly due to the enforced suspension of work in the North-Western Railway Workshops consequent on the labour unrest.
- (c) General economies effected in operating expenditure and in charges for maintenance and repairs.

24. The contribution of Rs. 5,48,80 lakhs to General Revenues is arrived at as follows:—

(Figures in thousands of rupees.)

(Based on actuals of penultimate year 1923-24).

	Rs.	Rs.
1. 1 per cent. on capital of 5,40,38,96 at charge—Commercial lines . . . . .	...	5,40,39
2. (i) Receipts—		
Gross traffic receipts—Commercial lines	92,94,37	
Subsidised Companies—Share of surplus profits	23,64	
	93,18,01	
(ii) Charges—		
Working Expenses—Commercial lines	59,15,60	
Indian States and Railway Companies' share of surplus profits	1,14,46	
Interest—		
On capital at charge—Commercial lines	19,66,80	
On capital contributed by Indian States and Companies	3,09,94	
Land and subsidy	5,40	
Miscellaneous Railway Expenditure	15,26	
Contribution at 1 per cent. on capital at charge—Commercial lines	5,40,39	
	88,67,85	
(iii) Surplus . . . . .	...	4,50,16
(iv) Contribution of one-fifth of surplus . . . . .	...	90,03
3. (i) Total contribution from railway revenues (1 plus 2 (iv)) . . . . .	...	6,30,42
<i>Deduct</i> —Loss on strategic lines—		
(i) Interest on Capital of 26,22,58	1,02,37	
(ii) Loss in working	18,67	
	1,21,04	
(iii) Net payment due from railway to General Revenues in 1925-26 . . . . .	...	5,09,38

(Figures in thousands of rupees.)

	Rs.	Rs.
4. Add $\frac{1}{2}$ of excess over 3 crores of surplus in 1925-26 arrived at as follows :—		
(i) Total receipts (including Government share of surplus profits from subsidized companies and interest on Depreciation and Reserve Fund balances)	1,00,58,46	
(ii) Total charges (including surplus profits paid to companies interests and other miscellaneous charges)	91,90,81	
(iii) Total gain from Railways during 1925-26 . . . . .	...	9,27,65
(iv) Excess of gain over contribution 4 (iii)—3 (iii) . . . . .	...	4,18,27
(v) Contribution equal to $\frac{1}{2}$ of excess over 3 crores . . . . .	...	39,42
5. Total contribution to General Revenues during 1925-26, 3 (iii) plus 4 (v) . . . . .	...	5,48,80

25. A word of explanation may be added here as to the wide difference in the capital at charge figures of 1923-24, 1924-25 and 1925-26 adopted in calculating the contributions to General Revenues. The figures are as follows :—

1923-24	5,40 crores.
1924-25	5,81 „
1925-26	6,01 „

The increase in the figures of each succeeding year is not due merely to the increased capital outlay of the year over the preceding year, but is accounted for partly by the liabilities taken over by the State on the assumption of direct State management of the East Indian and Great Indian Peninsula Railways which amounted to about 27 crores in 1924-25 and 5 $\frac{1}{2}$ crores in 1925-26.

26. The return during 1925-26 on the capital at charge of the Budget Lines was 5.31 per cent., which is an appreciable improvement over the return of 5.01 per cent. realised in 1913-14. It also compares very favourably with the return in more recent years excluding the years affected by the war, the percentage in 1921-22 being 2.64 per cent. only, rising to 4.38 per cent. in 1922-23 and 5.24 per cent. in 1923-24. The return for 1924-25 was as high as 5.85 per cent.

27. These percentages are calculated on the total capital at charge of both Commercial and Strategic Lines. The latter being unremunerative adversely affect the financial returns. Excluding the figures relating to those lines the net returns on the capital at charge of the commercial lines will be slightly better. Under the separation convention the loss on the working of the strategic lines, which includes the interest on the capital at charge of these lines, is borne by the Central Government. The reason for the lower percentage 5.31 per cent. as compared with last year is principally due to the falling off in goods traffic and to the working expenses of 1924-25 including the special credits of Rs. 179 lakhs referred to in paragraphs 21 and 22.

28. The institution of the depreciation fund has assured to Railway administrations a definite source out of which the expenditure on replacements and renewals can be met. without the uncertainty of sufficiency of funds which was a feature of the past. The table below compares by individual railways the charges to working expenses on account of deprecia-

tion and the actual expenditure on replacements and renewals during 1924-25 and 1925-26 :—

(Figures in thousands of Rupees).

Railways.	Credit to Depreciation Fund by debit to Revenue on account of Depreciation in 1924-25.	Amount spent on Replacements and Renewals and charged to Depreciation Fund in 1924-25.	Credit to Depreciation Fund by debit to Revenue on account of depreciation in 1925-26.	Amount spent on Replacements and Renewals and charged to Depreciation Fund in 1925-26.
(1)	(2)	(3)	(4)	(5)
STATE LINES WORKED BY STATE—				
North-Western	2,11,97	1,25,87	2,23,09	1,62,20
Eastern Bengal	73,27	50,78	75,73	35,05
East Indian	2,00,54	1,83,60	1,92,43	1,31,28
Great Indian Peninsula .	1,35,58	92,39	1,45,96	1,08,19
STATE LINES WORKED BY COMPANIES—				
Bengal Nagpur	1,02,70	41,26	1,09,54	42,02
Bombay, Baroda and Central India.	1,07,04	70,28	1,09,85	1,16,86
Burma	41,67	32,90	42,95	41,52
Madras and Southern Mahratta.	71,08	69,48	74,02	85,35
South Indian	46,56	17,13	47,26	48,22
Other Railways	44,59	45,32	46,05	26,71
TOTAL	10,35,00	7,29,01	10,66,88	7,98,40

29. An analysis of the Financial results of the year of individual railways is given in the statement below :—

Financial results of the working of Railways owned by the State.

(Figures in thousands of Rupees).

Railways.	Year.	Capital at charge.	Deduct amount of capital contributed by Companies and Indian States.	Net Government Capital at charge.	Receipts.	Working Expenses including Depreciation.	Net Receipts.	Percentage of Net Receipts on Capital at charge.	CHARGES AGAINST NET REVENUE RECEIPTS.		Gain.	Loss.	In great charges included in col. 11 but excluding Sinking Fund and Annuity charges involved in redemption of Capital.	RESULTANT.	
									Payment on account of share of Surplus Profits.	Interest Annuity and Sinking Fund charges.				Gain.	Loss.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<i>State Lines worked by State.</i>															
North Western	1923-24	1,10,84,37	...	1,10,84,37	15,18,11	11,00,99	4,17,12	3.8	...	4,46,21	...	29,09	4,15,02	2,06	...
	1924-25	1,12,64,09	..	1,12,64,09	16,99,22	11,48,21	5,51,01	4.9	...	4,22,74	1,28,27	...	4,22,74	1,28,27	...
	1925-26	1,15,92,75	...	1,15,92,75	15,42,39	10,76,22	4,66,17	4.0	...	4,37,08	29,09	...	4,37,08	20,09	...
Oudh and Rohilkhand	1923-24	31,41,87	...	31,41,87	3,63,06	2,37,50	1,25,56	4.0	...	1,06,36	19,20	..	1,06,36	19,20	...
	1924-25	32,39,70	...	32,39,70	3,68,30	2,72,30	96,00	2.0	...	1,07,25	...	11,25	1,07,25	...	11,25
	1925-26*	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eastern Bengal	1923-24	43,43,71	...	43,43,71	5,34,78	3,95,74	1,39,04	3.2	...	1,62,25	...	23,22	1,55,56	...	10,52
	1924-25	43,64,68	...	43,64,68	5,99,16	4,26,71	1,72,45	3.9	...	1,56,07	16,38	..	1,55,07	16,38	...
	1925-26	44,69,27	...	44,69,27	6,33,87	4,64,18	1,69,69	3.8	...	1,59,00	10,09	...	1,59,60	10,09	...
East Indian	1923-24	97,27,06	27,65,99	69,60,07	16,23,67	9,98,40	6,25,27	6.4	7.41	4,57,61	1,60,25	...	3,92,48	2,35,33	..
	1924-25	98,97,78	...	98,97,78	17,22,27	10,30,54	6,91,73	7.0	10.05	3,80,75	3,00,93	...	3,80,75	3,00,93	...
	1925-26	1,29,63,27	...	1,29,63,27	19,92,11	12,22,71	7,09,40	5.9	...	4,85,26	1,81,14	...	4,85,26	2,84,14	...
Great Indian Peninsula	1923-24	1,00,40,27	4,87,97	95,52,30	14,61,05	9,50,03	4,91,02	4.9	...	4,25,82	65,20	...	3,36,41	1,54,81	...
	1924-25	1,01,40,79	4,87,97	96,53,82	15,29,68	9,55,00	5,74,68	5.6	4.46	3,28,08	2,42,14	...	3,28,08	2,42,14	...
	1925-26	1,08,41,07	...	1,08,41,07	14,79,90	10,68,03	4,11,87	3.8	12.51	3,51,96	47,37	...	3,51,93	47,37	...

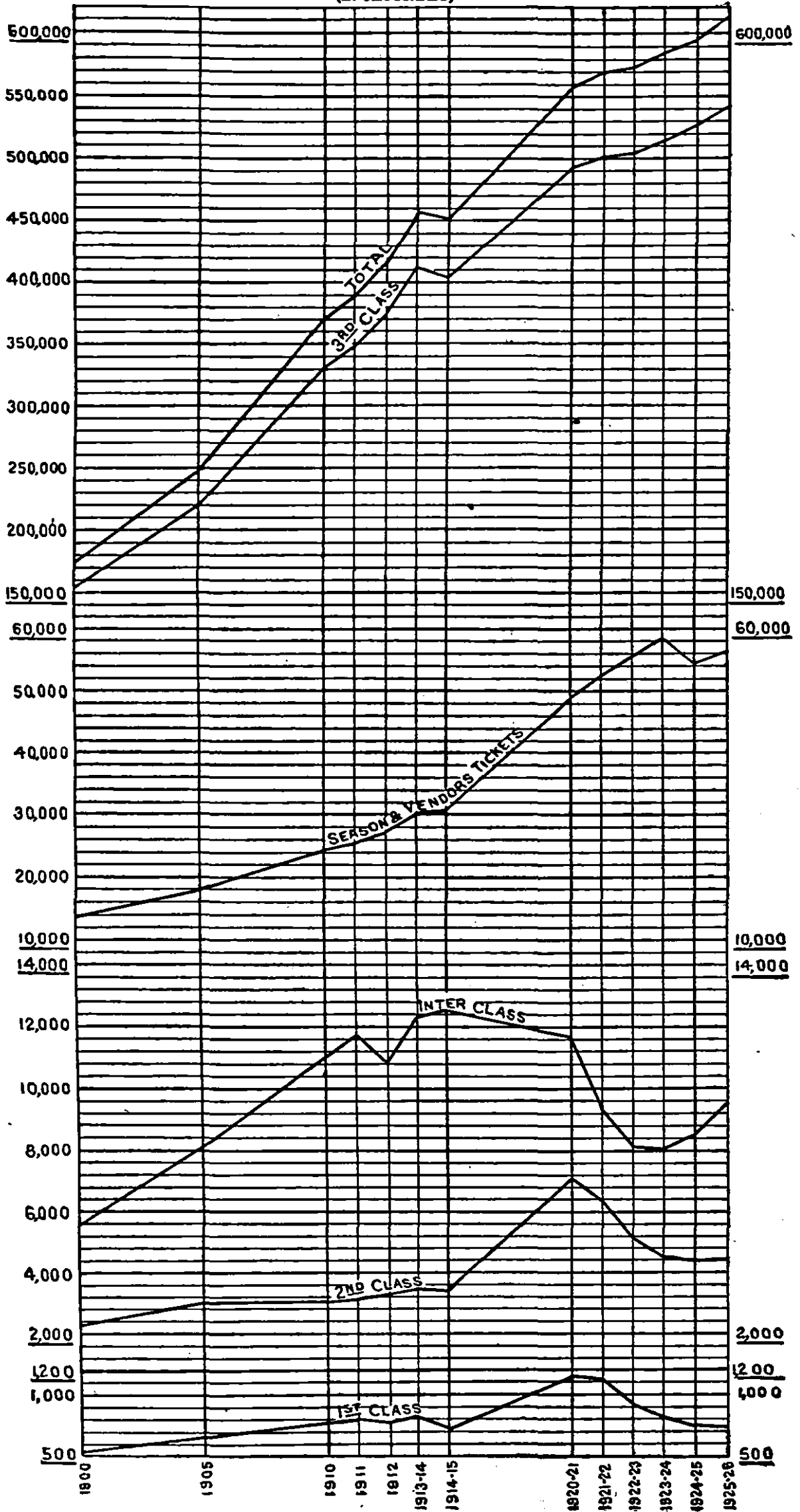
* Included with East Indian Railway.

State Lines Worked by Companies.		1923-24	1924-25	1925-26	1923-24	1924-25	1925-26	1923-24	1924-25	1925-26	1923-24	1924-25	1925-26	1923-24	1924-25	1925-26	1923-24	1924-25	1925-26	1923-24	1924-25	1925-26	1923-24	1924-25	1925-26	1923-24	1924-25	1925-26	1923-24	1924-25	1925-26							
Bengal Nagpur	1923-24	60,51,98	18,45,21	47,06,77	7,70,94	5,11,28	2,59,06	4.3	5.72	2,60,28	...	0.34	2,00,88	...	6.84																							
	1924-25	68,88,54	18,16,87	50,66,67	8,89,15	5,77,16	2,61,99	4.1	4.76	2,69,00	...	11.77	2,69,00	...	11.77																							
	1925-26	66,58,90	18,16,87	53,42,03	8,89,99	5,92,88	2,47,11	3.7	6.80	2,86,91	...	46.60	2,86,91	...	46.60																							
Bombay, Baroda and Central India.	1923-24	63,31,71	2,49,00	60,82,71	11,95,42	7,14,57	4,80,85	7.5	13.61	2,20,60	2,46,55	...	2,20,60	2,46,55	...																							
	1924-25	65,29,72	2,49,00	62,80,72	12,39,54	7,07,61	5,31,93	8.0	14.05	2,25,17	2,92,11	...	2,25,17	2,92,11	...																							
	1925-26	67,06,79	2,51,50	64,55,29	12,25,95	7,44,89	4,81,06	7.2	26.41	2,34,34	2,20,81	...	2,34,34	2,20,81	...																							
Burma	1923-24	26,03,69	6,09,67	19,34,02	4,11,88	2,52,26	1,59,12	6.1	34.24	83,67	41,21	...	83,67	41,21	...																							
	1924-25	27,09,44	6,69,67	20,39,77	4,29,80	2,62,80	1,67,59	6.4	32.97	92,41	42,21	...	92,41	42,21	...																							
	1925-26	28,23,15	6,69,67	21,53,48	4,93,82	2,76,20	2,17,62	7.7	37.66	98,67	81,29	...	98,67	81,29	...																							
Madras and Southern Mahratta.	1923-24	49,25,75	11,23,43	38,02,32	7,39,55	4,34,21	3,05,34	6.2	46.25	2,16,43	42,66	...	1,93,88	65,26	...																							
	1924-25	49,09,18	11,23,43	38,75,75	7,92,89	4,36,58	3,56,31	7.0	60.86	1,86,84	1,08,61	...	1,86,84	1,08,61	...																							
South Indian	1925-26	51,26,96	10,73,86	40,58,10	8,19,24	4,65,76	3,53,48	6.9	77.67	1,90,96	84,85	...	1,90,96	84,85	...																							
	1923-24	25,22,49	4,83,36	20,39,13	5,37,06	3,04,75	2,22,31	8.8	2.02	96,22	1,23,17	...	96,22	1,23,17	...																							
	1924-25	25,86,59	4,48,39	21,38,20	5,14,78	3,12,00	2,02,78	7.7	9.80	96,54	96,64	...	96,54	96,64	...																							
Other Railways	1925-26	28,00,42	4,15,34	23,85,08	5,44,12	3,15,56	2,28,56	8.2	10.68	1,04,76	1,13,12	...	1,04,76	1,13,12	...																							
	1923-24	32,99,24	3,65,80	29,33,44	3,30,60	1,95,55	1,34,95	4.1	4.31	1,25,76	4,88	...	1,25,76	4,88	...																							
	1924-25	33,82,05	4,39,00	29,42,15	3,69,68	1,62,37	2,07,31	6.1	4.03	1,25,30	77,08	...	1,25,30	77,08	...																							
Net of Miscellaneous Receipts and Charges not attributable to any one Railway.	1925-26	85,20,10	5,14,56	30,05,63	3,08,61	2,15,53	1,83,08	5.2	5.66	1,31,58	45,85	...	1,31,58	45,85	...																							
	1923-24	...	...	...	...	...	...	...	...	...	2.84	...	...	4.74	...																						
	1924-25	...	...	...	...	...	...	...	...	...	13.85	...	...	13.85	...																						
Interest on Depreciation and Reserve Fund balances.	1925-26	...	...	...	...	...	...	...	...	...	4.76	...	...	4.76	...																						
	1924-25	...	...	...	21.29	...	21.29	...	...	...	21.29	...	...	21.29	...																						
1925-26	...	...	...	53.39	...	53.39	...	...	...	53.39	...	...	53.39	...																							

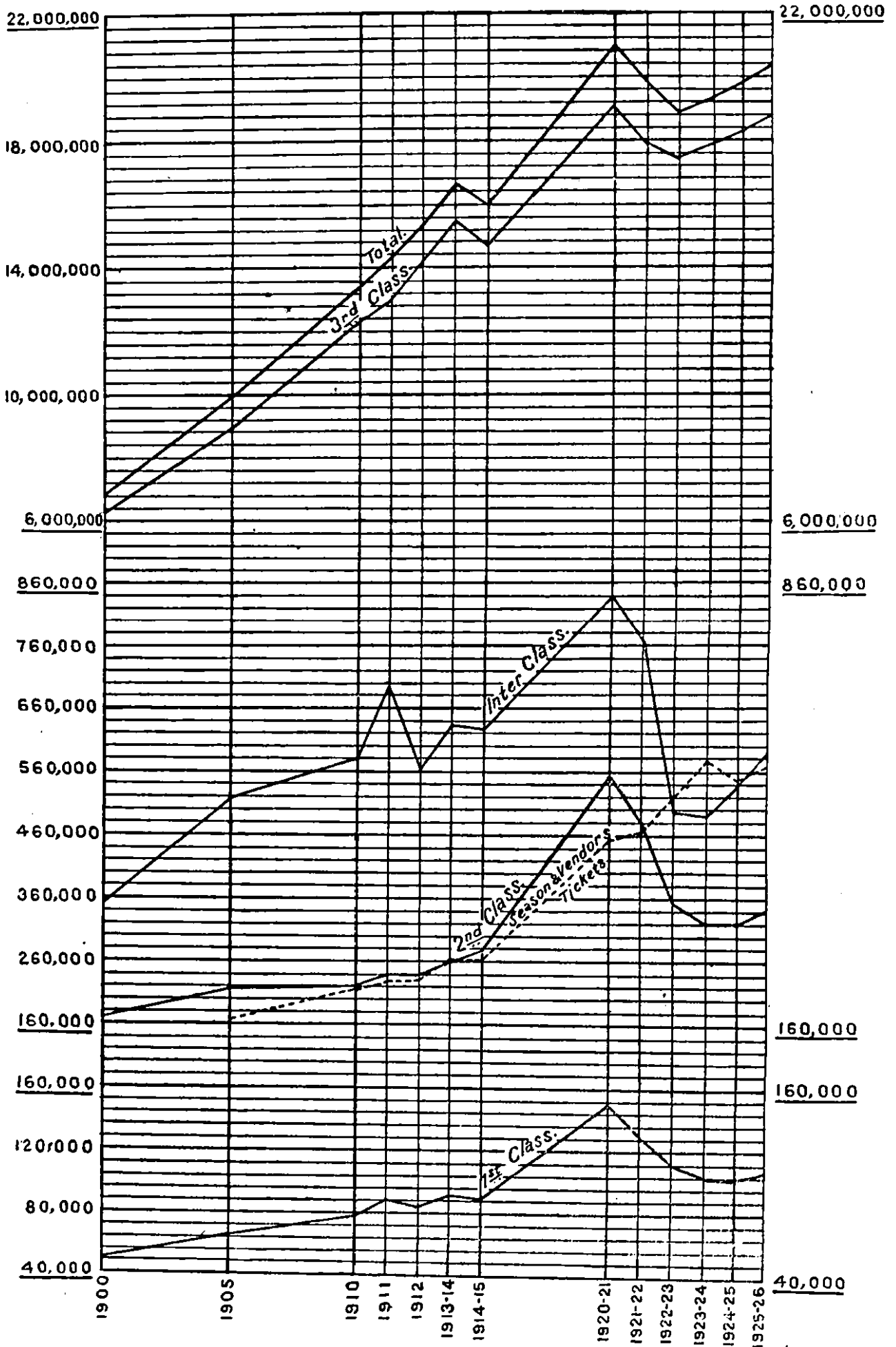
FINANCIAL RESULTS OF THE YEAR'S WORKING.

Railways.	Year.	Capital at charges.	Deduct amount of capital contributed by Companies and Indian States.	Net Government Capital at charges.	Receipts.	Working Expenses including Depreciation.	Net Receipts.	Percentage of Net Receipts on Capital at charges.	CHARGES AGAINST NET REVENUE RECEIPTS.		Gain.	Loss.	Interest charges included in col. 11 but excluding Sinking Fund and Annuity charges involved in redemption of Capital.	RESULTANT.	
									Payment on account of share of Surplus Profits.	Interest Annuity and Sinking Fund charges.				Gain.	Loss.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Total (Central)	1923-24	6,40,72,14	74,91,53	5,65,80,62	94,65,53	61,05,28	33,60,24	5.2	1,14,46	26,01,31	6,47,31	...	23,76,32	8,72,30	...
	1924-25	6,54,98,16	47,35,23	6,07,62,93	1,01,25,85	62,90,78	38,35,07	5.8	1,42,28	23,90,15	13,16,49	...	23,90,15	13,16,49	...
	1925-26	6,75,02,77	42,41,50	6,32,60,97	1,00,23,39	64,41,96	35,91,43	5.3	1,77,42	24,81,12	9,27,65	...	24,81,12	9,27,65	...
Provincial Railways	1923-24	19,32	...	19,32	4,08	3,29	74	3.8	..	3,95	...	3,21	3,95	...	3,21
	1924-25	19,90	...	19,90	2,59	2,66	-7	-0.7	...	84	...	91	84	...	91
	1925-26	20,22	...	20,22	2,77	2,48	29	1.4	...	87	...	58	87	...	58
Grand Total (Central and Provincial)	1923-24	6,40,91,46	74,91,52	5,65,99,94	94,69,55	61,08,57	33,60,98	5.2	1,14,46	26,05,26	6,44,10	...	23,80,27	8,69,00	...
	1924-25	6,55,18,06	47,35,23	6,07,82,83	1,01,28,44	62,93,44	38,35,00	5.8	1,42,28	23,90,99	13,15,58	...	23,90,99	13,15,58	...
	1925-26	6,75,22,99	42,41,50	6,32,81,19	1,00,26,16	64,44,44	35,91,72	5.3	1,77,42	24,81,99	9,27,07	...	24,81,99	9,27,07	...
North western (Commercial Lines.)	1923-24	84,61,79	...	84,61,79	13,46,96	9,13,78	4,33,13	5.1	...	3,43,33	89,35	..	3,12,68	1,20,50	...
	1924-25	85,77,92	...	85,77,92	15,39,35	9,52,44	5,86,91	6.8	...	2,99,97	2,66,94	...	2,99,97	2,66,94	...
	1925-26	84,89,04	...	84,89,04	13,78,33	8,86,08	4,82,24	5.7	...	3,06,14	1,76,10	...	3,06,14	1,76,10	...
Non-Commercial (Strategic Lines.)	1923-24	26,22,58	...	26,22,58	1,71,15	1,87,21	-16,06	-0.6	...	1,02,38	...	1,18,44	1,02,38	...	1,18,44
	1924-25	26,86,77	...	26,86,77	1,59,87	1,95,77	-35,90	-1.3	...	1,22,77	...	1,58,67	1,22,77	...	1,58,67
	1925-26	31,03,71	...	31,03,71	1,64,07	1,80,14	-16,07	-0.5	...	1,30,84	...	1,47,01	1,28,57	...	1,47,01

NUMBERS OF PASSENGERS CARRIED ON INDIAN RAILWAYS.
(IN THOUSANDS)



PASSENGER MILES (IN THOUSANDS) INDIAN RAILWAYS.



30. With the exception of the Burma and South Indian Railways the financial results of railways for the year 1925-26 are less favourable than those for 1924-25. This is due in some measure to the decline in gross earnings, but also, as explained in paragraph 22 to the working expenses in 1924-25 being reduced by special credits amounting to Rs. 179 lakhs.

The improvement on the Burma Railways is accounted for by the large rise, principally due to rice traffic of Rs. 64 lakhs or nearly 15 per cent. in gross earnings.

On the South Indian Railway the more favourable results are also due to increased earnings, principally from passenger traffic.

31. The working of all railways, except the Bengal Nagpur Railway resulted in a net gain to the State during the year 1925-26. The loss on the Bengal Nagpur Railway amounted to Rs. 46.60 lakhs which is 35 lakhs more than the loss during the year 1924-25. This loss is attributable to a larger debit on account of calculated depreciation, to increased payments in interest charges on the larger capital outlay and to expenditure on the renewal of debentures. The necessity for effecting economies in the working of this railway is a subject that is receiving the special attention of the Railway Board.

32. *Analysis of earnings.*—The total earnings on all railways of Rs. 113.39 crores consisted of Rs. 64.83 crores from Goods Traffic, Rs. 39.49 crores from Passengers and Rs. 9.07 crores from Parcels, luggage and Miscellaneous earnings.

33. *Passenger earnings.*—There was an increase of 1.87 per cent. in the Passenger earnings from 38.76 to 39.49 crores. The numbers of and earnings from passengers are summarised in the table below separately for each class for the four years previous to the War and for the six latest years. Figures for Season and Vendor's tickets are shown separately for the last three years as well as included in their proper classes. Graphs are also inserted showing year by year from the beginning of the century the number of passengers carried by classes and the number of passenger miles.

Indian Railways.

Year.	NUMBER OF PASSENGERS CARRIED (IN THOUSANDS).					EARNINGS FROM PASSENGERS (IN THOUSANDS OF RUPEES.)				
	1st class.	2nd class.	Inter.	3rd class.	Season and Vendor's tickets.	1st class.	2nd class.	Inter.	3rd class.	Season and Vendor's tickets.
						Rs.	Rs.	Rs.	Rs.	Rs.
1910 . . .	778	2,962	11,033	332,462	24,341	58,82	77,23	94,99	14,65,16	15,85
1911 . . .	799	3,135	11,762	348,479	25,687	66,38	83,83	1,08,88	15,73,15	16,85
1912 . . .	796	3,223	10,833	375,567	26,810	62,90	88,81	91,37	17,01,35	17,55
1913-14 . . .	812	3,461	12,371	410,960	30,114	68,94	88,70	1,03,48	18,37,03	19,36
1920-21 . . .	1,148	7,129	11,750	490,280	48,939	1,30,48	2,26,49	1,91,19	28,91,25	37,24
1921-22 . . .	1,125	6,404	9,264	500,515	52,376	1,38,47	2,28,87	1,45,11	28,75,29	41,58
1922-23* . . .	917	5,133	8,129	502,776	55,665	1,39,72	2,11,77	1,38,30	32,20,85	48,58
1923-24* . . .	817	4,538	8,095	512,974	58,084	1,25,80	1,95,99	1,37,88	32,91,78	51,70
1924-25 . . .	756	4,383	8,438	524,182	54,592	1,21,62	1,85,51	1,44,48	33,73,71	50,07
1925-26 . . .	739	4,395	9,542	542,397	56,297	1,19,24	1,82,74	1,55,88	34,36,38	51,66
1923-24† . . .	1,369	10,680	12,044	572,184	...	1,31,17	2,02,73	1,41,10	33,32,82	...
1924-25† . . .	1,246	10,301	12,647	581,804	...	1,22,93	1,92,00	1,48,01	34,12,45	...
1925-26† . . .	1,169	10,487	14,009	601,778	...	1,20,42	1,89,42	1,59,61	34,76,45	...

* Excludes the Maurbhanj and Parlakimedi Light Railways for which detailed information is not available.

† 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.

34. An increase has taken place in the numbers carried in each class except First Class. Earnings from passengers carried have increased by 76 lakhs under Intermediate and Third Class.

35. In 1922 on account of the large increase in working costs on railways due to the abnormal rise in the price of materials and an increased wages bill it was found necessary to enhance the maxima fares by 25 to 33 per cent. and goods rates by 15 to 25 per cent. But the question of the desirability of retaining rates and fares at this level continued to receive the careful attention of the Government of India and the Railway Administrations. The strengthening of the financial position resulting from the separation of railway from the general finances and the good years in 1923-24 and 1924-25 enabled the majority of railways to consider reductions in Passenger fares.

With effect from 1st January 1926 the South Indian Railway reduced its 1st class fares by ordinary trains from 22½ to 18 pies per mile and by mail trains in proportion. Similarly 2nd class fares were reduced from 11½ to 9 pies per mile by ordinary trains and proportionately by mail trains. Third class fares by mail were also reduced on 1st November 1925 from 5 pies all distances to 4½ pies for the first 100 miles and 4 pies for additional distance and on 1st February 1926 the fares by ordinary trains were reduced from 3½ pies to 3¼ pies.

The East Indian and Bengal Nagpur also reduced Inter and 3rd class fares from 1st January 1926. The reductions on both lines were:—

Intermediate by Mail—

from 7 pies per mile for first 300 miles
and 5 pies per mile for additional distance
to 7 pies per mile for first 300 miles
and 3½ pies per mile for additional distance.

Intermediate by ordinary trains—

from 5 pies all distances
to 5 pies for first 300 miles
and 3½ pies for additional distance

Third class by ordinary trains—

from 3½ pies all distances
to 3¼ pies for first 300 miles
and 2½ pies for additional distance

the fare by mail trains being reduced in proportion.

Other railways were arranging for reductions to have effect from 1st April 1926 and in framing the Railway Budget for 1926-27 allowance was made for a reduction in revenue amounting to Rs. 163 lakhs on account of these reductions.

36. **Passengers travelling without tickets.**—In view of the large number of passengers travelling without tickets and of the loss to railways and to Government caused thereby the Indian Railway Conference Association recommended in February 1923 that the Railways Act should be amended in order to strengthen the position of Railways in recovering fares and penalties from passengers travelling without tickets.

It was, however, decided that it was not advisable to amend the Act in the direction suggested until all other possible alternatives had been tried. Meanwhile Railway Administrations adopted the following measures:—

1. Stricter supervision and discipline.
2. Re-organisation of the Travelling Ticket Inspection system, etc., and
3. Introduction of system of checking trains by Flying Squads of Travelling Ticket Examiners.

In spite however of endeavours made by railways large number of passengers still succeed in travelling without paying the proper fares.

In 1924, 2,347,819 passengers were detected travelling without tickets and the total amount collected from them was Rs. 25,12,244. During the

first six months of 1925, 1,080,785 passengers were detected travelling without tickets and the total amount collected from them was Rs. 12,58,310. The whole question is receiving special attention.

37. *Goods Earnings.*—The total earnings on all Railways from goods traffic show a reduction of nearly 2 crores, from Rs. 66·46 to Rs. 64·47 crores which is chiefly due to the falling off in earnings from wheat and grain on account of the decline in exports referred to in paragraph 18 above.

The following statement shows the tonnage of principal commodities and the earnings derived therefrom on Class I Railways during the last two years. Apart from wheat and grain the most marked fluctuations compared with 1924-25 were increases under cotton raw and manufactured, kerosine oil, sugar, iron and steel, and other commodities, and decreases under salt, coal and coke, jute and oilseeds.

Commodity.	1924-25.		1925-26.		Increase + Decrease — in Earnings (lakhs).
	No. of tons carried in millions.	Rs. in crores.	No. of tons carried in millions.	Rs. in crores.	
(1) Coal and Coke	22·85	9·17	22·01	8·95	—22
(2) Railway Stores	21·77	3·09	20·30	2·91	—18
(3) Wheat	3·18	4·08	2·09	2·12	—106
(4) Rice in the husk and rice not in the husk.	5·42	4·35	5·92	4·42	+7
(5) Gram and Pulse, Jowar and Bajra and other grains.	6·00	6·06	4·63	4·19	—137
(6) Marble and Stone	2·99	0·77	3·78	0·94	+17
(7) Metallic ores	2·61	1·12	2·90	1·07	—5
(8) Salt	2·52	2·22	2·14	1·74	—48
(9) Wood, unwrought	1·81	0·94	2·19	1·06	+12
(10) Sugar, refined and un- refined.	0·97	1·64	1·05	1·85	+21
(11) Oilseeds	3·62	3·85	3·72	3·69	—16
(12) Cotton, raw and manu- factured.	2·00	5·76	2·57	6·42	+66
(13) Jute, Raw	1·24	1·42	1·51	1·23	—19
(14) Fodder	0·98	0·62	0·99	0·59	—3
(15) Fruits and vegetables, fresh.	1·03	0·82	1·24	0·91	+9
(16) Iron and steel, wrought .	1·25	1·87	1·60	2·06	+19
(17) Kerosine oil	1·19	1·79	1·37	2·06	+27
(18) Gur, Jagree, Molasses, etc.	1·14	1·16	1·10	1·06	—10
(19) Other commodities . . .	15·08	13·56	19·35	14·82	+126
TOTAL	97·65	64·29	100·46	62·09	—220

With a view to assisting industries and stimulating traffic it was decided to make a reduction of approximately 10 per cent. in the rates for long distance coal with effect from 1st April 1926.

38. **Economies effected during the year.**—The striving towards economy and reduction in working expenses which has now become a settled feature of railway working has again yielded satisfactory results. These results are narrated in Chapter IV of the report dealing with Transportation and Working and in the paragraphs of this chapter dealing with reduction of stores balances and compensation claims. A feature of the working of railways during 1925-26 has been a decrease in the tonnage of coal consumed.

The total tonnage of fuel consumption on all Class I Railways fell from 6,740,244 tons in 1924-25 to 6,610,361 tons in 1925-26 or a decrease of 1.93 per cent. The reduction is partly due to a decrease in the volume of traffic handled and partly to the efforts made by railways to reduce fuel consumption. The tonnage of coal consumed per 1,000 gross ton miles on broad gauge trains fell by 2.84 per cent. for passenger trains and by 0.70 per cent. for goods trains. The decrease for metre gauge goods trains was 1.03 per cent.

The expenditure on fuel generally has also fallen by 25 lakhs on Class I Railways and while this is partly due to the improved coal consumption figures mentioned above the principal cause is the reduction in the average cost of coal received from the mines.

39. **Stores Balances.**—In the report for last year attention was drawn to the large reductions effected in the stores balances during the previous years. Further reductions amounting to Rs. 195 lakhs were effected during the year under review and the appended statement shows the improvement in this respect on individual railways since 1921-22 :—

Stores balances (in thousands.)

Railways.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.
	Rs.	Rs.	Rs.	Rs.	Rs.
Assam-Bengal	24,81	31,48	18,38	12,30	9,49
Bengal-Nagpur	1,40,26	1,61,88	1,48,09	1,49,44	1,27,04
Bombay, Baroda and Central India	2,76,83	2,72,43	2,33,25	1,77,39	1,62,48
Burma	66,62	84,85	98,71	84,62	75,00
East Indian	3,07,15	3,55,82	3,23,41	2,40,14	2,54,11
Eastern Bengal	2,51,63	1,76,20	1,57,85	1,21,99	1,12,27
Great Indian Peninsula	4,66,49	3,88,35	3,97,77	2,89,49	2,38,67
Madras and Southern Mahratta	1,50,52	1,66,09	1,50,91	1,02,66	84,81
North Western	3,94,12	3,92,69	3,79,78	3,24,39	3,23,75
Oudh and Rohilkhand	85,36	83,37	87,25	63,96	*
South Indian	1,14,45	1,38,66	99,02	77,04	64,38
Other Railways	41,13	46,96	63,50	54,94	34,24
Central Indian Coalfields . . . . .	..	...	...	10,09	27,35
Total	23,19,36	22,98,78	21,57,92	17,08,05	15,13,69

* Included with the East Indian Railway.

40. Compensation Claims for goods lost or damaged.—A further substantial reduction was effected during the year in the amount paid under this Head as will be seen from the following statement:—

Claims for goods lost or damaged paid by Class I Railways (excluding Jodhpur Railway) during 1922-23, 1923-24, 1924-25 and 1925-26.

Railways.	1922-23.	1923-24.	1924-25.	1925-26.
	Rs.	Rs.	Rs.	Rs.
Assam-Bengal . . .	23,085	17,069	17,587	21,841
Bengal and North Western.	1,70,516	1,62,461	80,680	92,932
Bengal-Nagpur . . .	1,98,972	2,63,703	2,01,889	80,093
Bombay, Baroda and Central India.	15,68,572	6,44,678	6,03,064	4,40,465
Burma	45,183	29,319	33,662	30,982
Eastern Bengal . . .	1,98,554	1,77,020	1,68,020	1,86,736
East Indian	57,99,225	42,72,620	30,61,351	11,73,008 ^a
Great Indian Peninsula	19,68,436	16,17,133	6,63,609	3,41,130
Madras and Southern Mahratta.	2,21,125	1,54,162	85,548	91,018
Nizam's Guaranteed State.	38,222	24,206	17,022	18,219
North Western . . .	16,89,608	4,73,339	6,84,162	3,89,771
Rohilkund and Kumaon	45,105	16,681	21,360	17,088
South Indian	63,951	44,502	32,045	48,536
Total	1,20,30,554	78,96,893	56,70,499	29,31,819

The results shown in the above table show a steady decline in the amount paid as compensation every year. This satisfactory result is due to the special attention that has been devoted to the subject by the Railway Board and to the remedial and preventive measures taken by Railway Administrations, such as, better supervision over the staff, extension of the rivetting of wagons, and improved efficiency of the Watch and Ward Department, etc.

CHAPTER III.

NEW CONSTRUCTION AND ENGINEERING WORKS.

41. **Capital expenditure.**—Up to the end of March 1926 the total capital at charge on all railways including those under construction amounted to Rs. 763·09 crores of which Rs. 675·23 crores was capital at charge on State-owned railways inclusive of premia paid in the purchase of Companies' lines. The remainder Rs. 87·86 crores, represented capital raised by Indian States, Companies and District Boards.

The capital at charge of State-owned railways is arrived at as follows :—

	£
Liability and debt incurred in purchase of railways	150,109,299
Less liability and debt cancelled by the operation of Annuities and Sinking Funds	29,232,502
Net amount outstanding	120,876,797
	Rs. (omitting 000)
Converted at Rs. 15=£1	1,82,16,76 (a)
Direct expenditure by Government	4,93,06,35
TOTAL	6,75,23,11

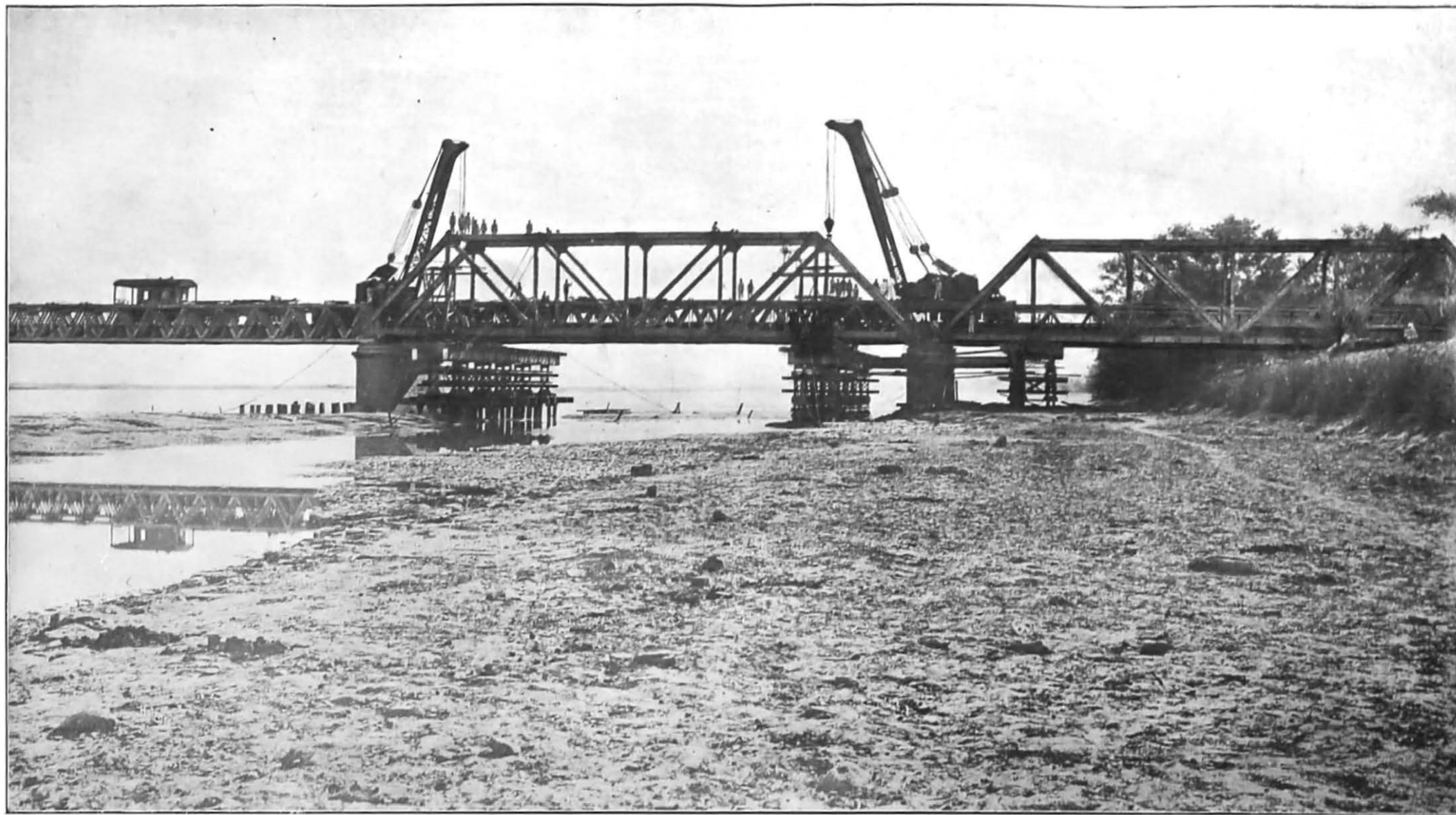
By far the greater portion of this amount, namely, Rs. 6,32,81,32 is Government capital and only 1/15th or Rs. 42,41,79 is owned by Companies. These figures include Rs. 31·03 crores on account of capital expenditure to the end of March 1926 on strategic lines.

42. The total capital outlay on all railways during 1925-26 was Rs. 21·63 crores of which Rs. 19·25 crores were spent on State-owned railways. The following statement shows how this outlay of Rs. 19·25 crores was distributed between open line works, rolling stock and new lines, similar figures being given for the previous four years and for 1913-14 :—

Year.	OPEN LINES.			New lines.	GRAND TOTAL.
	Works including stores.	Rolling-stock.	TOTAL.		
	Rs. crores.	Rs. crores.	Rs. crores.		
1913-14	9·80	7·31	16·61	1·66	18·47
1921-22	11·20	10·02	21·22	2·11	23·33
1922-23	6·77	9·52	16·29	2·74	19·03
1923-24	7·69	9·51	17·20	2·51	19·71
1924-25	4·66	6·42	11·08	2·39	13·47
1925-26	9·44	5·80	15·24	4·01	19·25

(a) Includes Rs. 85,23,830 on account of exchange on £2,575,000 representing Great Indian Peninsula Railway Company's share capital paid off during the year.

REGIRDING OF ALEXANDRA BRIDGE NEAR WAZIRABAD, NORTH WESTERN RAILWAY.



General view of bridge showing 25 ton cranes working.

43. The distribution of the capital outlay in 1925-26 over the different State-owned lines is shown in the summary below :—

Railways.	OPEN LINES.			New lines.	GRAND TOTAL.
	Works, etc.	Rolling-stock.	Total Open lines.		
	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.
Bengal-Nagpur	0.22	1.29	1.51	1.24	2.75
Bombay, Baroda and Central India	1.04	0.73	1.77	...	1.77
Eastern Bengal.	0.94	0.15	1.09	...	1.09
East Indian,	1.82	1.42	3.24	0.15	3.39
Great Indian Peninsula	0.98	1.21	2.19	...	2.19
Madras and Southern Mahratta	0.85	0.41	1.26	0.02	1.28
North Western	1.72	0.18	1.85	0.33	2.18
South Indian	1.24	0.14	1.38	0.76	2.14
Other Railways	0.63	0.32	0.95	1.51	2.46
TOTAL	9.44	5.80	15.24	4.01	19.25

Lines opened and under construction.

44. Lines opened during 1925-26.—A total mileage of 340.76 miles of line was opened to public traffic during the year and consisted of :—

144.38 miles	5' 6" gauge.
145.09 "	3' 3½" "
48.04 "	2' 6" "
3.25 "	2' 0" "

A detailed list is given below of the more important lines opened during the year :—

Name of line.	Gauge.	Mileage.	Owner.	Working agency.	Date of opening.
Majri-Rajur	5' 6"	13.22	State	G. I. P. Ry.	4th May 1925.
Kandra-Gomoharia Chord	5' 6"	6.20		B. N. Ry.	30th June 1925.
Bermo-Dunca Section	5' 6"	18.75		B. N. Ry.	19th October 1925.
South Karanpura Coalfields Extension.	5' 6"	19.26		B. N. Ry.	31st March 1926.
Malsi-Pakpattan	5' 6"	86.95	State	N. W. Ry.	23rd November 1925.
Bauktaw-Kambe, Kambe Cantonment.	3' 3½"	7.05		Burma Rys.	13th January 1926. 6th March 1926.
Suratgarh-Raisinghnagar	3' 3½"	35.23	Bikaner Durbar	Bikaner Ry.	1st October 1925.
Lamsing-Ye	3' 3½"	19.56	State	Burma Rys.	16th April 1925.
Gadwal-Allampur Section	3' 3½"	27.52	H. E. H. the Nizam's Govt.	N. G. S. Ry.	20th July 1925.
Dalangyn-Taungdingyi	3' 3½"	30.48	State	Burma Rys.	10th April 1925.
Parendra-Nautanwa	3' 3½"	25.26	B. & N. W. Ry.	B. & N. W. Ry.	1st December 1925.
Itwari-Nagpur	2' 6"	1.94	State	B. N. Ry.	1st July 1925.
Khanai-Hindubagh	2' 6"	43.10		N. W. Ry.	15th October 1925.
Gwalior-Kampoo Kothi	2' 0"	3.25	Gwalior Durbar	Gwalior Ry.	20th December 1925.

45. Lines previously opened to goods traffic that were opened during the year to passenger traffic are as detailed below :—

Name of line.	Gauge.	Length.	Owner.	Working agency.	Date of opening.
		Miles.			
Kandra-Gomoharia Chord	5' 6"	6.20	State	B. N. Ry.	30th June 1925.
Itwari-Motibagh	2' 6"	1.68		B. N. Ry.	1st July 1925.
Khanai-Hindubagh	2' 6"	46.00		N. W. Ry.	15th October 1925.

46. The following sections of line were doubled and opened for traffic :—

Name of line.	Gauge.	Mileage.	Working agency.	Date of opening.
Bandhua-Manpur, Manpur Phalgu East Block Hut.	5' 6"	5.47	E. I. Railway	6th April 1925 8th April 1925.
Chakardharpur-Golkera	5' 6"	20.00	B. N. Railway	28th May 1925.
Bhojudih Junction Gawal Block Hut	5' 6"	1.47	B. N. Railway	29th June 1925.
Bhowra Block Hut-Sudamdih	5' 6"	2.08	B. N. Railway	8th July 1925.
Penwagon Pyn Section	3' 3½"	20.00	Burma Railways	8th April 1925.
Aishbagh-Lucknow	3' 3½"	1.23	Rohilkund & Kumaon Railway.	31st October 1925.

47. During the year alterations to gauge were made as follows :—

Name of line.	Gauge.	Length.	Date of opening.
Churni Bridge Santipur (E. B. Ry.)	From 2' 6" to 5' 6"	9.81	30th May 1925.

48. Lines under construction on 31st March 1926.—At the end of the financial year 1925-26 a total of 2,446.60 miles of new lines was under construction, distributed as follows :—

	Miles.
5' 6" gauge	1,016.13
3' 3½" gauge	1,115.24
2' 6" gauge	315.23

During the year under review sanction was accorded to the construction of new lines totalling 1,102.16 miles.

	Miles.
5' 6" gauge	574.79
3' 3½" gauge	374.18
2' 6" gauge	153.19

49. The list of lines under construction is given in the table below which shows also the construction agencies and the progress reached :—

Name of line.	Gauge.	Mileage.	Working agency.	Progress of work on 31st March 1926. Proportion completed.
Argada Branch	5' 6"	1-60	Bengal-Nagpur Railway.	.95
Dharmaband-Kharkharee	5' 6"	2-50		.51
Guttitanagar Branch	5' 6"	7-23		.30
Burkakama-Chandil	5' 6"	74-00		.75 on 33-44 miles. } Argada-Burkakama .72 on 39-63 miles. } (3083 miles opened).
Talcher Coalfields	5' 6"	62-80	East Indian Railway.	.96
Raipur Parbatipur Section of Raipur-Visianagram Railway.	5' 6"	280-00		.01
Central Indian Coalfields	5' 6"	163-52		.15 on Dalton-gung-Barwadih-Burkakama and Annuppur-Semra 113-52 } miles opened. 50-00 } Total 163-52 }
Bhagalpur-Bansi	5' 6"	31-13	East Indian Railway.	.83
Chandrapur Gomoh Chord	5' 6"	9-97		.92
Bikhikesh Road-Bikhikesh	5' 6"	7-12		.29
Kasipett-Balharshah	5' 6"	91-73	Nizam's Guaranteed State Railway.	.91 on Ramgundum-Goliara Section. .33 on Goliara-Tandur Section. .04 on Tandur-Rajura-Road Section. .31 on Rajura-Balharshah Section. } Kasipett-Ramgundum 57-77 miles opened.
Karepalli-Kothagodium	5' 6"	24-52	North Western Railway.	.93
Amritsar-Narowal	5' 6"	39-78		.01
Shabdara-Narowal	5' 6"	48-82		.08
Shoranur-Nilambar	5' 6"	41-28	South Indian Railway	.34
SirhindaRupar	5' 6"	30-00	Patiala Durbar	
Dhamua-Lakshmikantapur	5' 6"	19-00	Eastern Bengal Railway.	
Agra-Bah	5' 6"	45-83	Great Indian Peninsula Railway.	Construction recently sanctioned.
Nidadavolu-Narasapur	5' 6"	47-00	Madras and Southern Mahratta Railway.	
Calcutta-Chord	5' 6"	8-30	East Indian Railway.	
Hotgi-Sholapur	3' 3½"	9-63	Madras and Southern Mahratta Railway.	.17
Gudivada-Bhimavaram	3' 3½"	41-00		.01
Patan Kakoshi Kakkhal	3' 3½"	26-13	Gaekwar's Baroda Railway.	Patan Kakoshi 16 miles opened. Work on remaining section held in abeyance.
Gudwal-Kurnool	3' 3½"	11-50	Nizam's Guaranteed State Railway.	.95 on Gudwal-Allampur Section. First 28 miles opened.

Name of line.	Gauge.	Mileage.	Working agency.	Progress of work on 31st March 1926. Proportion completed.
Bantwa-Kutiana	3' 3½"	11.17	} Junagad.	.81
Veraval-Una	3' 3½"	48.00		} Mysore State .	1.00 Section up to Jambar 4.86. } = 12.50 " Section up to } miles Prachi Rd. 7.64 } opened.
Shimoga-Arasalu	3' 3½"	26.80	} Mysore State .		.80
Nanjangud-Mysore Frontier	3' 3½"	33.00		} South Indian Rail- way.	.05
Dindigul-Pollachi	3' 3½"	75.28	} South Indian Rail- way.		.01
Vilupuram-Trichinopoly	3' 3½"	110.50		} South Indian Rail- way.	.17
Virudunagar-Tenkasi	3' 3½"	76.32	} Assam-Bengal Rail- way.		.09
Mayavaram-Tanquebar	3' 3½"	18.36		} Assam-Bengal Rail- way.	.50
Kariungung-Longai Valley	3' 3½"	47.52	} Eastern Bengal Rail- way.	
Dinajpur-Rubea	3' 3½"	52.00		} Eastern Bengal Rail- way.
Kanivihalli-Swamihalli	3' 3½"	12.00	} Madras and Southern Maharatta Railway.		Construction recently sanctioned.
Thana-Chotila	3' 3½"	12.56		} Madras and Southern Maharatta Railway.
Madura-Bodinayakanur	3' 3½"	55.09	} South Indian Railway	
Sibeagar Road-Khowang	3' 3½"	38.79		} Assam-Bengal Railway.	.00
Furkating-Badulipara-Jorhat	3' 3½"	42.17	} Assam-Bengal Railway.		.23
Hanumangarh-Sirala	3' 3½"	71.06		} Bikaner Railway	.06
Ramnagar-Suratgarh with a branch from Bugia to Anupgarh.	3' 3½"	70.77	} Bikaner Railway		((Suratgarh-Raisinghgar Section 35.23 miles opened.) .84 on Sriganganagar-Kearising- pur Section.
Bauktaw-Mingaladon	3' 3½"	3.95		} Bikaner Railway	.95 (Bauktaw Cantonment Section 7.05 miles opened).
Taungdwingyi-Kayaukpadaung	3' 3½"	71.00	} Burma Railways		.08
Sogyi-Ye-U	3' 3½"	23.54		} Burma Railways	.78
Heho-Tayaw Extension	3' 3½"	9.00	} Burma Railways		Construction recently sanctioned.
Pegu-Kayan	3' 3½"	30.93		} Burma Railways	.75
Kayan-Thongwa Extension	3' 3½"	11.00	} Burma Railways		Construction recently sanctioned.
Mandalay-Madaya	3' 3½"	10.80		} Burma Railways	.27
Marwar-Sanderno	3' 3½"	44.46	} Jodhpur Railway .		{ .46 on Merwara- Jujawara 21.60 } = 44.46 miles. } miles. { .18 on Jujawara- Desui 22.96 } miles.
Pandharpur-Miraj Extension	2' 6"	84.32		} Barai Light Railway.	.25
Dholpur-Rajkhera	2' 6"	22.34	} Dholpur Railway .		.10
Krishnagar-Nawadwip Ghat	2' 6"	10.00		} Eastern Bengal Rail- way.	.47
Anjar-Bachan	2' 6"	23.75	} Cutch State Railway		.03. Further work stopped.
Kangra Valley (Fathankot to Shanon).	2' 6"	100.60		} North Western Rail- way.
Jambusar-Kavi	2' 6"	17.87	} Bombay, Baroda and Central India Railway.		Construction recently sanctioned.
Samni-Dehoj	2' 6"	24.72		} Bombay, Baroda and Central India Railway.
Parlakimedi Gunpur Extension	2' 6"	31.83	} Bengal-Nagpur Rail- way.	

REGIRDING OF ALEXANDRA BRIDGE NEAR WAZIRABAD, NORTH WESTERN RAILWAY.



Girder of second span lowered into position on staging.

50. The following are brief notes on some of the more important lines opened or under construction during the year:—

Khyber Railway.

The construction of the Khyber Railway, a length of about 28 miles, was sanctioned in July 1920 and in November of that year, after various preliminary difficulties had been overcome, the work of construction actually commenced. Owing to the peculiar and arduous conditions under which the construction had to be carried out, five years elapsed before the section from Jamrud to Landikotal, a length of about 21 miles, was completed and opened for public traffic on 2nd November 1925. The remaining portion from Landikotal to Landikhana is nearing completion.

This is the first 5 feet 6 inches gauge line which has been built to the new Standard Dimensions and allows for a maximum running width of 12 feet and running height of 15 feet 6 inches. The great engineering difficulties which have had to be overcome, and the standard to which the railway has been built render it a technical achievement ranking with the greatest engineering works carried out by Railway Engineers.

In the absence of His Excellency the Viceroy the opening ceremony was performed by the Hon'ble Member for Railways, Sir Charles Innes, in the presence of a large and representative gathering.

The line is situated entirely outside the administrative border of British India in the strip of tribal territory which separates it from Afghanistan. The trade that passes through the Khyber Pass is already considerable and it is hoped that the railway will still further increase its volume, thereby bringing profit and employment to many who in the past have subsisted with difficulty on the meagre agricultural resources of the country which it traverses.

Raipur-Vizianagram Railway.

This line on the 5 feet 6 inches gauge, located between Raipur and Vizianagram, was designed to give direct communication between the Central Provinces and the New East Coast Harbour at Vizagapatam, and is described in detail in last year's report. The first section from Vizianagram to Parvatipuram, 48 miles, was opened in 1914, and during the year under report construction has been started on the remaining portion Raipur to Parvatipuram. Work is in progress in the first 30 miles north from Parvatipuram and for the 70 miles South of Raipur, and at the close of the year a resurvey of the central length was in progress with a view to improving and shortening the alignment of this section.

Dindigul-Pollachi.

The construction of this line—74 miles, 3' 3 $\frac{3}{8}$ " gauge, was sanctioned in April 1925. When completed it will link up the isolated metre gauge Podanur-Pollachi branch with the South Indian metre gauge system and while providing direct communication between the West Coast and the Madura District will open up the intervening districts.

Madura-Bodinayakanur.

This line 55 miles, 3' 3 $\frac{3}{8}$ " gauge, is of considerable importance from the administrative point of view as it will help to open up the tract of country between the South Indian Railway main line and the Travancore Hills. It is expected that, while facilitating trade and generally assisting in the development of this rich tract of country the branch will attract considerable passenger traffic to the trade centres of Theni and Bodinayakanur.

Nidadavolu-Narasapur and Gudiradu-Bhimavaram Railways.

These lines which branch off the Madras and Southern Mahratta Railway system will provide railway communication in the densely populated portions of the Kistna and Godaveri deltas where, owing to the number of canals, existing communications are inconvenient.

It is anticipated that they will be opened for traffic in 1928.

Agra-Bah.

This line will open out an irrigated tract of the Agra District situated at the head of the Jumna Chambal Doab at present devoid of railway communication.

Calcutta Chord Railway.

This line starts from a point near Dankheri station on the Burdwan-Howrah Chord of the East Indian Railway and joins the Eastern Bengal Railway near Dum Dum junction.

It is about 8 miles in length and includes a bridge over the Hooghly river at Bally. This connection is primarily intended for export of coal from the East Indian Railway. But it is likely in the near future to be used also for coal from the Bengal-Nagpur Railway Coalfields, and with the developments anticipated in the terminal arrangements at Calcutta and the electrification of the lower portion of the Eastern Bengal Railway a large proportion of the Suburban passenger traffic will eventually pass over it.

Kangra Valley Railway.

This 2' 6" gauge line taking off at Pathankot and running through the Kangra Valley to Shanon, a distance of 100 miles, will open up the rich Kangra Valley and at the same time make the Kulu Valley more accessible.

Shanan the terminus is the site of the power station for the Mandi Hydro-Electric Power Scheme and the railway is a joint enterprise of the Government of India and the Local Government.

Shahdara-Narowal and Amritsar-Narowal Railways.

The Shahdara-Narowal was originally projected as an alternative to the Narowal-Amritsar extension of the Sialkot-Narowal Branch. It has now been decided to construct both sections simultaneously, the Shahdara-Narowal section being a joint enterprise of the Government of India and the Punjab Government. Both sections will traverse highly cultivated and thickly populated areas in need of improved transport facilities.

51. New construction Programme.—The improved financial position of railways resulting from the separation of finance has enabled the Railway Board to adopt a bolder policy in the direction of new construction.

The problem has been dealt with on the basis of examining the whole country in separate areas roughly corresponding to the areas served by the different railway administrations, and continuous programmes of survey and construction are being prepared, which are subject to revision each year in the light of the co-ordinated recommendations of the Local Governments and the Local Railway Administrations.

In order to deal more expeditiously with the increased programme of construction, the organization on those railways with heavy programmes has been improved by the appointment of special Chief Engineers with additional construction staff.

The total mileage of projects which the Railway Board had either sanctioned or were having investigated by the end of March 1926 amounted to between 6,000 and 7,000 miles, and it is hoped that when all arrangements in this direction are in full swing the total yearly addition to the mileage of Indian Railways will be in the neighbourhood of 1,000 miles.

52. Electrification of Railways.—The opening of the electrified Harbour Branch at Bombay was mentioned in last year's report as the first step in introducing electrification in India.

This service which has since been extended to Bandra forms only part of the various schemes at present in hand for the electrification of the suburban and main line services in Bombay which on the Great Indian Peninsula Railway include the electrification of the main and suburban line to Kalyan and of the main lines to Igatpuri and Poona, and on the Bombay, Baroda and Central India Railway the electrification of the lines between Church Gate and Borivli.

The work on the uncompleted portion of the schemes is being steadily pushed forward and it is hoped soon to inaugurate an electrified service on the whole of these sections.

There is little doubt that with the opening of these electrified services Bombay will feel a great benefit and that a better distribution of its great population may be looked for in the early future.

The re-examination of the problem of suburban traffic in Calcutta is now approaching completion and the preparation of a revised electrification scheme is in hand as a result of the decision to proceed with the construction of the Calcutta Chord Railway with a bridge across the Hooghly at Bally.

The Madras suburban traffic problem is also being dealt with. Additional tracks are being provided on the suburban section of the South Indian Railway from Madras to Tambaram, and the electrification of this section is also under investigation.

The feasibility of electrifying other portions of the South Indian Railway is also under consideration in view of the possibility of a hydro-electric supply being available for this purpose.

In view of the great benefits to be expected in railway working in South India from a hydro-electric supply the Government of India have associated themselves with the Local Government in the investigation of Hydro-Electric Supplies in Madras Presidency, and the schemes are at present being examined by Messrs. Merz and McLellan, Consulting Engineers for electrification schemes to the Government of India.

53. Open line improvements.—Among the more important works carried out or taken in hand during the year as improvements to facilities for handling traffic are included doubling and quadrupling of tracks, new marshalling yards and improvements to existing yards, improved water supplies, strengthening of bridges and new workshops and extensions to existing workshops. The expenditure on these works has been directed towards the better and more efficient handling of present traffic and also towards enabling the railways to meet the natural expansion of traffic. Considerable progress has been made in the programme for raising the standard of the main lines to carry the heavier trains that are now necessary. Each Railway administration is now working to a properly co-ordinated programme for strengthening and improvement of bridges and track towards definite standards, which have been laid down by the Railway Board.

Of the new open line schemes completed or in hand during the year the following are the more important:—

Assam-Bengal.

By the end of the year the Electric Power House at Pahartali was completed and fully equipped. Considerable progress was also made on the water scheme at Pahartali.

Bengal and North-Western.

The remodelling of Gorakhpur Yard and the Loco. Shed and Yard at Sonapore was completed during the year and additional loops were provided at 17 stations to facilitate the crossing of trains.

The train control system by telephone was introduced on the section Gorakhpur-Sonepore (144 miles) from 1st August 1925 and between Gorakhpur and Burhwal (133 miles) from 24th December 1925.

Bengal-Nagpur.

Between Howrah and Khargpur 11 stations were converted into 4 line stations.

The Adra and Mohuda assisting lines have been completed and the line from Anara to Kandra has been doubled.

The doubling between Cossye and Midnapur was finished during the year thus completing the double line from Khargpur to Midnapur. Similarly the doubling of the line from Gowai to Bhojudih has completed the double track between Kargali and Bhojudih.

The yards at Bhojudih, Anara and Tatanagar have been remodelled and Malkera and Khanoodih yards have been enlarged to act as small Weighment Bases.

The first instalment of the 10 years scheme for the extension of the Khargpur Workshops costing 6 lakhs is nearing completion.

Bombay, Baroda and Central India Railway.

Quadrupling between Borivli and Grant Road. This work is nearing completion and the quadrupled lines are expected to be ready for opening in June 1926.

The construction of a road overbridge at Mahalakshmi was sanctioned in December 1925.

Work on the new Loco. Shops at Dohad has been progressing favourably.

The work of rebuilding of the Bassein Bridge is nearing completion.

The remodelling of Ahmedabad yard and the construction of a road overbridge at this station is being proceeded with.

Improvements to Loco. and Carriage shops at Ajmer have been carried out during the year.

Burma Railways.

The remaining 20 miles of doubling between Pyuntza and Pyu were completed and opened for traffic. while the doubling of the main line between Pyu and Kyungun made good progress.

Prome station and yard were completed during the year and the remodelling of Pyinamana, Kemmendine and Thazi stations and yards are in hand.

The carriage and wagon shops at Mytinge were extended and remodelled and the Loco. shops at Insein are being remodelled.

Eastern Bengal Railway.

Work on the Parbatipur-Silliguri conversion made good progress during the year and is expected to be completed by September 1926.

The conversion of the 2' 6" gauge line to Broad Gauge from Churni Ghat to Santipur, a distance of 9.81 miles was completed during the year.

Two new stations Bagerhat College on the Narrow Gauge and Oltadanga on the Broad Gauge were opened and 8 stations which had been closed to traffic were reopened.

A broad gauge connection between the East Indian at Azimganj and the Eastern Bengal at Nashipur Road for goods traffic only was effected during the year and opened to traffic on 3rd March 1926.

H. E. H. THE NIZAM'S GUARANTEED STATE RAILWAY.



James Street Station, a suburban station recently rebuilt in reinforced concrete.



Secunderabad Station Yard.

A light railway from Krishnagar to Navadwip, an important pilgrim centre, was put in hand and by the end of the year 50 per cent. of the work had been completed.

Other works in progress during the year included the provision of staff quarters at Parbatipur, and the remodelling of Parbatipur, Chitpur, Cossipore, Katihar and Sealdah South.

East Indian Railway.

The doubling of the Grand Chord line between Kastha and Ganjkhwaja on the Gya-Moghalsarai section is in progress.

Extensions were carried out to the Carriage and Wagon Shops.

The work of remodelling of Lucknow Station and Yard was continued and good progress was made during the year.

Considerable work was done on the extension of Locomotive shops at Lucknow.

Works in progress included the regirdering of the Lower Sone bridge, Electric installation at Dhanbad, Gya and Moghalsarai, extension of loop Benares Cantonment to Lucknow, and improved facilities in Jherriah Coalfields.

Other works under construction or which will be taken in hand shortly include the remodelling of Howrah, Burdwan, Kusundia, Jherriah, Dhanbad, Mokameh Ghat, Moghalsarai and Ajodhya, a new down yard at Asansol and alterations to the yards at Ondal, Allahabad, Rosa, Moradabad and Lakhsar.

Great Indian Peninsula Railway.

The most important works completed during the year were the remodelling of Poona Station and the extension of the electrified services to Bandra. The work of realigning of a portion of the Bhor Ghat with the object of eliminating the Bhor Ghat reversing station was sanctioned in August 1925.

Other works in hand include the remodelling of Victoria Terminus, new tranship yard at Ghoripuri, remodelling of Mazgaon and improvement of water supply at Bhusawal.

Jodhpur Railway.

The remodelling of Merta Road yard has been completed and considerable progress has been made in the remodelling of Jodhpur and Luni, and the new Loco. Yard at Hyderabad (Sind). The main extensions to the Workshops at Jodhpur are practically complete.

Madras and Southern Mahratta Railway.

Important remodelling works taken in hand this year include a new yard at Tondiarpet, and improvements to the Central Station at Madras.

Good progress has been made on the remodelling of the Perambur Workshops, and a considerable length of relaying of permanent way has been taken in hand. Other works in progress during the year include the remodelling of Arkonam, Ghorpuri, Poona and Jalarpet, the provision of train control between Madras and Jalarpet and the reconstruction of a telegraph line between Renigunta and Guntakal.

Nizam's Guaranteed State Railway.

The interlocking of the Hyderabad Yard was completed and its electrical equipment brought into use. Good progress was made in remodelling the Workshops at Lallaguda. The Indian Institute at Lallaguda was completed and the opening ceremony was performed by the Hon'ble the Resident at Hyderabad on 17th February 1926.

North Western Railway.

The capacity of the more important single line sections has been further improved by the remodelling of wayside stations and improvement of signalling and interlocking particularly on the Raewind-Khanewal and Lahore-Rawalpindi Sections. The more important of remodelling schemes in hand are those at Rawalpindi, Amritsar, Wazirabad, Umballa, Kotri, Rohri and Khanalampura, while New Gujranwala station, the Goods Yard at Amritsar and Muzaffarnagar have been completed.

The construction of a road overbridge at Karachi is in hand. Two humps have been provided in Lahore Goods Yard. A new Divisional office has been built at Multan.

A considerable amount of work was done during the year on strengthening of bridges and relaying of tracks.

An additional length of 30 miles from Peshawar to Landikotal was brought under the Rawalpindi Train Control. The installation of Neal's Instruments on the single line between Lahore and Lalamusa was nearly completed by the end of the year and instruments are on order from England for the Raewind-Khanewal section.

A new 2,000 K. W. Turbo-Alternator, new Boiler, Economiser and additional cooling Tower at the Moghalpura Power House were completed and brought into use. This Power House now contains three 2,000 K. W. Turbo-Alternator sets.

South Indian Railway.

For some time past it has been recognised that the conditions on the single line of the South Indian Railway in the Madras Suburban Area were unsatisfactory, and a comprehensive scheme for providing additional tracks and other facilities between Madras and Tambaram was sanctioned in December 1925.

Considerable progress was made in the new Broad and Metre Gauge Locomotive shops at Trichinopoly, and work was commenced on the conversion to Broad Gauge of the Erode-Trichinopoly Branch.

Vizagapatam Harbour.

In last year's report it was mentioned that the development of Vizagapatam as a major port had been sanctioned by the Secretary of State, the necessary funds being provided by the Government of India. The work of development has been entrusted to the Railway Board and with the approval of the Board of Directors they have appointed the Agent of the Bengal-Nagpur Railway as their Administrative Officer. The Board of Directors have also agreed to the use of their organisation to assist the Administrative Officer. The first section of the development sanctioned which is estimated to cost Rs. 193 lakhs includes a wharf 1,500 feet long capable of taking 3 or 4 steamers, moorings for 2 vessels in the harbour and accommodation at the oil jetty for oil tankers or oil burning steamers. The wharf will be constructed so as to give a depth of 30 feet below low water and a channel dredged to the same depth will connect up the harbour to the sea. The wharf will be provided with the necessary cranes and railway sidings. A dharmasala, waiting room and customs examination sheds will also be provided for dealing with passenger traffic.

Considerable preliminary work has been done during the year under review. Orders have been placed for a large suction dredger and a rock breaker and dipper dredger. In the meanwhile a grab dredger has been working continuously since December 1925 with the object of providing a berth for the suction dredger. A hydrographical survey of the bar and creek has been carried out and considerable work has also been done in the way of constructing bunds and providing temporary arrangements for carrying on the trade of the port during its development.

A good deal of work has been done on the necessary schemes of town planning in conjunction with which a malarial survey has been carried out of the area surrounding the harbour, and a scheme of water supply is also under investigation.

The time required for the completion of the harbour will depend on that taken for dredging and reclamation but it is anticipated that ships will be able to berth in the new harbour within five years.

An Advisory Committee has been appointed by the Government of India in order to advise the Administrative Officer and Engineer-in-Chief in the development of Vizagapatam Harbour. This Committee will also deal with questions which will arise from time to time in connection with carrying on the trade of the present port during construction in order to minimise as far as possible interference with present arrangements, and to enable the construction of the Harbour to proceed without undue delay.

The Committee was appointed on 21st January 1926 and as at present constituted consists of:—

- | | |
|---|-------------------|
| (1) Agent, Bengal-Nagpur Railway— <i>Chairman.</i> | |
| (2) Engineer-in-Chief, Vizagapatam Harbour Works— <i>Deputy Chairman.</i> | |
| (3) The Director of Industries, Central Provinces. | } <i>Members.</i> |
| (4) The Collector of Vizagapatam. | |
| (5) The Port Officer, Vizagapatam. | |
| (6) The Chairman, Vizagapatam Municipality. | |
| (7) The Chief Engineer, Madras and Southern Mahratta Railway. | |

and four non-official members.

54. Terminal facilities at Calcutta.—In order to enable future improvements in terminal railway facilities in Calcutta to be properly co-ordinated with the developments which are being dealt with by various public bodies a Committee presided over by Mr. F. C. Legge was appointed in April 1925 to report on the adequacy of existing railway lines leading into and out of Calcutta, and to submit recommendations for co-ordinated plans of improvement to meet in the most economical way the present and future needs of the public and trade.

At the same time the revision of the scheme of electrification of the lower portion of the Eastern Bengal and East Indian Railways was taken in hand by Messrs. Merz and McLellan, Consulting Electrical Engineers to the Government of India.

The report of the terminal facilities committee has been received but the whole question is closely linked up with the problem of electrification of the suburban railways and consideration of the main report must therefore await the receipt of the Consulting Engineers' Report.

55. Terminal facilities at Bombay.—A somewhat similar problem presents itself in Bombay and the Railway Board decided to have a comprehensive investigation made by an independent expert in order that the future development of terminal railway facilities should be co-ordinated with a view to securing for the public the most convenient railway arrangements consonant with cheap fares and charges.

Important questions have arisen connected with the operations of the Development Department and the Improvement Trust necessitating amongst other changes the removal of the Bombay, Baroda and Central India Railway terminus from Colaba and the provision of a new Terminus.

Mr. Lloyd Jones, Agent of the Nizam's Guaranteed State Railways, was selected for this enquiry and he commenced his investigation in August 1925. He was instructed to report on the requirements of trade in regard to the export and import of various classes of goods and to suggest measures for

obtaining the best possible service either by modifying the present system of working or by a readjustment of existing facilities, co-ordinating the work of the two railways and the Port Trust Railways in order that unnecessary overlapping of functions may be avoided.

Mr. Lloyd Jones was also asked to investigate the conditions as regards suburban and long distance passenger traffic taking into consideration the adequacy of existing arrangements for dealing with this traffic.

At the end of the year under review the Railway Board were awaiting Mr. Lloyd Jones' report which was under preparation and was expected shortly.

CHAPTER IV.

TRANSPORTATION AND WORKING.

56. **Operating Statistics.**—The business of a railway is so very extensive and widespread that it is difficult to take it all in unless the operations are reduced to comprehensible terms. Such terms which are universally used by railways are, train miles, engine miles, ton miles, passenger miles, etc. They represent units of work done or the movement of a train, an engine, a ton, a passenger, etc., one mile. The revised system of statistics which was introduced in 1923-24 with the object of introducing uniformity in the method of compilation of the basic figures in Indian Railway Statistics has now had two years to settle down and it is possible to observe a definite improvement in the results attained. At the same time it must be remembered that statistics are not intended merely to register improvements but to set forth as clearly as possible the working of a railway in all its many spheres. Bad results brought out by statistics are as useful as good results, if not more so, in that they indicate operating or other handicaps. But the first consideration is accuracy in compilation. To this end the Railway Board have drawn up very detailed instructions for the compilation of each set of figures to ensure accuracy. It might here be mentioned that in view of the masses of figures involved the leading railways have installed modern electrically operated machines for the work of tabulating and sorting figures. These machines work on the basis of coded information punched on cards and the results show a considerable saving of labour and an acceleration in compilation.

Train and engine miles.—Statements 17 and 36 in Volume II give the train and engine miles of Class I and Classes II and III railways respectively for the years 1924-25 and 1925-26. The train miles are shown separately under passenger, mixed, goods and departmental. The engine miles are shown under shunting, assisting not required, assisting required, light and departmental. The word "departmental" means that the service is for the exclusive use of railway material or employees. Total train miles on Class I railways (Broad and Metre Gauges combined) in 1925-26 were (in thousands) 151,153 as compared with 152,717 in 1924-25. The following table shows the fluctuations in passenger and goods train miles:—

	CLASS I RAILWAYS. BROAD GAUGE.			CLASS I RAILWAYS. METRE GAUGE.		
	1924-25. (in thousands.)	1925-26.	Percentage of variations.	1924-25. (in thousands.)	1925-26.	Percentage of variations.
Passenger train miles	49,084	51,787	+5.5	14,854	15,650	+5.4
Goods train miles	43,472	40,888	-5.9	14,129	14,349	+1.6

It will be noticed from this statement of train miles that passenger train miles increased by over 5 per cent. on both broad and metre gauges while the goods train miles decreased by nearly 6 per cent. on the broad gauge and increased by 1½ per cent. on the metre gauge.

Shunting, engine miles.—Shunting engine miles of the two years compare as follows, shunting being reckoned at .5 miles to the hour:—

	CLASS I RAILWAYS. BROAD GAUGE.			CLASS I RAILWAYS. METRE GAUGE.		
	1924-25. (in thousands.)	1925-26. (in thousands.)	Percentage of variations.	1924-25. (in thousands.)	1925-26. (in thousands.)	Percentage of variations.
Passenger and proportion of mixed . . .	3,600	3,679	+2.2	1,425	1,500	+5.3
Goods and proportion of mixed . . .	19,538	17,543	-10.2	6,825	6,779	-0.7

These statistics are reflected in the statistical results of shunting miles per 100 train miles (or the percentage of shunting work to train work) which shows a decrease in every case. This is a welcome indication of the sustained efforts made by railways to reduce their bills for shunting.

	BROAD GAUGE.			METRE GAUGE.		
	1924-25.	1925-26.	Percentage of variations.	1924-25.	1925-26.	Percentage of variations.
Shunting miles per 100 train miles (Passenger and proportion of mixed).	6.65	6.46	-2.86	5.92	5.82	-1.18
Shunting miles per 100 train miles (Goods and proportion of mixed).	42.5	40.5	-4.71	32.0	32.3	-1.82

Average speed.—The average through speed of trains on the broad gauge shows an advance in the case of passenger trains from 19 to 19½ miles per hour and from 8.97 to 9.58 miles per hour in goods trains. The average through speed is the average speed of a train from start to finish inclusive of stops *en route*.

Average load.—The average gross load of goods trains on the Broad Gauge, which includes both the weight of the goods and the weight of the vehicles, shows a slight increase from 753.4 to 759.2 tons. As a result of these improvements in speed and load of goods trains the comprehensive figure of gross ton miles per train hour shows an advance of 5 per cent. from 7,027 tons to 7,401 tons.

Wagon user.—The decline in the average load on the Broad Gauge from 13.2 to 12.6 tons may be attributed to the decrease in heavy traffic (*e.g.*, grain and coal) which moves in full wagon loads. Similarly the decrease in wagon miles per wagon day from 37 to 34.2 on the broad gauge and from 31.3 to 30.8 on the metre gauge is also due to the falling off in goods traffic for with less traffic to be moved fewer wagons are used and in consequence the wagon miles are less.

Rolling stock.—The percentage of passenger vehicles under or awaiting repairs shows an improvement from 17 to 15.9 on the broad gauge and 12.6 to 12 on the metre gauge. The percentage of goods wagons under or awaiting repairs also shows a slight improvement on the broad gauge from 6.70 to 6.62.

Coal consumption.—Turning to the very important figures of coal consumption the results show a general improvement in the tons of coal consumed per thousand gross ton miles. The figures are:—

	CLASS I RAILWAYS. BROAD GAUGE.			CLASS I RAILWAYS. METRE GAUGE.		
	1924-25.	1925-26.	Percentage of variations.	1924-25.	1925-26.	Percentage of variations.
Passenger and proportion of mixed . . .	189.9	184.5	-2.84	185.2	185.2	...
Goods and proportion of mixed . . .	143.5	142.5	-0.70	155.8	154.2	-1.08

On individual railways the following improvements in the working results are noticeable :—

Eastern Bengal Railway.

On the broad gauge the average net goods train load (weight of contents) increased from 331·3 to 352·1 tons.

The goods shunting miles per hundred train miles which are bound to be high on this railway due to its short average lead and to its very high proportion of “ sidings ” have been brought down from 112·1 to 93·3. These figures are reflected in the comprehensive measure of goods working, net ton miles per engine hour, which have increased from 819·5 to 934·9.

On the metre gauge the goods shunting miles per 100 train miles also show a welcome drop from 69·4 to 59·9 and the corresponding passenger figure also shows a decrease from 13·9 to 11·7.

On this railway a noteworthy result of the intelligent use of statistics has been the reduction of six passenger trains each way which were proved by statistics to be unnecessary and running at a loss.

East Indian Railway.

The average speed of main line goods trains increased from 9·08 miles per hour in 1924-25 to 9·92 in 1925-26 and the average speed of all goods trains improved from 8·88 to 9·58. The average number of vehicles per main line goods train went up from 49·2 to 50·3 and net ton miles per engine hour from 1,574·9 to 1,665·1.

Great Indian Peninsula Railway.

The average number of vehicles per goods train has increased from 36·8 to 38·1. The passenger shunting miles per 100 train miles has been reduced from 5·56 to 3·94.

The train miles per day per engine in use have gone up from 132·4 to 141·0 in coaching service and from 56·5 to 68·1 in goods service.

The pounds of fuel per 1,000 gross ton miles (coaching) show a reduction from 242·1 to 222·7 and (goods) from 188·2 to 178·5 despite the fact that the consumption of coal per 1,000 gross ton miles might have been expected to go up with a fall in traffic. These results have been obtained by enforcing strict economy in the use of engine power. One effort in this connection has been the institution of the two section engine run. Instead of changing the train engine at the end of a normal run the crew only is changed and the same engine takes the train on. By this means a saving is effected in unproductive engine time such as that involved in lighting up and getting from and to shed.

South Indian Railway.

The coal consumption figures on this Railway show a distinct improvement, the figures for 1924-25 and 1925-26 being as follows :—

Passenger—

Broad gauge.	Pounds per 1,000 gross ton miles.
1924-25	162·1
1925-26	156·3
Metre gauge.	
1924-25	194·1
1925-26	184·2

Goods—

Broad gauge.	Pounds per 1,000 gross ton miles.
1924-25	138·2
1925-26	141·0
Metre gauge.	
1924-25	129·7
1925-26	123·7

The slight increase in the consumption per 1,000 gross ton miles (Goods) on the broad gauge may be attributed to the average through speed of goods trains having advanced from 9·44 to 10·6 miles per hour.

North Western Railway.

As a result of a sustained effort to cut down unproductive goods engine working this railway has been able to reduce its shunting miles per 100 train miles from 41·7 to 37·1 and its light engine miles per 100 train miles from 8·34 to 6·97. The engine miles per day per engine on the line also show a slight improvement from 47·6 to 48·9.

57. **Running of passenger trains.**—From the public point of view the punctual running of passenger trains is a most important point to which individual administrations pay very great attention. The daily running of trains is closely watched by means of reports compiled for each train supplemented by daily reports from every station on the system. These reports are carefully scrutinised in the district or divisional offices and cases of bad running looked into on the spot with a view to the eradication of the causes. The results of running are also tabulated weekly or monthly in statistical forms which are examined at the headquarters of the administration, and attention is concentrated on those portions of the line where the running of trains shows signs of unpunctuality.

On Class I Railways alone over 3,500 passenger trains of every description are run daily and while it is advisable and necessary to leave to individual administrations the details of running, the behaviour of trains as a whole during the month is reviewed periodically by the Railway Board by means of statistics furnished by Railways. In this connection it must be remembered that it is only lately that Indian Railways have been able to overtake the arrears of renewals of permanent way which during and after the War could not be tackled for financial reasons. These heavy programmes of renewals together with schemes for improvements naturally interfere very seriously with the punctual running of trains and it is by no means an easy matter to reconcile the conflicting interests.

Viewed in this light the principal results for Class I Railways for February 1926 which are given below show a satisfactory advance on those for 1925 though it is admitted that there is still plenty of room for improvement.

1	PERCENTAGE OF TRAINS ARRIVING RIGHT TIME OR LESS THAN 10 MINUTES LATE TO NUMBER OF TRAINS RUN.				ALL TRAINS.		
	Mail and important through trains.	Mixed trains.	Suburban trains.	Other passenger trains.	Percentage of trains arriving right time to number of trains run.	Percentage of trains arriving under 10 minutes late to number of trains run.	Percentage of trains arriving right time or less than 10 minutes late to number of trains run. (Column 6 + Column 7).
	2	3	4	5	6	7	8
<i>Broad Gauge.</i>							
February 1925	62·2	75·4	94·0	77·3	61·0	10·3	80·3
February 1926	80·6	81·5	98·5	82·4	71·8	16·4	88·2
<i>Metre Gauge.</i>							
February 1925	67·8	71·4	95·8	84·0	64·9	12·8	77·7
February 1926	74·8	77·4	95·3	85·2	70·5	11·2	81·7

58. **Great Indian Peninsula Electric Service.**—During the year the electrified service over the Harbour Branch was increased and an additional service was opened on the Mahim Chord from Victoria Terminus to Bandra. The operation of the service was also greatly improved. Most of the major troubles always incidental to a new service have been overcome and such troubles as occur now a days are of a minor nature. These are also gradually being eliminated as the staff gain more experience of the operation of the service. The extension of the service has more than doubled the number of trains run. At the end of the year 1,096 trains were being run weekly compared with 462 up to February 1926, and of these trains an average of 93 per cent. ran right time, 5 per cent. under 5 minutes late and 2 per cent. over 5 minutes late.

59. **Through-services.**—It is interesting to note the following through-services of over 1,200 miles which are maintained by Railways in conjunction with each other. By a "through-service" is meant a journey over two or more railways without any necessity of changing:—

	Miles.	
Bombay (V. T.) to Peshawar	1,542	
Howrah to Peshawar	1,501	
Bombay (Colaba) to Peshawar	1,450	
Bombay (V. T.) to Howrah	1,349	<i>via</i> E. I. R.
Do. do.	1,223	<i>via</i> B. N. R.

Other through-services include:—

Bombay (V. T.) to Dehra Dun	1,198
Bombay (Colaba) to Kalka (for Simla)	1,068
Howrah to Kalka (for Simla)	1,066
Howrah to Madras	1,022
Sealdah to Muttra	831
Bombay to Madras	794

60. **Working of the wagon pool.**—The wagon pool for standard gauge railways was continued during the year under the Director of Wagon Interchange appointed by the Indian Railway Conference Association. Speaking generally there was no difficulty in meeting the demands of railways for the supply of empty wagons. On the contrary partly due to traffic remaining dull throughout most of the year and partly to improved working resulting in better "wagon user" the problem to be solved was how to dispose of the empties which to a greater or less degree were surplus on every railway.

The Car Record Section has continued to be an invaluable part of the organisation of the office. In addition to tracing individual wagons which were "wanted" for one reason or another it has been possible by means of a minute check of the results of the 1925 census together with the aid of the Junction Movement Registers maintained by the Car Record Section to bring up to date the stock registers of all railways. It has also assisted railways in effecting the periodical return of their wagons for overhaul and has considerably reduced the number of wagons which are overdue examination. Stricter attention has also been paid by all railways to the correct routing of non-pooled wagons and to speeding up the turn round of stock.

As a source of information to the Commercial Departments of railways the Car Record Section has been most useful. This fact is borne out by the increasing number of enquiries received from railways. These enquiries amounted to 1,658 during the year ending 31st March 1926 compared with 1,193 during the previous year.

The Conference of 1925 confirmed the decision that 24 hours free allowance to working Railways in respect of all wagons interchanged at Junctions should be reduced to 16 hours. All Railways see the advantage of passing interchanged wagons through the Junction within this period.

The success of Neutral Control of wagon examination at Interchange Junctions led the 1925 Conference to make the scheme permanent and to recommend its extension to other Junctions. Requests have been received by the Director of Wagon Interchange to inaugurate the scheme at almost every Broad Gauge Interchange Junction in India, and this is gradually being done.

61. **Coal Department.**—In 1925 the coal mined in British India amounted to 19,969,041 tons against 20,256,034 tons in 1924 or a decrease of 286,993 tons.

The total quantity of coal despatched from the main coalfields in India by Railways was as follows:—

	Tons.
Umaria	91,866
Singareni	293,702
Pench Valley collieries	485,768
Bengal, Bihar and Orissa collieries	18,845,096

Of this amount the East Indian and Bengal-Nagpur Railways despatched 18,579,308 tons—the East Indian Railway carried 12,868,819 tons and the Bengal-Nagpur Railway 5,710,489 tons.

Including Bunker coal, shipments from the Port of Calcutta to Indian and Foreign Ports during 1925-26 under the supervision of this Department amounted to 437,276 tons as compared with 619,522 tons in 1924-25.

Railway collieries.—The State Railways' Coal Department inspected 7,026,729 tons during 1925-26 as compared with 6,796,586 tons in 1924-25. The total output from the principal Railway-owned collieries for the last two years was:—

Colliery.	Owned by	TOTAL OUTPUT IN TONS.		DISTRIBUTION IN 1925-26. (IN TONS.)					
		1924-25.	1925-26.	E. I.	B. N.	E. B.	N. W.	G. I. P.	B. & N. W.
Bokharo-Ramgarh	E. I. & B. N.	698,862	721,376	301,353	360,023	...	...	...	...
Kurharbaroo and Serampore.	E. I.	652,045	763,622	748,995	...	4,657	8,161	...	1,673
Kargali	G. I. P.	528,845	605,439	239,198	...	5,960	...	300,280	...
Mohpani	G. I. P.	71,341	70,514	...	...	...	...	70,514	...
Swang	E. I. & B. N.	43,626	58,602	...	58,602	...	...	...	...

Kargali (G. I. P. R.).—During the year the Central Power station which will supply current to all the Railway collieries in the Bokharo coalfields was practically completed and all the collieries will now be gradually electrified. In other respects the colliery is complete.

Mohpani (G. I. P. R.).—The life of this colliery is drawing to a close and as much machinery as possible is being transferred to other Railway collieries. It is expected to close the colliery about March 1927.

Bhurkunda (State).—All buildings, such as offices, Workshops, Hospital, Manager's Bungalow, etc., were completed during the year and a large amount of under-ground development work in two of the Seams has been carried out. It is expected the railway connection will be completed about October.

Jarangdih (B., B. & C. I. & M. & S. M.).—Practically all surface buildings are completed. At the end of the year one Shaft had been sunk to the bottom of the Main Seam and the second Shaft had about 41 feet still to be sunk. The railway bridge across the Koonar River was completed and the work of laying the colliery siding was well in hand. Despatches from this colliery should start immediately after the rains are over.

Religara (B., B. & C. I. and M. & S. M.).—Work here was confined to the building of a few temporary quarters and the getting out of detailed plans and estimates.

Argada (B. N. R.).—Most of the works have been completed and protection bunds have been constructed on all sides except the western side which is about 90 per cent. complete. Quarters for skilled labour and 300 units of miner's dwellings have been completed and occupied and work on 80 more units has commenced. By the end of March 1926 about 4,000 tons of coal had been despatched and an output of 20,000 tons per month was expected to be reached shortly.

CHAPTER V.

ROLLING STOCK AND MATERIALS.

62. **Additions to equipment.**—The equipment and the net additions to equipment during 1925-26 are summarised in Summaries Nos. VIII and IX in Volume II of this report. The details for individual lines will be found in statements Nos. 10, 11, 33 and 34.

During the year the following rolling-stock including arrears of previous years was on order for the broad and metre gauge railways :—

Item.	Broad Gauge.	Metre Gauge.
Locomotives	208	94
Coaching stock	3,458	729
Goods stock	12,246	4,897

Against these orders the numbers placed on the line by the end of the year were as follows :—

Item.	Broad Gauge.	Metre Gauge.
Locomotives	170	46
Coaching stock	1,160	318
Goods stock	7,725	2,490

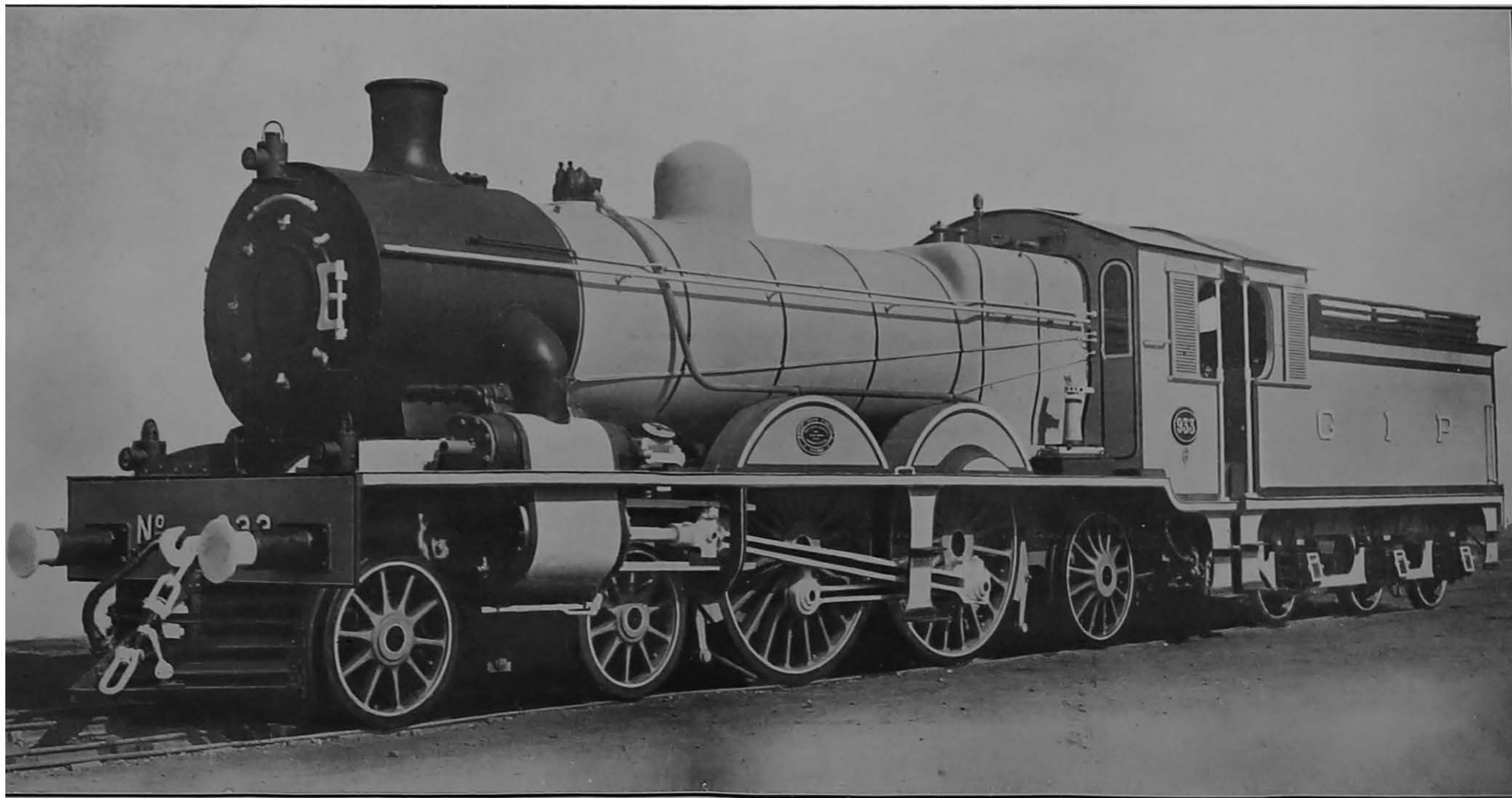
The numbers of coaching and goods stock are stated in terms of four-wheeler units. These numbers shown as placed on the line do not, however, represent the actual net additions to the rolling stock on railways, as many of the units were required to replace existing vehicles which had reached the end of their useful life.

63. The following statement shows the net additions to or reductions of rolling-stock on Class I Railways during 1924-25 and 1925-26 :—

	5' 6" GAUGE.		3' 3½" GAUGE.	
	1925-26.	1924-25.	1925-26.	1924-25.
Locomotives—				
Number	—18	—6	18	—4
Total increase in tractive effort in pounds, during the year.	2,099,251	1,737,252	408,190	187,144
Coaching stock—				
Passenger carriages—				
Number	139	366	—2	153
Seats.				
1st	379	145	65	80
2nd	700	604	373	—61
Inter	3,607	2,511	51	377
Third	28,688	33,445	2,940	11,825



Garratt Engine articulated 2-6-2, 2-6-2 type, North Western Railway.



E-1 Type Engine converted to superheater, Great Indian Peninsula Railway.

	5' 6" GAUGE.		3' 3½" GAUGE.	
	1925-26.	1924-25.	1925-26.	1924-25.
Other coaching vehicles—				
Number	228	228	14	11
Goods stock—				
Wagons—				
Number	4,779	1,626	1,668	816
Increase in capacity in tons .	135,848	30,210	24,899	12,796
Other goods vehicles—				
Number	-397	532	291	230

From this statement it will be seen that although in numbers, taking broad and metre gauge together, the locomotives on Class I Railways remained the same during 1925-26 as in the previous year, at the same time a large number of condemned engines of low tractive effort were replaced during the year by modern engines of higher tractive effort. The net result is an increase in total tractive effort of 2 million pounds on the broad gauge and nearly $\frac{1}{2}$ million on the metre gauge. In coaching stock also the net increase in the number of carriages (139 on the broad gauge) does not alone represent the increase in accommodation. A considerable number of old carriages were replaced during the year by new carriages of larger seating capacity, with the result that there was an increase in 3rd class accommodation of 28,688 seats on the broad gauge and 2,940 on the metre gauge making a total net increase of 31,628 seats. The total number of coaching vehicles, representing replacements as well as additions, placed on the line on broad and metre gauge railways during the year was 1,478 compared with 1,448 in the previous year. In addition 4,187 coaching vehicles were on order during the year and will be placed on the line in subsequent years. The actual net increase in goods wagons was 4,779 on the broad gauge and 1,668 on the metre gauge. For the same reason as has been explained above under coaching stock the net increase in capacity was 135,848 tons on the broad gauge and 24,899 tons on the metre gauge.

64. Standardisation of equipment.—The process of standardisation of equipment advanced during the year under the direction of the Railway Board. The work of the Locomotive Standards Committee and of the Carriage and Wagon Standards Committee mentioned in last year's report resulted in the Consulting Engineers being entrusted with the preparation of drawings and specifications preparatory to ordering a number of engines of the new types for trial and of detailed drawings for a number of new types of "Indian State Railway" wagons in supersession of the present Indian Railway Conference Association Standards.

Further a Standing Committee of Chief Engineers was formed with three Sub-Committees for the standardisation of bridges, track signalling and interlocking. The importance and urgency of effecting a greater measure of standardisation was accentuated by the transfer to the direct control of the Railway Board of the East Indian and Great Indian Peninsula Railways whereby the Board became directly responsible for the major portion of the Standard (5' 6") gauge railways in India.

65. Standardisation of Locomotives.—As the result of the reference of the recommendations on their 1924 Report to the Consulting Engineers, the Locomotive Standards Committee made certain modifications in the proposals for the adoption of new types of Locomotives. The new types were finally

accepted by the Railway Board for trial as standards for general adoption and it has been decided to order the following engines of the new types for trial on different railways :—

	4-6-2 TYPE.			2-8-2 TYPE.	
	Branch.	Light.	Heavy.	Light.	Heavy.
Broad Gauge	6	28	12	13	14
Metre Gauge . . . . .	...	4	5	11	...

During the manufacture of these locomotives the Consulting Engineers will supervise the preparation of accurate standard drawings of all details assisted by a Member of the Locomotive Standards Committee.

The standardisation of Narrow Gauge (2' 6" and 2' 0") Locomotives was referred to this Committee during the year and on receipt of their proposals they were referred to the Consulting Engineers for their opinion on the types recommended.

66. **Standardisation of Rolling-stock.**—The technical committee appointed in November 1924 by the Railway Board to revise the Indian Railway Conference Association designs of coaching underframes and wagon stock and to prepare designs of any other types for which there might be a demand, is known as the Carriage and Wagon Standards Committee. The revision was necessitated owing to the fact that in some instances existing designs had not been entirely satisfactory in service, also because it was necessary to redesign all underframes to take the Automatic Centre Buffer Coupler. The report of the Committee, which was received in September 1925, was forwarded to the Locomotive and Carriage and Wagon Superintendents' Committee of the Indian Railway Conference Association and to the Consulting Engineers to the India Office for examination, and the latter were asked to prepare general drawings embodying the recommendations made. These recommendations included one new design for broad and metre gauge carriage underframes, thirteen instead of sixteen types of broad gauge, thirteen instead of twenty types of metre gauge wagons, and two new broad and one metre gauge types of special wagons. The revised drawings for the broad gauge types have since been received and examined by the Carriage and Wagon Standards Committee and their recommendations with certain modifications have been approved by the Railway Board. Instructions have issued to the High Commissioner for India to the effect that six sample vehicles and underframes of each type are to be constructed and these will be put into service to ascertain what modifications, if any, are required before the revised designs are finally approved by the Railway Board. The Carriage and Wagon Standards Committee is intended to be a permanent body. In order to prevent stagnation and ensure progressive improvements in and additions to designs of coaching and goods stock the Committee will be convened as required to report on and advise the Railway Board on suggestions made from time to time by the different Administrations.

67. **Standardisation of Permanent Way, Bridgework, Signalling and Interlocking.**—The advisability of standardising the main essentials of permanent way, bridgework, signalling and interlocking has been recognised for some time past and as the result of their increased responsibilities in regard to Standard (5' 6") gauge railways the Railway Board came to the conclusion that both their own requirements and those of the important Company managed Indian Railways would best be met by the formation of a Standing



Progressive Carriage Building at Lilloah, East Indian Railway, showing a complete side of a carriage being lifted into position.

Committee of Chief Engineers of Class I Railways. It was decided that the Standing Committee should have three Sub-Committees, functioning under it, which would deal in detail with (1) permanent way, (2) bridgework and (3) signalling and interlocking.

This Committee, in addition to controlling the work of the proposed standardisation Sub-Committees would control the work of the sleeper pool committee and also form a body of experts to whom important matters could be referred for advice or opinion. In so far as the work of the standardisation Sub-Committees was concerned, the duties of the Standing Committee would be (1) to act as a connecting link between the former and the Railway Board in the matter of settling the various matters to be included in the agenda for the meetings of the Sub-Committees, (2) to receive and review the reports submitted by the latter and to make recommendations thereon for the consideration and orders of the Railway Board, and (3) generally to ensure that the work of standardisation was carried out on a continuous and progressive basis.

The Railway Board's scheme met with a ready response from the Railway Administrations concerned, who agreed to place the services of their Chief Engineers at the disposal of the Railway Board, when required. The Standing Committee of Chief Engineers of Class I Railways was accordingly constituted and held its first annual meeting at Simla from the 6th to the 11th July 1925. Among other matters dealt with at that meeting, the Fundamental Rules for the constitution and procedure of the Standing Committee, which had already been drafted by a special Sub-Committee, were considered and adopted; and the first Reports submitted by the Track and Bridge Sub-Committees were received and considered.

The Track Sub-Committee was convened for the first time on the 15th January 1925 and remained in session till the 7th March 1925. At that meeting they dealt with two important subjects, namely, the standardisation of points and crossings for 5' 6" gauge railways and the revision of the standard dimensions of timber sleepers for the 5' 6", metre and 2' 6" gauges. Their report on these subjects was, as stated above, submitted to and considered by the Standing Committee of Chief Engineers in July 1925, and the latter referred back to the Sub-Committee the proposed standard designs of points and crossings for further consideration and modification. This Sub-Committee has also had referred to them, for necessary action, the standardisation of cast iron and steel sleepers for 5' 6" gauge railways, as well as a number of other questions of varying importance, ranging from the suitability of the design of the new British standard section fishplates to the merits of a number of patent devices. These matters were under consideration during the second meeting of the Sub-Committee which commenced on 8th February 1926.

The Bridge Sub-Committee met on 1st April 1925 and remained in session till September of that year. They submitted for consideration by the Standing Committee of Chief Engineers, at their meeting in July, a First Interim Report, embodying recommendations regarding the revision of the general formula for "Impact" in the case of girder bridges on 5' 6" gauge railways, which were generally approved by the Standing Committee. They later submitted a Second Interim Report, containing recommendations regarding the revision of the Bridge Rules for 5' 6" gauge railways. Proposed revised Bridge Rules, based on these two Reports of the Bridge Sub-Committee, are now under consideration by the Railway Board, under whose orders they have been circulated to all Railway Administrations, Government Inspectors of Railways, and the Consulting Engineers to the Secretary of State and the High Commissioner for India, for examination and remarks. During their first session the Bridge Sub-Committee also considered the question of the co-ordination of weight of rail with locomotive and wagon axle-loads, for both unrestricted and restricted speeds, which had been referred to them by the Standing Committee of Chief Engineers at their meeting in July, and submitted a very comprehensive and detailed report on "Track

Stresses", which will be of great value in the future; whenever questions regarding co-ordination of weight of rail and axleload arise. This Sub-Committee are now carrying out deflection tests on metre gauge girders, with a view to formulating a revised Impact Formula and revised Bridge Rules for metre gauge railways.

68. Investigation of Sleeper and Timber Supply.—Arising out of the recommendation of the Sleeper Enquiry Committee 1923-24 an officer from the Imperial Forest Department has been attached to the Railway Board's organisation during the year with the designation of Timber Advisory Officer. He has been enquiring into the possibility of increasing the supply of indigenous wood sleepers by means of a more extended use of treated timbers for the purpose, and examining the best methods of putting into practice generally the recommendations of the Sleeper Enquiry Committee particularly in arranging better co-operation with the authorities owning or controlling the forests from which the main supplies of sleepers are obtained for the Railways. In connection with this work the Timber Advisory Officer has made extensive tours during the year to the principal sleeper supply centres and considerable progress has been made in improving the prospects of supply.

He has also been arranging for the institution of experiments with some of the cheaper kinds of indigenous timbers in the building of railway carriage bodies, in accordance with the recommendations that were made by the officer who investigated this matter last year. The timber for these trials is being supplied by the Forest Departments of different provinces and will be seasoned in the Forest Department's seasoning kilns at Dehra Dun and Rangoon.

69. State Railways Workshops Committee.—A number of schemes aiming at improvement in the capacity of the workshops of the North-Western, Oudh and Rohilkhand and Eastern Bengal Railways in regard to repairs to locomotives and rolling-stock had been proposed and in some cases had been put in hand when the transfer to State management in 1925 of the East Indian and the Great Indian Peninsula Railways gave an opportunity of effecting economies and improving efficiency by a definite co-ordination of the work of the State Railway Workshops. At the same time improvements in workshop methods in Great Britain and elsewhere made it advisable that the whole of the workshop organisation on these railways should be overhauled and modernised. The Railway Board, therefore, appointed a Committee consisting of Sir Vincent Raven, K.B.E., formerly Chief Mechanical Engineer of the North Eastern Railway and President of the Institution of Mechanical Engineers, as Chairman, and Mr. J. M. D. Wrench, Chief Mechanical Engineer, Great Indian Peninsula Railway, lately officiating Director of Mechanical Engineering, Railway Board, as a Member. Mr. K. C. Srinivasan, an officer of the Accounts Department, with special knowledge of workshop Accounts, was attached to the Committee as Financial Assistant. Mr. R. McChesney, Technical Assistant to the Chief Mechanical Engineer, North-Western Railway, was appointed Secretary to the Committee.

The Committee was instructed to enquire into and report on:—

- (a) The capacity or otherwise of the existing workshops of State Railways to deal economically and expeditiously with the maintenance of rolling-stock at the present time.
- (b) The necessity or otherwise of enlarging and extending the existing workshops, man-power and machinery with a view to the maintenance of an increased quantity of rolling-stock.
- (c) The advisability of concentrating the manufacture of spare parts in one or more of the larger workshops and to relieve the repair shops of all such manufacturing processes,



Bogie Oil Tank Wagon, South Indian Railway.

- (d) The alternative of establishing an entirely independent workshop wherein manufacturing work could be standardised and, if necessary, such maintenance work performed as other workshops may be unable to undertake—consideration to be given to the question of the site or locality most likely to lead to economic manufacturing costs and expeditious output.
- (e) The question of increased utilisation of Indian products in railway workshops.
- (f) Whether the manufacture of spare parts is done at rates which shew favourable comparison with the rates at which they could be obtained from outside agencies.

The Committee commenced their work early in January 1926 and submitted their report at the end of March 1926. This report is now receiving the attention of the Railway Board.

70. Automatic Centre Buffer Coupler.—As a result of further investigations of the problem of converting rolling-stock for use with the Automatic Centre Buffer Coupler, it was found to be necessary to obtain a more accurate knowledge of both the expenditure and the mechanical alterations involved in converting the large number of different types of wagons and vehicles in use. It had been recognised that in some cases fundamental alterations in the underframes would be necessary but the problem owing to the wide differences in design was found to be somewhat more extensive than had been hoped. It was considered advisable to ask the Consulting Engineers to prepare detailed drawings and estimates of the alterations required to be carried out to each of the various types of 5' 6" gauge stock now in use before proceeding to establish conversion depots for fitting the Automatic Centre Buffer Coupler to the existing stock. The grant for the work voted by the Assembly was accordingly not utilised during the year.

In the meantime, railways were instructed to continue to experiment with various types of automatic couplers and transition devices. A senior Mechanical Engineer was placed on special duty to co-ordinate and collate the results of trials which were still proceeding at the close of the year.

71. Supply of rails and structural steel from indigenous sources.—

The year under review was the 6th year of the Railway Board's 7-year contract with Messrs. The Tata Iron and Steel Company, for the supply of rails and fishplates to the State-worked Railways and the last year of the Company-worked Railway contracts. The total demands of the State-worked Railways, to be supplied during the year 1925-26, amounted to 52,206 tons and orders for the entire quantity were placed with the Steel Company. The demands of the Company-worked Railways for which orders were placed with the company amounted to 69,535 tons, orders for the balance having been placed abroad. Of these demands the Steel Company were able to supply 47,694 tons to the State-worked Railways and 66,227 tons to the Company-worked railways, leaving a balance of 4,820 tons, which was carried forward to the year 1926-27.

The pre-existing arrangement with the Company for supply of steel, other than rails, to State-worked railways under which the price per ton was fixed every quarter at an average c.i.f. landed price *plus* duty less Rs. 7-8 per ton of imported steel, was allowed to continue to 31st December, 1925. It was settled in communication with the Company that, thereafter, the State-worked railways should call for tenders as and when necessary in the usual way, opportunity being given of course to the Steel Company to tender in rupees in India.

72. Bounties for Wagons.—In August 1925, the Railway Board issued simultaneous call for tenders in England and India for 6,539 wagons to meet

the combined requirements of Indian Railways during the year 1926-27. They, at the same time, asked the Indian Stores Department to let the Railway Board have an estimate of the manufacturing capacity of the wagon-building firms in India, before the 10th of November 1925, the date on which the tenders were to be opened.

As bounties were to be paid on wagons manufactured in India during the year 1926-27, in accordance with the terms of Section 4 of the Steel Industry (Protection) Act, 1924, it became necessary to consider what amount would be available for bounties on orders placed in India for delivery in 1926-27 and this gave rise to a difficulty.

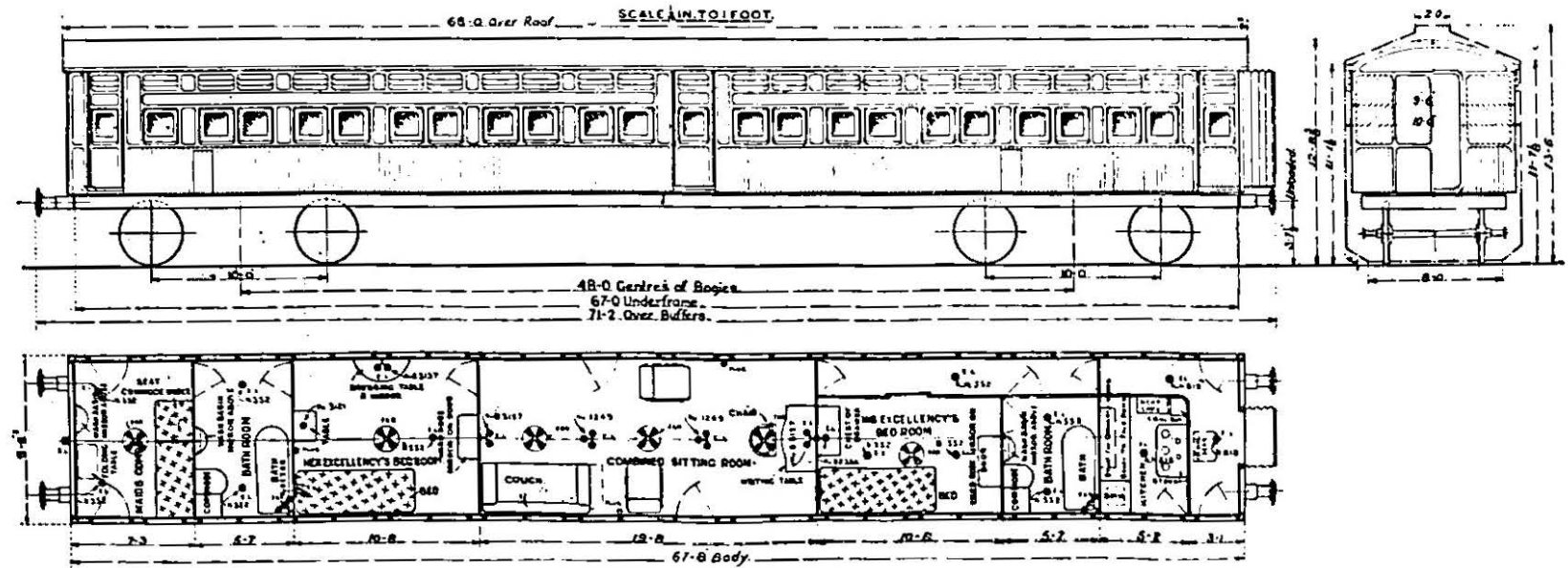
The Steel Industry (Protection) Act, authorised the payment of not more than 7 lakhs of rupees by way of bounties upon wagons during each of the three years 1924-25, 1925-26 and 1926-27, but, as explained in the last report, only Rs. 2,85,600 could be paid by way of bounties during the year 1924-25 and the balance, *viz.*, Rs. 4,14,400, of the permissible total bounty in that year lapsed as the Act did not provide for the carry forward of an unspent balance from one year to another. During the year 1925-26, payment by way of bounty was limited to Rs. 7 lakhs, but the amount due to be paid during that year on wagon orders placed under the bounty scheme, aggregated Rs. 10,73,400. It was, therefore, necessary to carry forward the excess over Rs. 7 lakhs on these orders, *viz.*, Rs. 3,73,400, into the year 1926-27, thus reducing the bounty money available on wagons to be delivered against new orders during the year 1926-27 to Rs. 3,26,600. This amount was considered insufficient for payment of bounties on further orders that might be placed with the wagon-building firms in India for manufacture during the year 1926-27, and in the circumstances it was considered necessary that legislation should be undertaken to increase the bounty money available for payment on orders to be placed for supply during the year 1926-27. Consequently it was proposed that legislation should be undertaken to utilise the lapse of Rs. 4,14,400 which occurred in 1924-25, for purposes of payment during 1926-27, in addition to the amount available, *viz.*, Rs. 3,26,600 after payment on orders previously placed. But there was insufficient time to undertake the desired legislation and, as an alternative, a resolution was introduced and passed in the autumn session of the Legislative Assembly of 1925 authorising Government to pay by way of bounties Rs. 21 lakhs during the three years 1924-25 to 1926-27 both inclusive, without any limitation on payment during any one of the three years. This enabled the Government to increase the balance of bounty money available during 1926-27 by the amount short spent in the year 1924-25, thus increasing the amount of bounty to be paid during 1926-27 to Rs. 7,41,000.

This amount was utilised in full in placing orders for 351A-1, 1143A-2, 1426 C-1 and 324 C-3 wagons with Indian wagon building firms.

Subsequently section 4 of the Steel Industry (Protection) Act, was amended, and is now as follows:—

“ The Governor General in Council may pay by way of bounties *
 * * * in respect of iron or steel wagons and of underframes
 for railway carriages ordered after the 31st day of March, 1925,
 and before the first day of April, 1927, by any such Railway
 Administration, such sums not exceeding in the aggregate a
 sum of nineteen lakhs and forty thousand rupees, as he thinks
 fit.”

73. **Steel Coaches.**—Investigation into the question of the prevention of overcrowding in passenger trains led the Board during the latter part of the year 1924-25 to the conclusion that, to meet the increased passenger traffic offering and anticipated, some special steps were necessary to accelerate the increase of coaching stock, especially lower class stock on the East Indian and North-Western Railways. The provision that had been made in the budget for 1925-



H. E. The Governor of _____ al's Saloon and his Staff Saloon, Eastern Bengal railway.

26 had been limited by the potential building capacity of these two railways, and there were already arrears on the building programmes of previous years. In order to relieve the situation therefore it was decided to provide a number of additional passenger units by obtaining steel coaches from abroad instead of following the usual practice of building steel coaches with wooden bodies in India. Sanction was accordingly given to obtain 11 rakes for the East Indian Railway on Renewal Account in replacement of old low capacity stock and 11 rakes for the North-Western Railway on Capital Account. Each rake will consist of 10 bogie coaches equivalent to 20 four-wheeled units, and will furnish seating accommodation for approximately 1120 lower and 35 upper class passengers. It was found that these coaches could be erected in Railway Workshops without interfering with the programme for building passenger stock of wooden bodies.

In order to give effect to this proposal as soon as possible the Railway Board placed the matter before the Standing Finance Committee in June 1925 and obtained their approval to the necessary expenditure in addition to the expenditure voted by the Assembly in the Budget. These rakes are estimated to cost Rs. 98,36,505 out of which Rs. 53,60,815 will be chargeable to Capital. Indents were sent forward last year and it is expected that the contract will be completed by about the middle of 1926, which will enable these vehicles to be put into service before the end of the year 1926-27.

74. Electric Headlights for Locomotives.—Electric headlights on locomotives have been in use on most of the railways to some extent for a number of years and initial difficulties connected with their use have been largely overcome.

The additional security which has been obtained in night running has been almost universally recognised and the Railway Board has finally decided to make their use universal. They have therefore issued orders that as a safety measure on State-worked railways electric headlights shall be provided by all Railway Administrations on all locomotives working mail, passenger, or mixed trains, whether on double or single line sections by 31st March 1928. This decision, however, does not extend to branch lines where trains are infrequent and run at slow speeds.

The total number of mail, passenger and mixed engines belonging to Class I Railways equipped with electric headlights, at the end of the year under review was 716 out of an average number in daily use on such services of 2,200.

75. Value of railway materials purchased.—The value of materials purchased by Indian Railways in 1925-26 was 23.30 crores as compared with 20.83 crores in 1924-25 excluding coal, stone, bricks, lime, etc., and other locally purchased stores. The purchases in India and from abroad are shewn in the statement appended from which it will be seen that the principal increases were 1.04 crores for rolling-stock and 84 lakhs for tools, stores and permanent way. The value of materials purchased in India shews an increase particularly in the case of rolling-stock, the value of which advanced from 37 lakhs to 98 lakhs. This figure, however, does not include expenditure on the building of coaching stock bodies all of which is undertaken in railway workshops, the expenditure on spare parts and fittings for rolling-stock also manufactured in railway workshops, and the expenditure on wagon building in the workshops of the Bombay, Baroda and Central India Railway, the Bengal and North-Western Railway and the Burma Railways. Nor is the expenditure on structural and other engineering works completed 'in situ' taken into account. It is intended in future years to embody this information in the Annual Report.

76. During the year the railways bought from the Tata Iron and Steel Company 109,850 tons of steel rails and 4,071 tons of fishplates, at a cost of Rs. 1,44,83,464.

Statement showing value of stores purchased under principal headings.

Headings.	VALUE OF IMPORTED MATERIAL.			Value of indigenous materials.	Total purchases, 1925-26.	Total purchases, 1924-25.
	Purchased direct.	Purchased through Agents in India.	Total imported materials.			
	Rs. crores.	Rs. crores.	Rs. crores.			
Rolling-stock	5.52	0.66	6.18	0.98	7.16	6.12
Tools and stores	0.81	2.73	3.54	3.22	6.76	6.96
Permanent way	1.29	0.32	1.61	4.28	5.89	5.45
Electric plant	0.72	0.51	1.23	0.01	1.24	1.11
Building and station materials and fencing	0.23	0.52	0.75	0.17	0.92	0.61
Bridge work	0.43	0.07	0.50	0.04	0.54	0.51
Workshop machinery	0.45	0.15	0.60	...	0.60	0.45
Engineer's plant	0.01	0.09	0.10	0.03	0.10	0.22
TOTAL	9.49	5.08	14.57	8.73	23.30	20.63

CHAPTER VI.

STAFF.

77. **Number of staff.**—The total number of employees on all Indian Railways at the end of the financial year 1925-26 was 741,860 as compared with 745,216 in the previous year. This decrease of 3,356, it is interesting to note, occurred in a year in which the route mileage increased by 340 miles.

The following table shows the number of employees on 31st March 1925 and 1926 divided among the various communities :—

Year.	Europeans.	STATUTORY INDIANS.				GRAND TOTAL.
		Hindus.	Muslims.	Other classes.	Total.	
1924-25 *	5,567	542,430	164,389	32,830	739,649	745,216
1925-26	4,986	534,474	166,365	36,035	736,874	741,860

* Revised figures.

78. **Cost of staff.**—The following statement shows the cost of all the staff employed on Class I Railways (excluding Jodhpur Railway) during the years 1924-25 and 1925-26 :—

Railway System.	1924-25.	1925-26.
	Rs.	Rs.
Assam-Bengal	35,97,779	51,48,420
Bengal-Nagpur	2,63,72,735	2,75,18,436
Bengal and North-Western	67,90,257	70,76,187
Bombay, Baroda and Central India	4,13,66,581	4,28,31,328
Burma	1,37,98,830	1,46,58,207
Eastern Bengal	*2,19,20,529	2,25,88,468
East Indian	*6,50,73,066	6,04,92,713
Great Indian Peninsula	*5,20,04,002	5,46,71,533
Madras and Southern Mahratta	2,25,83,292	2,41,70,197
Nizam's Guaranteed State.	53,70,297	54,97,257
North-Western	5,44,90,103	5,09,67,481
Rohilkund and Kumaon	15,40,679	16,16,099
South Indian	1,61,44,604	1,72,26,648
TOTAL	33,10,52,754	33,44,62,974

* Revised figures.

These figures of cost include not only the total pay of the staff but their allowances (other than travelling allowances), gratuities and provident fund bonuses. With the exception of the East Indian and North-Western Railways all the railways show small increases in expenditure in 1925-26 which is due partly to increments under the time scale of pay and partly to payments on account of Lee Commission Concessions to Company-managed Railways.

The increase in the Assam-Bengal Railway is mainly under construction due to the large programme now in hand. The decrease in the East Indian is accounted for mainly by the transfer of the Naini-Jubbulpore section to the Great Indian Peninsula from the 1st October 1925, and is counter-balanced by an increase in the latter. The decrease in the North-Western Railway is chiefly due to the labour unrest among the workshop staff at the beginning of the year and to subsequent short time working.

79. Recruitment and Training of Officers.—In paragraph 96 of the Administration Report for 1924-25 a reference was made to a provisional report prepared by the Railway Board on the subject of the recruitment and training of Railway Officers in India. This matter continued to occupy the attention of the Board during the year and formed the subject of discussions with the Central Advisory Council and the Agents of State-managed Railways. The report was finally completed in November 1925 and submitted to His Majesty's Secretary of State for India for approval.

80. The scheme of recruitment and training contained in the report aims at the larger recruitment of Indians to the extent of 75 per cent. of the vacancies in the cadres of State-managed Railways. It deals with the three main classes of staff, *viz.*, (1) Civil Engineers, (2) Mechanical Engineers and (3) Transportation and Commercial Officers, employed on railways, laying down qualifications and a scheme for their recruitment and training. Under this scheme candidates for the Civil Engineering and Transportation and Commercial Departments who must be the holders of certain specified degrees after selection by Provincial Quota Committees will be required to compete at a qualifying examination which will include an oral test. Successful candidates for the Engineering Department will be appointed on 3 years' probation during which they will undergo one year's practical training, comprising Workshop practice and Survey and Construction Works. At the end of the period of probation they will be required to pass a final practical examination prior to confirmation.

Candidates selected after the examination for the Transportation and Commercial Departments will be similarly appointed on 3 years' probation during which they will be required to go through a course of training comprising practical work on railways and instruction at the Railway School of Transportation. At the conclusion of the course of training, probationers will have to pass a final examination for confirmation.

For the Mechanical Engineer appointments (including those in the Power Branch of the Transportation Department) a system of special apprenticeship is proposed. Applications are to be invited by advertisement and selection will be made from candidates who have passed either the I.Sc., I.A., or Senior Cambridge examinations. Selected candidates will undergo a course of training in Railway Workshops (both practical and theoretical) for a period of 3 years; this period of Workshop training will be followed by a 2 years' higher Mechanical Course in the Bengal College of Engineering, Sibpur for candidates required for the Mechanical Department, or a further 2 years' practical training in the Running Department for candidates required for the Power Branch of the Transportation Department. Thereafter selected apprentices to the required number will be sent to England to go through a prescribed course of training both practical and theoretical for two years; at the end of which they will be required to qualify for either the A.M.I.C.E. or A.M.I.M.E. During the entire apprenticeship period both here and in England the apprentices will be allowed suitable stipends.

Officers for the Stores Department will be selected from amongst suitable officers trained in the Civil and Mechanical Engineering Services.

81. **Indianisation.**—The following statement shows by Class I Railways the number of Gazetted Officers on State-managed Railways and officers of corresponding rank on Company-managed Railways on the 1st April 1926 as compared with 1st April 1925. Full details of the numbers by departments will be found in Appendix F which also contains similar information relating to subordinates on scales of pay rising to Rs. 250 per mensem and over.

Statement of gazetted officers on State-managed Railways and officers of corresponding rank on Company-managed (Class I) Railways (excluding Nizam's Guaranteed State and Jodhpur Railways) on the 1st April 1926 as compared with 1st April 1925.

Name of Railway.	1ST APRIL 1925.						1ST APRIL 1926.						INCREASE + DECREASE —					
	Europeans.	Statutory Indians.				Grand Total.	Europeans.	Statutory Indians.				Grand Total.	Europeans.	Statutory Indians.				Grand Total.
		Hindus.	Muslims.	Other classes.	Total.			Hindus.	Muslims.	Other classes.	Total.			Hindus.	Muslims.	Other classes.	Total.	
A. B.	52	6	1	2	61	59	7	1	6	13	63	—2	+1	..	+3	+4	+5	
B. N.	170*	27	5	19	221*	172	30	6	14	50	222	+2	+3	+1	—5	—1	+1	
B. & N. W.	55	3	1	..	59	59	4	1	..	5	64	+4	+1	..	..	+1	+5
B. E. & C. I.	150*	14	..	21	185	153	20	..	23	43	196	—4	+6	..	+2	+8	+2	
Burma	90*	3	..	12	105	95	4	..	16	20	115	+5	+1	..	+4	+5	+10	
K. B.	79*	31	3	12	125	82	38	2	15	55	137	+3	+7	—1	+3	+9	+12	
E. I.†	227	49	12	26	314	219	48	12	37	97	316	—8	—1	..	+11	+10	+2	
G. I. P.	175*	18	5	23	221	194	25	7	21	53	247	+19	+7	+2	—2	+7	+28	
M. & S. M.	122	15	1	6	144	121	22	2	10	34	155	—1	+7	+1	+4	+12	+11	
N. W.	192*	60	13*	28	293*	197	66	21	34	121	318	+5	+6	+3	+6	+20	+25	
R. & K.	12	1	..	..	13	12	1	..	..	1	13	..	..	..	..	..	..
S. I.	83	17	1	3	104	106	22	1	5	28	134	+13	+5	..	+2	+7	+20	
Railway Board and Miscellaneous Officers.	59*	8*	3*	14*	84	49	7	3	18	28	77	—10	—1	..	+4	+3	—7	
TOTAL	1,485*	252	45	166	1,948*	1,509	294	56	198	548	2,057	+24	+42	+11	+32	+85	+109	

* Revised figures.
† Includes O. & B. Railway.

Statement showing percentages of total officers employed.

	EASTERN BENGAL, EAST INDIAN, GREAT INDIAN PENINSULA AND NORTH WESTERN RAILWAYS.		TOTAL CLASS I RAILWAYS (EXCLUDING NIZAM'S GUARANTEED STATE AND JODHPUR RAILWAYS).	
	1st April 1925.	1st April 1926.	1st April 1925.	1st April 1926.
Europeans	70.62	67.98	76.23	73.36
Statutory Indians—				
Hindus	16.58	17.38	12.94	14.30
Muslims	3.46	4.13	2.31	2.72
Other classes	9.34	10.51	8.52	9.62
TOTAL	29.38	32.02	23.77	26.64

Taking all the railways together the percentage of Indians filling Gazetted Officers' posts increased from 23.7 per cent. to 26.6 per cent. On the 4 State-managed lines, the increase was from 29.4 to 32 per cent. Taking the North Western Railway which is the largest line alone 38 per cent. of the superior posts are now held by Indians.

82. **Vacancies among Officers and how filled.**—In accordance with an undertaking given in the Legislative Assembly by the Honourable Member for Railways in February 1926 a detailed statement will be found in Appendix G of this Report (Volume I) showing the number of appointments created and vacancies which occurred among officers of gazetted rank on State-managed Railways and of corresponding rank on Company-managed Railways and how they were filled during 1925-26. Summarised, the figures are as follows:—

	No. of new appointments created during the year.	No. of vacancies which occurred during the year.	No. of appointments abolished during the year.	No. of vacancies not filled up during the year.	Net number of vacancies filled during the year.	FILLED BY				
						Statutory Indians.				
						Europeans.	Hindus.	Muslims.	Other classes.	Total.
Agency	4	4	..	..	8 (b)	1	1	2	..	8
Engineering	99	61	10	18	132	75	46	6	5	57
Transportation (a)	18	14	..	7	25	10	5	..	4	9
Commercial	1	2	..	1	2	2	..	..	..	..
Mechanical	4	22	..	2	24	18	5	..	1	6
Stores	2	12	..	8	6 (c)	3	1	..	1	2
Other Departments	10	21	..	5	20	17	5	..	4	9
TOTAL	138	130	10	41	223(b) & (c)	132	63	8	15	66

Percentage Europeans to total number of vacancies filled—60.0.

Percentage Statutory Indians to total number of vacancies filled—39.4.

(a) Includes figures of commercial departments in the case of B., B. & O. I. and M. & S. M. Railways.

(b) Four vacancies filled by officers transferred from Engineering, Traffic and Audit Departments.

(c) One vacancy filled by transfer of an officer from Electric Department.

The number of net vacancies appearing under "Engineering" is more than half the total number of net vacancies and is due to the large programme of Railway Construction at present in hand. The percentage of Europeans appointed during the year to the total number of vacancies was 60.6. The policy of Indianisation was accepted by the Company-managed lines late in the year and the effect of the acceptance of the policy has not been fully reflected in the figures for the year 1925-26.

On the State-managed lines the percentage of Europeans was 56.1. This high figure has been due mainly to the following causes:—

(a) Owing to the large construction programme in hand a very large number of posts of temporary Engineers had to be created and for these posts it was very necessary to obtain if possible men of experience. The first efforts were confined entirely to obtaining Engineers for this purpose in India and a few of these men so obtained were Europeans; it was then found necessary to complete requirements by recruiting in England.

(b) Owing to the absence of training facilities in this country very few qualified Indians were available for appointment to the Mechanical Department. In their Resolution No. 2058-E. of 15th July 1926, the Government of India have introduced a scheme for the recruitment and training of Indian youths for this Department, and when apprentices recruited under that scheme become qualified for employment the figures are expected to show a gradual improvement in respect of recruitment of Indians.

(c) The figure for the Transportation Department includes several Europeans who were engaged by the late Great Indian Peninsula Railway Company before the Railway was taken over by the State.



Technical School, Jamalpur, East Indian Railway.

As regards the higher subordinate grades a detailed statement will be found in Appendix F showing by Railways, the number of employees on scales of pay rising to Rs. 250 and over on the 1st April 1926 as compared with 1st April 1925. A summary of the figures is given herewith:—

Statement of subordinates on scales of pay rising to Rs. 250 per mensem and over on Class I Railways (excluding Nizam's Guaranteed State and Jodhpur Railways) on the 1st April 1926 as compared with 1st April 1925.

Name of Railway.	1st APRIL 1925.						1st APRIL 1926.						INCREASE + DECREASE—					
	Europeans.	Statutory Indians.				Grand Total.	Europeans.	Statutory Indians.				Grand Total.	Europeans.	Statutory Indians.				Grand Total.
		Hindus.	Muslims.	Other classes.	Total.			Hindus.	Muslims.	Other classes.	Total.			Hindus.	Muslims.	Other classes.	Total.	
A. B.	22	23	4	40	78	95	17	20	4	60	80	97	-5	+3	..	+4	+7	+2
B. N.	333*	140	13*	408	550	859*	321	144	10	420	574	895	-12	+4	-3	+17	+18	+6
B. & N. W.	31*	15	2	50	76	107	32	14	2	50	72	104	+1	-1	..	-3	-4	-3
D., B. & C. I.	155*	253	25	500	784	939*	147	231	28	615	824	971	-8	+23	+3	+9	+40	+32
Durma	28*	83	0	108	200	318	26	32	9	221	312	338	-2	-1	..	+23	+22	+20
E. B.	118*	100	5	103	274	417*	134	109	5	171	285	419	-9	+3	..	+8	+11	+2
E. I.†	850	300	25	780	1,114	1,973	678	323	31	1,184	1,538	2,216	-181	+23	+0	+305	+424	+243
G. I. P.	230*	125	20*	303	957	1,243*	332	175	35	774	984	1,316	+40	+50	+6	-29	+27	+73
M. & S. M.	85	31	1	173	205	290	73	38	1	188	227	300	-12	+7	..	+15	+22	+10
N. W.	401*	328	123*	378	829	1,230*	313	325	118	441	884	1,197	-38	-3	-5	+03	+55	-33
R. & K.	0*	6	1	13	19	25	5	4	1	15	20	25	-1	-1	..	+2	+1	..
S. I.	63	73	2	158	233	290	56	72	3	172	247	303	-7	-1	+1	+14	+14	+7
TOTAL	2,412*	1,482	230*	3,680	5,410	7,822*	2,134	1,503	247	4,207	6,047	8,181	-278	+111	+8	+518	+637	+359

* Revised figures.

† Includes O. & B. Railway.

Statement showing percentages of total senior subordinates employed.

	EASTERN BENGAL, EAST INDIAN, GREAT INDIAN PENINSULA AND NORTH-WESTERN RAILWAYS.		TOTAL CLASS I RAILWAYS (EXCLUDING NIZAM'S GUARANTEED STATE AND JODHPUR RAILWAYS).	
	1st April 1925.	1st April 1926.	1st April 1925.	1st April 1926.
Europeans	34.74	28.30	30.84	26.09
Statutory Indians—				
Hindus	17.66	18.11	18.95	19.47
Muslims	3.74	3.67	3.05	3.02
Other classes	43.86	49.92	47.16	51.42
TOTAL	65.26	71.70	69.16	73.91

The percentage of Indians to the total has risen from 69 in 1925 to 73.9 in 1926 the actual figures being 5,410 in 1925 and 6,047 in 1926.

There was thus during the year an increase of no less than 637 in the number of Indians occupying these posts and a decrease of 278 Europeans.

83. **Training of Staff.**—It was promised in last year's Report that this year's report should contain a full description of the Railway Transportation School at Chandausi.

In the first place to get a clear idea of the part which Chandausi is playing and is to play in the Transportation School Scheme it is necessary to review briefly that scheme as a whole.

The marked development in the science of transportation and the equipment of railways, and the insistent demand for reduced rates and fares together with the increase in operating expenses which post-war conditions have imposed in every quarter of the globe, have brought prominently into view the need for increased efficiency in working, or in other words for obtaining the maximum use from the material available. It follows that not only must the material be of the best but that a higher standard must be obtained from the staff who have to handle it, and it is to meet this problem, that the Railway Board have devised a system of Transportation Schools which will give the staff much fuller instruction in transportation duties than has been attempted hitherto. The scheme is being applied in the first instance to the State-worked Railways but it is anticipated that, as it develops, the Company-worked Administrations will see the advantages it offers and the desirability of participating therein and starting similar schools of their own.

Briefly the foundation of the proposal is a system of "Area Schools." That is the State Railways are to be divided into "Areas" conforming more or less with the existing divisions between the different lines, and for each Area there will be a school, which will provide the primary education in transportation of the railway staff. The schools at present proposed will be situated at:—

- | | |
|-----------------------------|---|
| (1) Gomoh | for the E. B. R. and Eastern Divisions of the E. I. R. |
| (2) Chandausi | for the Western Divisions of the E. I. R. and the Eastern Divisions of the N. W. R. |
| (3) Bina or Betul | for the G. I. P. |
| and (4) Lyallpur | for the Western Divisions of the N. W. R. |

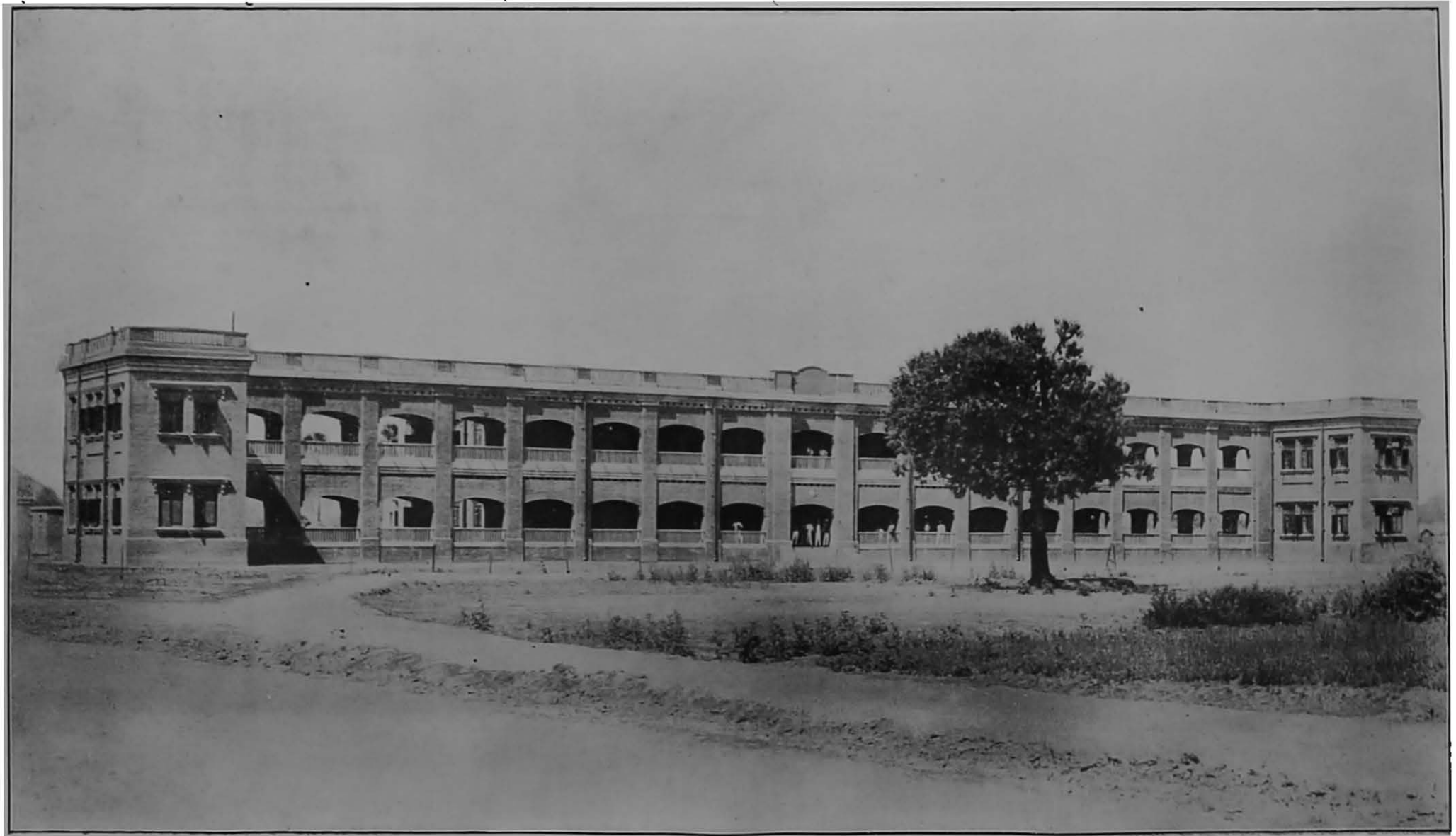
A temporary school at Bina is under formation and the scheme for having a larger school for the Great Indian Peninsula Railway at Bina or Betul is under consideration. The existing Telegraph School at Lyallpur is also being developed into an Area School. A scheme for having a school at Gomoh instead of the existing East Indian Railway Training School at Asansol is also being formulated.

84. These schools will have two distinct functions:—

- (a) The training of "Probationers" who have not yet commenced their railway service, and
- (b) the provision of periodical "Refresher" courses for those already in the railway service, certificates being granted on the results of each course.

In considering the training of probationers it must be borne in mind that a general education is no part of the scheme, which deals purely with railway subjects, but generally speaking the selected candidates will have read up to the matriculation standard. For the present men for the Traffic and Commercial sides only will be taken. These fall into three groups:—

- (1) The Station master group comprising telegraph signallers, assistant station masters and station masters. These men will be given a course which will not exceed ten months and may be less (depending on the ability of the candidate) in telegraph signalling with, in addition, some instruction in assistant station masters' duties both on the Traffic and on the Commercial sides.
- (2) The Commercial group, comprising coaching and goods clerks, will have a three to four months course in coaching and goods duties and also some instruction in traffic working.



Indian Apprentices Hostel, Jamalpur, East Indian Railway.

- (3) The Trains Staff group, comprising guards, will have a two to three months course in the particular branches of knowledge they require, including some practical work on the line with an experienced guard.

In every case there will be an age limit for appointment and the probationer will be required to pass an examination at the conclusion of his course. He will then have to work for twelve months at least on a railway on probation to ensure before he is confirmed that he will prove a satisfactory railway servant.

The second function of the Area Schools, the provision of " Refresher " courses, is intended to provide courses of training for the staff at intervals of say five years, certificates being granted at the completion of the courses, and the intention is that no railway servant will be considered eligible for promotion to a higher post unless he holds the corresponding school certificate. It may, however, be stated that such a certificate, though an indispensable qualification for promotion, does not in itself confer any right to such promotion, nor will the holder of a certificate be promoted, unless he has satisfied his superiors that he is in all respects fitted for the higher post he is to attain.

85. As has been already stated the Area Schools will provide the primary education under the scheme. The secondary education, naturally of a more advanced type, will be the business of a " Central School " which will take the more senior men who have already passed through the Area Schools, and will in addition provide instruction for Probationary Officers, and " Refresher " courses for Officers. For the latter part of the work the Board have under consideration a plan for what would amount to a Railway Staff College on a more suitable site than that occupied by the existing Central School, but for the present Chaudausi is fulfilling these functions, and to a limited extent those of an Area School also as laid down in the programme already referred to.

The reasons for fixing on Chaudausi were the urgency for making a start with the scheme and the fact that buildings were available. These were once part of a district headquarters of the Oudh and Rohilkhand Railway. They were much dilapidated but they were rapidly repaired and reconditioned, thus enabling the Government of India's intention that the school should be opened in the spring of 1925 being fulfilled and the first session was held in March of that year.

86. The objects kept in view in formulating the scheme of training adopted were briefly as follows:—

- (1) To teach and explain the system of rules for operating traffic on the Indian Railways, both in lectures and by demonstration with models;
- (2) To explain the details and working of such mechanism as the vacuum brake, electrical train lighting, the principles of the locomotive, the theory and use of telegraph instruments, etc.;
- (3) To give instruction on the Commercial side with particular attention to station accounts and the booking of goods and passengers; and
- (4) To create a real interest in all the details of Railway Operation and to encourage a spirit of mutual assistance and of *esprit de corps*.

87. There are at present three classes of students receiving instruction at Chaudausi, namely:—

- (1) The Senior Class, with a maximum number of 28, who come for a period of 30 days including examination. They are composed of junior officers, station masters and assistant station

masters of important stations, inspectors from the various branches of the Transportation Department, running shed foremen, traffic controllers, and occasionally senior drivers and train examiners.

The course comprises instruction in:—

General rules for working traffic,
 Practical train passing and control,
 Vacuum brake,
 The principles of the locomotive,
 Station accounts and Coaching and Goods clerks duties,
 Telegraph office supervision, and
 Statistics and Railway Organisation.

- (2) The Junior Class, maximum number 28, period including examination 30 days, comprise station masters and assistant station masters, etc., drawing less than Rs. 200 per mensem, with instruction in:—

General rules for working traffic,
 Practical train passing,
 Vacuum brake,
 Wagon construction,
 Station accounts and Coaching and Goods clerks duties, and
 Telegraph including theory of instruments.

- (3) The "Area" Class, which is the first step towards the formation of the Chandausi Area School, maximum number 25 (drawn from the Chandausi "Area"), period including examination 23 days. Station masters of small stations, assistant station masters, and relieving assistant station masters instructed in:—

General rules for working traffic,
 Practical train passing,
 Theory of telegraphic instruments, and
 Telegraph signalling (refresher work).

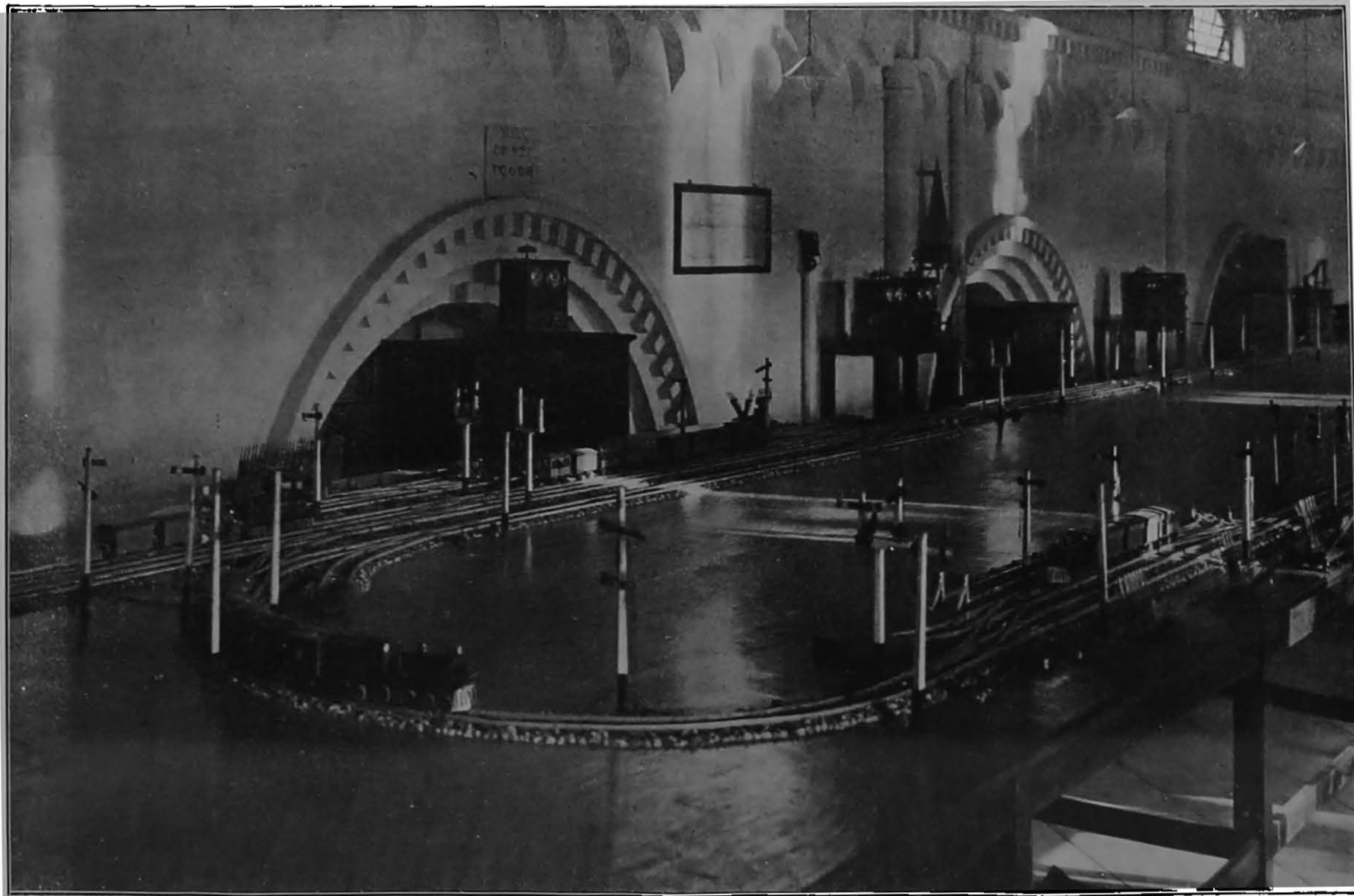
88. The accommodation for instruction provided consists of—

- (1) The Transportation Traffic School, of which the most important feature is a complete 2½" gauge model railway, operated by electrically driven locomotives, controlled by signals, with ten stations of different types, complete with double and single line block instruments, interlocked lever frames, signals, points, point locking gear, detectors, compensators, etc.

There is also a full sized facing point lay-out with two cabins controlling the signals and all details complete.

- (2) The Locomotive and Carriage School, with apparatus for demonstrating the working of the vacuum brake, sectioned locomotive fittings, valve gear models and train lighting apparatus.
 (3) The Commercial School, and
 (4) The Telegraph School complete with the necessary instruments, batteries, etc.

A competent staff of instructors has been provided. On the average the railway employee under instruction attends four lectures of an hour each daily. In addition he has to put in a certain amount of private study, and experience shows that the men are exceedingly keen with the satisfactory



Block Signalling School, Madras and Southern Mahratta Railway.

result that the percentage of failures to pass the concluding examinations has been very small. It is also found that the results of inter-railway competition and exchange of ideas are of considerable value.

89. During the period of residence in the school it is endeavoured to make the men as comfortable as possible. Each man is provided with a furnished room, electrically lit, where he can study as well as sleep. The rooms are of two types according as the occupant draws less or more than Rs. 200 a month. The school has its own electricity supply, an excellent water supply, and a well thought out scheme of sanitation. The grounds cover nearly a hundred acres where tennis, cricket, and football or hockey are provided for. Provision is also made for washing clothes and disinfecting. There is a school dispensary and a sub-medical officer who is under the supervision of the Civil Surgeon, Moradabad.

With Europeans, Anglo-Indians, Mahomedans and Hindus from all parts of India to cater for, the messing arrangements present a somewhat difficult problem. The method adopted is to place the whole of the catering in the hands of an Indian contractor, and on the whole this has worked well; but the complications will be understood when it is mentioned that it has been necessary to arrange for no fewer than nine different kitchens. In the case of the senior students separate messes are provided for Officers, European Subordinates, Mahomedan Subordinates and Hindu Subordinates. In the case of the Junior and Area Classes separate messes are provided for—

- (a) Hindus who prefer to eat at tables,
- (b) Hindus who prefer to eat on the ground,
- (c) Hindus who cook their own food, and
- (d) Mahomedans.

In conclusion it may be stated that while the Railway Board fully realise that the theoretical education provided at Chandausi can never be sufficient in itself or take the place of practical experience, it is confidently hoped that as a supplement to practical experience it may prove of very real value, and enable the Indian Railway man to attain to that high standard of efficiency which is so vitally necessary to the successful working of the Indian Railways under modern conditions.

90. **The Madras and Southern Mahratta Railway Block Signalling School.**—The Madras and Southern Mahratta Railway Block Signalling School was opened on the 2nd of January 1925, with a view to giving facilities to members of the staff to extend their knowledge of Railway working. It has served for the last year as a training ground for station masters, guards and signalmen.

The equipment consists of a model miniature railway with stations of all the important types existing on this Railway. This model railway allows of all kinds of operations being demonstrated with miniature trains. Stations are fully equipped with working lever frames, points, signals and slotting arrangements. There are nine stations, each station having its own particular method of working.

The lectures and demonstrations cover a wide range of subjects including the principles of signalling and block working, the general rules, station accounts, marshalling of trains and in fact all matters directly connected with the working of trains. They are intended to turn out men with a good practical as well as theoretical knowledge of the working of the railway machine and ready to apply their knowledge to any emergencies which may arise.

Courses are limited, as far as possible, to twenty men at a time and the following have been given throughout the year :—

	Courses.
Assistant station masters	6
Guards	4
Signalmen	2

Courses for assistant station masters last 6 weeks, for guards and signalmen 3 weeks.

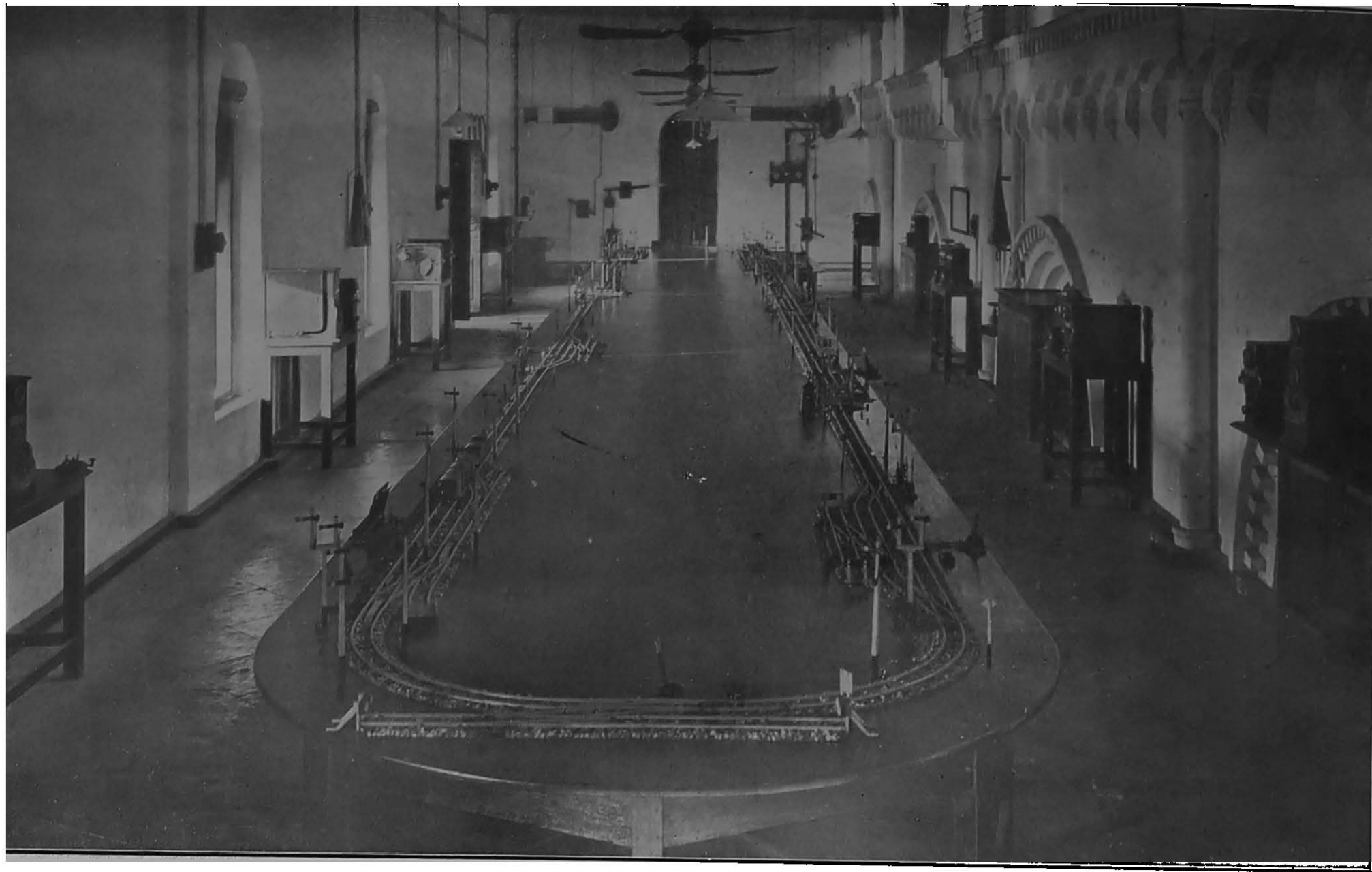
In addition to these courses voluntary courses of lectures on the principles of signalling and interlocking have been given in the evenings to junior officers and head office clerks.

Examinations are held at the end of each course and men are sent back to their districts with a very much broader and more vivid idea of the general working of the railway than they get by going through the whole of their training on their own district.

91. Strikes.—With the exception of the strikes on the North-Western and Bengal and North-Western Railways, there were no strikes of any importance during the year under review. The strike on the North-Western Railway began on the 26th March 1925 and ended about the third week of June 1925. The strike was restricted almost entirely to the illiterate Indian subordinates and lower paid staff. The number of men affected was about 20,000. The alleged cause of the strike was the discharge of a fitter of the Loco. Shops at Rawalpindi.

The trouble on the Bengal and North-Western Railway which commenced on the 20th May 1925 and ended on the 13th June 1925, arose in connection with alleged ill-treatment of one of the Engineering employes at the hands of his Assistant Engineer. About 3,500 men of the Engineering Department, Loco. Workshops and Shed staff went on strike.

92. State Railway Provident Fund.—By the passing of the Provident Fund Act, which came into force on the 1st April 1926, the Government contribution which is added to the subscriber's own contribution to his Provident Fund cannot be forfeited unless he has resigned his employment within 5 years of its commencement or has been dismissed from his employment for reasons specified in the Rules of the Fund. The necessary amendments will accordingly be made in the Rules for the State Railway Provident Fund.



Block Signalling School Madras and Southern Mahratta Railway.

CHAPTER VII.

MISCELLANEOUS.

93. **Improvements and amenities for the travelling public.**—In accordance with the custom of the last two years an account is given below of the progress made by each railway in the direction of improvements and amenities for the travelling public. It will be seen that 80 additional waiting-rooms or sheds at existing stations were opened during the year, and that the accommodation in 23 sheds was increased. Eleven Indian refreshment rooms and 44 vendors' stalls were opened during the year but the Indian dining car running on the Mehsana-Wadhwan Section (metre gauge) of the Bombay, Baroda and Central India Railway had to be discontinued as it was not well patronised.

Assam-Bengal Railway.

Two Up and two Down shuttle trains commenced running on Sundays only from June 1925 between Tinsukia and Naharkatya. One Mixed train was introduced from 1st July 1925 to run in each direction between Moriani and Tinsukia.

Arrangements for a better supply of water for passengers have been made at several stations, and the water is sterilised by chlorogen.

Separate hotels and tea-rooms for Hindus and Muhammadans have been provided at 2 stations and vendors' stalls have been erected at other stations.

At Akhaura Junction a new station building is being built with ample 3rd class waiting accommodation. A new 3rd class waiting hall has been built at Chittagong.

Bengal and North-Western Railway.

From 2nd December 1925 two extra trains were introduced between Gorakhpur and Nautanwa consequent on the opening of the Pharenda-Nautanwa extension.

During the year 35 extra bogie inter and 3rd class carriages have been put into traffic with seating accommodation for 2,678 3rd class passengers and 102 inter class passengers. The latrines of all new bogie 3rd class carriages have been fitted with electric light and an additional water cock has been supplied in inter and third class bogie carriages.

Hydrants for the convenience of passengers have been provided at Chowkaghat and Rajatalab stations, an electric pump has been installed at Sonapore and a well has been sunk at Savan Kachery.

Indian refreshment rooms were opened during the year at Barauni Junction and Gonda and a vendor's shop has been provided at Aunrihar Junction.

Third class waiting sheds have been provided at Begusarai and Azamgarh stations and waiting-rooms for Indian ladies have been supplied at Raxaul and Azamgarh. A waiting-room for 1st and 2nd class passengers has been provided at Mashrak.

The passenger platform at Tulsipur has been extended.

The sanitary arrangements for Melas at Ballia have been improved by the erection of 4 sets of latrines.

A booking office and a parcel godown have been provided in the 3rd class shed at Bahraich.

Bengal-Nagpur Railway.

A sum of Rs. 21,000 has been expended during the year in improving the drinking water-supply arrangements at stations.

Foodstalls and kitchens have been opened at seven stations and a sum of Rs. 34,000 has been spent on providing waiting-rooms at various places. Pilgrim Serais have also been provided at Purulia, Adra and Khargpur.

The general design of future bogie 3rd class carriages which are now under construction has been modified with a view to improving the facilities and comforts of passengers. The principal improvements are as follows:—

Each carriage is divided into 4 compartments, 2 large and 2 small.

All compartments are provided with bundle racks and upper berths.

Each carriage is provided with 6 latrines lit by electric light, 2 for each of the large compartments and one for each of the small compartments. Each set of 3 latrines is provided with an overhead water tank with a capacity of 200 gallons thus giving each passenger approximately 4 gallons of water.

Burma Railways.

An additional local train was introduced in each direction during the year between Taungzan and Martaban, Rangoon and Pegu, and Pyinmana and Taungdwingyi.

The carriage building programme during the year has been devoted to the rebuilding of carriages that were in a poor condition and in this connection opportunity was taken to replace the panel shutters, concerning which there have been complaints, by Louvre shutters.

Platform hydrants have been erected at 2 stations on the Rangoon district and further hydrants were in the course of erection at 17 other stations.

Vendors' stalls were in course of erection at some 30 stations.

Increased waiting accommodation has been provided at 15 stations and extensions to waiting sheds at 3 stations on the Pegu-Moulmein Branch are in hand.

Bombay, Baroda and Central India Railway.

On the broad gauge system additional local trains as required have been put on the Bombay Suburban Section. An extra passenger train has been introduced between Bulsar and Broach, and a local train between Baroda and Ahmedabad has been extended to and from Viramgam.

Owing to the overcrowding of the Gujrat Mail in view of the fact that the Kathiawar Express was taking 24 hours longer than the Mail between Bombay and Ahmedabad it was found necessary to run two mails from 1st October 1925: the Gujrat Mail to and from Ahmedabad and the Kathiawar Mail to and from Viramgam. The traffic was thus divided equally between the two trains. This had the desired effect and the public considered the new arrangement to be a distinct improvement.

On the metre gauge system Sind Mails were introduced between Ahmedabad and Marwar Junction *en route* to and from Hyderabad. A parcel train running between Ajmer and Ahmedabad in each direction was converted into a mixed train and made available for carrying passengers. Mixed trains running between Ujjain and Fatehabad Chandrawatigunj were extended to and from Mhow.

The system of providing passengers with cool drinking water in running trains by means of travelling Hindu watermen during the hot weather was continued. A few more watermen have been put on at certain stations where they were considered necessary.

Vendors' stalls have been provided or were in course of construction at 10 stations.

Waiting sheds and extensions to waiting sheds were under construction at 11 stations.

The provision of facilities for the supply of food on trains and its supervision by special Indian Catering Inspectors, which was mentioned in last year's report, has been continued but the Indian Dining Car running on the Mehsana-Wadhwan Section (metre gauge) was discontinued as it was not well patronised.

Three new flag stations have been provided at Gora, Ghuma, Khambhada and Kanbha.

Inter class accommodation has been made permanent on certain trains between Agra Fort and Cawnpore and between Delhi and Bhatinda, and has been provided on 35 Up and 36 Down between Agra Fort and Kathgodam.

Eastern Bengal Railway.

On the broad gauge 2 Up and 2 Down additional local trains were put on between Calcutta and Baruipur; and on the metre gauge one Up and one Down mixed trains which used to run between Katihar and Kasba, were extended to and from Jogbani.

During the year a new type of suburban rake was built which was a considerable advance in the matter of accommodation on those previously turned out. This new rake seats 970 passengers as against 664 in the old type, the increase being mainly in the 3rd class, *i.e.*, from 490 to 780. 25 coaches were built during the year with small compartments to enable parties travelling together to engage a compartment to themselves. In the new carriages the luggage racks have been raised 5", thus considerably improving the seating accommodation by giving more head-room.

Rs. 21,000 have been spent in improving the water-supply for passengers. These improvements in addition to increasing the number of water taps on platforms have chiefly been in the shape of the provision of Ashford Tube Wells at 11 stations.

An Indian refreshment room was under construction at Katihar and vendors' stalls were provided at several stations.

Some Rs. 67,000 have been spent on extra booking facilities, improvements to station approaches, the provision of stone benches in 3rd class waiting halls at 48 stations, new or extensions to existing waiting halls, shelters on island platforms and the raising or widening of platforms. Waiting rooms for Indian ladies have been provided at 8 stations.

During the year 46 lower class bogies were converted from gas to electric lighting. At the end of the year the position was that out of 25 suburban rakes 22 were electrically fitted and the remaining 3 will shortly be similarly equipped.

Of the total passenger stock on the railway 78 per cent. of the broad gauge and 51 per cent. of the metre gauge have now been converted to electric lighting and the remainder will be converted as soon as the necessary equipment can be obtained.

East Indian Railway.

Twenty additional passenger trains were introduced during the year and ten other trains extended.

Drinking water facilities were increased at some 30 stations and a special compartment was set apart on the principal express and passenger trains carrying drinking water for passengers.

A Hindu refreshment room was opened at Howrah during the year and a Muhammadan refreshment room at Moghalsarai.

Waiting rooms for Indian ladies were opened at Seohara, Moradabad and Ahnradpur. Waiting halls or sheds for 3rd class passengers were built at 10 stations and at Bareilly the waiting shed on the island platform was extended. Reflooring was carried out in the waiting rooms at 23 stations and in the waiting sheds at 10 stations.

Other improvements carried out during the year include foot over-bridges at Burhee and Futwah; 3rd class booking offices at Jherriah and Asansol and an extra window to the booking office at Dhanbad. At 4 stations the platform was extended. Latrines were constructed at 7 stations.

During the year 137 passenger bogies all lit with electricity were added to the stock and put into traffic; of these 100 were entirely for inter or 3rd class passengers, 12 were luggage or miscellaneous vans, 22 were 1st and 2nd class bogies, and 2 were composite bogies carrying 1st, 2nd and inter class. 29 lower class bogies were converted from gas lighting to electricity during the year.

Great Indian Peninsula Railway.

An electric train service between Bandra and Victoria Terminus was introduced from 3rd February 1926. The service was increased as necessary and at the end of the year 39 trains were being run up and down daily.

Hindu and Muhammadan refreshment rooms were provided at Poona and food or tea stalls were provided at 14 stations.

New 3rd class waiting sheds were provided at 7 stations and the waiting sheds mentioned in last year's report as under construction were completed and opened at 21 stations. New waiting-rooms for Indian passengers were opened at Nagpur and Poona.

Parcel trains have been provided with 3rd class carriages to enable passengers to travel by these trains between Igatpuri and Bhopal instead of between Igatpuri and Bhusaval. The Delhi Express Trains were extended to Rawalpindi thus obviating the necessity for through passengers changing trains at Delhi.

Jodhpur Railway.

One additional mixed train each way was introduced between Mirpur Khas and Jhudo.

On the main line all 3rd class 4-wheeled carriages have been replaced by bogies.

Additional water arrangements have been provided at 8 stations.

Passenger sheds have been provided at 2 stations and were under construction at 2 more. The 3rd class passenger shed at Jodhpur was enlarged and improved.

This railway has devoted considerable attention to the through running of carriages to contiguous railways. Examples of these through services are:—

The Sind Mails running between Hyderabad (Sind) and Ahmedabad.
Through trains running between Marwar Junction, Bhatinda and Phulera.

Through carriages running between Hyderabad (Sind) and Agra Fort, Delhi and Verawal.

Madras and Southern Mahratta Railway.

Twenty-two additional trains were introduced on the broad gauge and 10 on the metre gauge.

The work of providing a water-supply for passengers at Tirupati is in hand.

A Hindu refreshment room at Cuddapah is under construction.



Poona New Station, Great Indian Peninsula Railway.

Third class waiting sheds are being provided at 9 stations and separate waiting accommodation for 3rd class women passengers at 3 stations. An additional partially covered platform was provided at Madras Central Station.

H. E. H. the Nizam's Guaranteed State Railways.

Muhammadan and Hindu refreshment rooms have been opened at Secunderabad, Hyderabad and Jalna and are under construction at Dornakal and Purna.

The waiting accommodation for 3rd class passengers is being increased at Sailu and Umri. Zenana waiting-rooms have been provided for 3rd class passengers at Hyderabad and Secunderabad.

North Western Railway.

Thirty-six additional passenger trains were introduced during the year and in addition the following sections were opened for passenger traffic:—

Khanai-Hindubagh (2' 6" gauge on Quetta Division).

Jamrud-Landikotal (Khyber Railway).

Pakpattan-Mailsi (Sutlej Valley Railway).

Between Lahore and Karachi and Rawalpindi and Victoria Terminus (Bombay) respectively one of the through passenger trains in each direction has been accelerated so as to provide an Express service for inter and 3rd class passengers.

Forty-two gas lighted 3rd class carriages have been fitted with electricity and 116 carriages which were already electrically lit were fitted with standard wiring and couplers.

Drinking water shelters have been provided at all roadside stations on the Lahore Division and new drinking water tanks have been constructed at Jullundur City. Extra drinking water taps have been supplied at 4 stations on the Karachi Division and tube wells for the supply of pure drinking water have been sunk at 10 stations on the Multan Division and at several stations on the Delhi Division.

Third class waiting halls or sheds have been provided at 24 stations and a waiting hall for inter and 3rd class female passengers has been opened at Jacobabad. An inter class ladies waiting-room has been provided at Lahore.

The new Gujranwala station was opened on 15th April 1925 and during the year new stations were opened at Pattoki, Kot Radha Kishen and Okara.

Additional vendors' shops have been provided at 5 stations.

Electric fans have now been installed on Nos. 2, 4 and 5 platforms at Lahore.

Rohilkund and Kumaon Railway.

Twelve bogie 3rd class carriages with seating accommodation for 1,152 passengers have been put into traffic.

A new station was opened on 15th February 1926 at Lucknow Junction (metre gauge) with commodious platforms and electric light. An additional platform was provided for down trains at Lucknow City.

South Indian Railway.

On the broad gauge 10 shuttle trains and 2 mixed trains were introduced, while on the metre gauge 6 through trains were introduced taking the place of certain shuttle services over shorter distances. The rail motor coach

running between Trichinopoly Junction and Kulitalai was extended to run two trips each way between Katalai and Kulitalai.

Indian refreshment rooms were opened at Tirupattur and Madura, and refreshment stalls at Morappur during the year, and the management of the Indian refreshment rooms at Tanjore, Trichinopoly Junction, Madura, Mettupalaiyam and Calicut was taken over by the Company.

The 3rd class passenger waiting sheds were enlarged at 5 stations and additional benches were provided in the waiting sheds at 28 stations. Permanent festival waiting sheds with booking offices were provided at 4 stations.

High power lights were provided at 3 stations and additional high power lights were supplied at 17 other stations.

94. Coupon tickets for mercantile firms.—An interesting innovation was introduced during the year by the Madras and Southern Mahratta Railway whereby 1st class tickets at reduced fares are issued to representatives of firms for journeys totalling 3,000 miles performed on business within six months. On production of a certificate signed by the head of the firm to the effect that the representative will only use the tickets for journeys on the business of the firm a coupon book is issued consisting of 500 coupons, each coupon permitting a journey of six miles. The price of the book at present is Rs. 234-6-0. The book must be presented to the booking clerk when a ticket is required without detaching any coupons. The booking clerk removes the number of coupons from the book necessary for each journey and in exchange issues a first class ticket to the station required. The arrangement was introduced as a purely commercial proposition to encourage people who usually travel second class to pay a little extra and travel first class instead. The innovation met with considerable success on the Madras and Southern Mahratta Railway and arrangements were made to introduce it on the Great Indian Peninsula and South Indian Railways with effect from 1st April 1926.

95. Flood Damages.—Flood damages on railways were less severe in 1925-26 than in the previous two years. In consequence there was less interruption to traffic and the subsequent bill for repair of damages caused by breaches was fortunately small. The worst cases occurred on the Madras and Southern Mahratta Railway in May 1925 and on the South Indian Railway in December 1925. In the former case a storm which started at midday on the 16th May did considerable damage to the stations between Tenali and Ellore. At Stuartpuram, Tenali, Chirala and Tadinalli the roofs of several buildings were carried away. At Kistria Canal 24 broad gauge wagons and at Tadinalli 60 metre gauge wagons were capsized. The main line north of Bezwada was scoured for some distance. Transshipment was impossible and through booking north of Bezwada and south of Ellore was, therefore, temporarily stopped. All Telegraph communication between Tenali and Ellore was interrupted. The Masulihatam Branch was flooded in places and there was a breach beyond Nidamanuru. The Tenali-Repalle Branch was also breached beyond Kollur Road. The Railway line between Bezwada and Mustabad was seriously damaged. There was no loss of life. On the main line through but restricted communication was restored by the 18th evening and the full service of trains was resumed on the Main Line and on the Tenali-Repalle Branch on the 20th. A restricted service on the Bezwada-Mustabad Branch was restored on the 27th and full service on June 7th.

The other case occurred on the South Indian Railway on the night of 10th December 1925. Owing to unprecedented rain the railway line at mile 246/16-12 between Pattukkottai and Adirampatnam stations on the Tanjore District Board Railway (metre gauge) was over-topped by a sudden flood and the line breached. Train No. 55 Mixed ran into the breach at 0-10 hours on the 11th, resulting in the engine and 4 bogies being capsized, 2 of the latter being completely telescoped and the other 2 partly: one other bogie was derailed, 9 passengers were killed and 20 injured. The enquiry established the fact that there was no negligence on the part of the staff

concerned in the execution of their duty. The unfortunate mishap was entirely due to abnormal weather which could not possibly have been foreseen.

Breaches also occurred on the following sections of the Burma Railways:—

Mu Valley on June 16, August 5 and September 16, 1925, causing interruption to traffic of 2½, 9 and 2½ days respectively.

Thazi-Myingyan causing 3 days interruption and Moulmein-Ye in September causing 10 days stoppage of traffic.

On the Bengal and North Western Railway the line between Gainsari and Tulsipur was breached on August 11, 1925, by flood water and traffic was interrupted till August 16.

On the East Indian Railway the main line near Bihta was breached on September 9, 1925, by the overflowing of the Sone River and through communication was interrupted till September 14.

On the Eastern Bengal Railway nearly all the transshipment points suffered again due either to silting up of bars or to erosion. Goalundo, Sirajganj and Fulchhari were affected most and the usual changes of ghats and yards were necessary.

On the North Western Railway on July 6, 1925, the pitching round a crib bridge between Mangi and Kachh on the Sibi-Bostan section was washed away due to heavy rain. Transshipment was arranged and through communication was restored on July 9.

On July 29 a pier of a 40 feet span bridge on the Kalabagh-Bannu Section was completely washed away. Transshipment was arranged on July 31 and through running restored on August 1.

On August 11 the piers of a bridge on the Sialkot-Narowal section sank due to heavy floods and the girders and rails were displaced. Transshipment could not be arranged till the 13th. The breach was repaired and through running resumed on August 22.

Breaches also occurred on the Nushki Extension Railway on 3 occasions during the year on July 30 and October 25, 1925 and on January 14, 1926, causing interruption to traffic for 3, 2 and 6 days respectively.

96. **Accidents.**—The following table shows the numbers of passengers, railway servants and other persons killed and injured in 1924-25 and 1925-26.

	KILLED.		INJURED.	
	1925-26.	1924-25.	1925-26.	1924-25.
<i>A.—Passengers.</i>				
(1) Accidents to trains, rolling-stock, permanent-way, etc.	22	117	161	206
(2) Accidents caused by movements of trains and railway vehicles exclusive of train accidents.	352	295	1,131	1,085
(3) Accidents on railway premises in which the movement of trains, vehicles, etc., were not concerned.	3	6	31	21
TOTAL	377	418	1,323	1,312

	KILLED.		INJURED.	
	1925-26.	1924-25.	1925-26.	1924-25.
<i>B.—Railway Servants.</i>				
(1) Accidents to trains, rolling-stock, permanent-way, etc.	20	36	141	168
(2) Accidents caused by movements of trains and railway vehicles exclusive of train accidents.	333	386	1,285	721
(3) Accidents on railway premises in which the movement of trains, vehicles, etc., were not concerned.	49	44	1,897	600
TOTAL	402	466	3,323	1,489
<i>C.—Other persons.</i>				
(1) Accidents to trains, rolling-stock, permanent-way, etc.	35	19	78	34
(2) Accidents caused by movements of trains and railway vehicles exclusive of train accidents.	2,081	2,016	817	764
(3) Accidents on railway premises in which the movement of trains, vehicles, etc., were not concerned.	23	26	68	59
TOTAL	2,139	2,061	963	857
GRAND TOTAL	2,918	2,945	5,609	3,658

97. The number of passengers killed shows a decrease of 41 while the number of passengers injured shows an increase of 11. The following statement shows the numbers of passengers killed and injured during the last four years :—

Year.	Killed.	Injured.
1922-23	405	1,368
1923-24	372	1,272
1924-25	418	1,312
1925-26	377	1,323

98. The number of railway servants killed during the year decreased by 51 although the number of railway servants injured increased by 545. The following table analyses the main causes of accidents to railway servants on Class I railways :—

Cause.	NUMBERS KILLED.		NUMBERS INJURED.	
	1925-26.	1924-25.	1925-26.	1924-25.
1. Misadventure or accidental	212	217	901	484
2. Want of caution or misconduct on the part of the injured person.	101	148	279	165
3. Want of caution or breach of rules, etc., on the part of servants other than the persons injured.	9	7	51	38
4. Defective apparatus or systems of working, dangerous places, dangerous conditions of work or want of rules or systems of working.	1	2	5	4
TOTAL	323	374	1,236	691

99. Out of a total of 2,918 persons killed on Railways 1,649 were trespassers and 308 committed suicide.

100. The following statement analyses the accidents which occurred on all Railways during the last two years grouped under the principal causes. A fuller statement showing the accidents in greater detail under the separate railways is to be found in Appendix D of Volume II of this report:—

	1924-25.	1925-26.
Cases of running over cattle	8,350	9,612
Derailments not involving passenger trains	4,011	4,397
Accidents due to failure of couplings	3,080	2,722
Accidents due to failure of machinery of engines or faulty working of crew	1,879	2,178
Derailments of passenger trains	404	347
Fires in trains or at stations or bridges	368	290
Collisions involving goods trains or goods vehicles	330	309
Broken rails	298	361
Running over obstructions on the line	287	294
Bursting of tubes and boilers of engines	276	275
Accidents due to failure of axles	170	145
Flooding of permanent-way	141	92
Collisions involving passenger trains	79	65
Passenger trains running in the wrong direction through points but not derailed	75	98
Collisions between light engines	73	66
Land slips	75	40
Accidents due to failure of tyres or wheels	34	20
Accidents due to failure of brake apparatus	32	33
Trains running through level-crossing gates	31	26
Failure of bridges or tunnels	6	12
Miscellaneous	487	712
TOTAL	20,486	22,094

It will be noticed that there has been a welcome decrease under the heads "Derailments of passenger trains" and "Collisions involving passenger trains" though a small increase has occurred in "passenger trains running in the wrong direction through points but not derailed."

The smaller number of "Land slips" and "Flooding of Permanent-Way" is chiefly accounted for by the more favourable weather conditions experienced in 1925-26.

The reductions under "Fires in trains or at stations or bridges" may possibly be attributed so far as fires in trains are concerned, which alone dropped from 290 to 200, to the steady increase in the number of vehicles converted to electric lighting.

"Cases of Running over cattle" still represent by far the largest proportion of all accidents (43 per cent.) and the figures under this head show an increase of 1,262 over the previous year.

"Derailments not involving passenger trains" and "Accidents due to failure of machinery of engines or faulty working of crew" also show increases. The rise in the number of "Broken rails" chiefly occurred on the East Indian Railway where the number of cases went up from 15 to 69.

101. A short description of the more serious accidents is given below :—

Derailement of Punjab Mail between Kanth and Mewa Nawada.—On the 21st September 1925, No. 2 down Punjab Mail was derailed at mile 419/21 between Kanth and Mewa Nawada stations on the Moradabad Division of the East Indian Railway. The first two bogies behind the engine partially telescoped and capsized and the three following bogies were derailed. The 2nd guard and an Indian passenger were seriously and eight passengers slightly, injured. The derailment was due to deliberate and malicious tampering with the track, but although a substantial reward was offered by Government for information likely to lead to the arrest and conviction of the culprits their identity has remained undiscovered.

Halsa accident.—At about 1-13 hours on the morning of 16th October 1925, No. 8 down Dacca Mail collided with the tender of engine No. 118 of 37 up parcels train at Halsa on the Eastern Bengal Railway. The engine of 37 up parcels train was backed along the down loop line in the up direction while No. 8 down Dacca Mail was approaching the station. The engine failed to stop short of the fouling mark and thereby fouled the down main line being consequently run into by 8 down Mail which was running through on the down main line. The tender of the Parcels train engine was completely wrecked. The Mail engine and the three bogie coaches immediately behind it were badly damaged and derailed. Ten persons were killed and thirty-seven passengers injured, of whom two subsequently died in hospital. The damage to rolling-stock was estimated at Rs. 1,08,038.

The assistant station master and the gunner, who, as the result of the enquiry, were held responsible for the collision, were prosecuted and convicted, the former being sentenced to six months rigorous imprisonment under section 101 of the Indian Railways Act, 1890 (IX of 1890), and the latter to one year's rigorous imprisonment under the same section. Against this order, appeals were preferred by the accused. The Sessions Judge confirmed the conviction of the gunner dismissing his appeal and acquitted the assistant station master.

Level crossing accident on Delhi-Umballa-Kalka Railway.—About 12 o'clock on the 2nd January 1926, a car belonging to the Patiala Durbar which was occupied by some purdah ladies was approaching level crossing No. 123 between Chandigarh and Ghaggar, Delhi-Umballa-Kalka Railway, at the same time as No. 8 down was nearing the crossing. The car was driven on to the crossing and was run into by 8 down. Of the ladies in the car seven were killed or died subsequently and two were severely injured. The motor driver was also severely injured.

The Committee of Enquiry found that the accident was primarily due to a lamentable misunderstanding on the part of the motor driver who thought the gates were being opened whereas they were being closed and they considered him guilty of negligence in having stopped his car on the track instead of halting clear of it when he saw that the further gate was closed against him.

102. "Safety First".—The following is a brief account of "Safety First" propaganda on some of the principal Railways :—

Assam-Bengal.—Safety First notices have been prominently posted in the Loco. Workshops. These notices explain to the staff how it is possible to reduce the number of preventible accidents and whenever an accident occurs the foreman draws the attention of the staff to the notices.

Bengal-Nagpur Railway.—A series of articles and photographs on this subject have been reproduced in the Bengal-Nagpur Railway Magazine for dissemination to the staff.

Eastern Bengal Railway.—Illustrated booklets have been obtained from English Railways with the idea of publishing similar booklets on this railway.

East Indian Railway.—Coloured posters have been prepared and will in due course be issued with suitable inscriptions in English, Urdu and Hindi. These will be posted up in prominent places in workshops and stations.

Great Indian Peninsula Railway.—An excellent "Safety First" booklet depicting the various common actions which are productive of accidents and how to avoid them has been issued broadcast to the staff. A film dealing with "Safety First" matters is being planned and will be shown by the Great Indian Peninsula travelling cinema.

North Western Railway.—Notices have been exhibited in conspicuous places pointing out to the staff and the travelling public the grave risks they run through thoughtlessness and failure to comply with the rules. Posters have been displayed in three vernaculars in lower class carriages warning passengers against standing on the foot-boards and sitting in open doorways while the trains are in motion.

Nizam's Guaranteed State Railways.—It has been decided to publish and circulate 1,000 copies of a Safety First booklet to the staff.

Madras and Southern Mahratta Railway.—Notices are posted at suitable places in stations and Loco. Yards warning the public and employees of dangerous practices.

103. Visit of the King and Queen of the Belgians.—An interesting feature of the year was the visit paid by the King and Queen of the Belgians to India in the autumn of 1925. The tour lasted from September 11th to October 18th and during that time the Royal Party travelled some 5,400 miles visiting Bombay, Kirki, Calcutta, Darjeeling, Benares, Lucknow, Bharatpur, Agra, Delhi, Simla, Peshawar, Rawalpindi and Gwalior. His Excellency the Viceroy kindly placed his train at the disposal of the Royal Party for the tour. Before his departure from India His Majesty the King of the Belgians expressed his keen appreciation of the railway arrangements for the tour in the following message to the Chief Commissioner for Railways :—

"Before I leave India, I wish to thank on behalf of the Queen and myself all the officers and men of the Railways over which we have travelled for the very excellent arrangements they have made for our comfort while travelling.

I realise that the movements of a Sepical Royal Train entail a great deal of preparation and very considerable exertions to all concerned.

I have been particularly impressed with the working of the Railways over which I have travelled and I am filled with admiration for the smooth and able manner in which every detail is carried out and all difficulties are overcome.

The construction, administration and operation of the Railway systems in India have made a great impression on me, and have caused me to realise as much as anything else in this country the strength and efficiency of the British Empire."

104. Local Advisory Committees.—Local Advisory Committees have now been formed on all State-owned Railways with the exception of the Bengal-Nagpur Railway. Steps are being taken for the early formation of such committees on this Railway.

The following statement shows the number of meetings held during 1925-26 :—

Railway.	Number of meetings held during 1925-26.
Assam-Bengal	2
Bengal and North-Western	1 Gorakhpur and 2 Muzaffarpur.
Bombay, Baroda and Central India	11
Burma	5
Eastern Bengal	7
East Indian (including Oudh and Rohilkhand)	11 Calcutta, 3 Cawnpore and 5 Lucknow.
Great Indian Peninsula	11 Bombay and 1 Nagpur.
Madras and Southern Mahratta	7
North Western	10 Lahore and 3 Karachi.
Rohilkund and Kumaon	1
South Indian	4

The work of Local Advisory Committees has continued to be of great value both to Railway Administrations and the public. The suggestions made by the Committees were carefully considered and as far as possible endeavours were made to give effect to them provided they were likely to serve the general convenience of the public without detriment to the Railway Administrations.

The subjects discussed at the meetings were many and varied and included the following :—

Facilities for 3rd class passengers.

Arrangement for the provision of refreshments and drinking water for passengers.

Increased accommodation for Intermediate and 3rd class passengers in trains and at stations.

Improvements in the design of railway carriages.

Reduction of fares.

Concession in fares.

Alterations in time-tables.

Settlement of claims.

Theft of railway fittings.

Passengers travelling without tickets.

Remodelling of stations.

Electrification schemes, etc.

During the year the suggestion made by a Member of the Legislative Assembly to publish the names of the Members of the Local Advisory Committees in the Time and Fare tables of the Railways concerned was adopted.

105. **Publicity.**—The immense possibilities of publicity as a means of encouraging traffic are beginning to be realised and many extensions of the work on the different railways have taken place during the year.

The Great Indian Peninsula Railway have perhaps been foremost in this effort and the Publicity Bureau at Victoria Terminus has continued to assist

the public generally, by supplying information and working out suitable itineraries. The tourist traffic is on the increase. 6 "Round the World" cruise ships anchored in Bombay harbour and 11 Tourist Specials were run for the visitors during the year. A wide distribution of publicity matter was made through the medium of newspapers, booklets, leaflets and posters. An attractive time-table of trains of all the principal railways in India, the first of its kind prepared by any Indian Railway, was published in October 1925.

The most interesting innovation of the year, however, on the Great Indian Peninsula Railway and one likely to have far reaching results was the inauguration of a travelling cinematograph car. This car commenced touring over the line on the 19th November 1925 and by the end of the year had visited 70 stations. Free displays in the open air are given which attract most of the neighbourhood. The audiences have numbered from 1,000 to 10,000 and one audience at Katni was even estimated at 30,000. Hitherto the programmes have been mainly for entertainment although a film entitled "A short winter tour in India" has already been produced. It is also intended to use the cinema for the education of the staff, for advertising the facilities provided by the railway for the travelling public and for showing films illustrating modern and scientific methods of agriculture, etc., with the idea that such will lead to the adoption of improved methods and larger yields to the benefit of the ryot and with them the railway. With this object in view films dealing with the following subjects were in course of preparation and were expected to be ready early in 1926-27 :—

- Improved methods of sugarcane cultivation.
- Poultry farming in India on scientific lines.
- Wheat production in India—old and new methods.
- Cotton production.
- Irrigation.
- Improvement of Indian cattle.

These will be followed by films dealing with Vacuum brake, Steam Valve Gear, Breakdown work, Firing, Lubrication, Track maintenance, Safety First and First Aid.

The Bengal-Nagpur Railway has published a pamphlet entitled "The Changing Scene in India" and sent copies to all the large Tourist offices in India, America and Great Britain. This railway sends its attractively got up Magazine to the leading Hotels and Clubs in India and the principal Railway Companies throughout the world. Free copies are distributed from Port Said to all passenger liners proceeding to India.

The Bombay, Baroda and Central India Railway has published a pamphlet describing the large works under construction on the Bombay Suburban Section also a second and larger edition of their illustrated Tourist Guide to centres of interest on the line. They have also reproduced three artistic posters depicting places of interest served by the Bombay, Baroda and Central India Railway for display in America and at the principal ports between India and England.

H. E. H. the Nizam's Guaranteed State Railway is using picture post-cards of places of interest on the line for correspondence. This railway also reports that the Information Bureau which was opened at Secunderabad early in 1925 has proved a great success.

Other railways are increasing their advertisements in publications having a wide circulation, preparing booklets on places of historical interest and developing the use of attractive pictorial posters advertising holiday resorts; and vernacular notices on melas have been used with good effect.

APPENDIX A.

List showing Railways in India alphabetically arranged under each gauge according to system of working.

[NOTE.—The railways under construction or sanctioned for construction on the 31st March 1926, are shown in italics.]

I.—STATE LINES WORKED BY THE STATE.

- 5' 6" gauge.**
 Eastern Bengal.
 East Indian.*
 Great Indian Peninsula.†
 North Western.
 South Bihar.‡
Central Indian Coal-fields.
- 3' 3³/₈" gauge.**
 Aden.
 Cawnpore-Burhwal Link.
 Eastern Bengal (3' 3³/₈" and 2' 6").
- 2' 6" gauge.**
 Kalka-Simla.
Kangra Valley.
 Khanai-Hindubagh.
 Kohat-Thal.
 Trans-Indus (Kalabagh-Bannu).
- 2' 0" gauge.**
 Dera Ismail Khan-Tank Decauville.
 Jorhat (Provincial).

II.—STATE LINES WORKED BY COMPANIES.

- 5' 6" gauge.**
 Bengal-Nagpur.
 Bezwada Extension.
 Bombay, Baroda and Central India.
 Kolar Gold-fields.
 Madras and Southern Mahratta.
 South Indian.
- 3' 3³/₈" gauge.**
 Alnavar-Dandeli (Provincial).
 Alon-Saingbyin.
 Assam-Bengal.
 Bangalore-Harihar.
 Bombay, Baroda and Central India.
 Burma.
 Burma Extensions.
 Dhone-Kurnool.
 Hindupur (Yesvantpur-Mysore Frontier).
 Jodhpur-Hyderabad (British Section).††
 Lucknow-Bareilly.
 Madras and Southern Mahratta.
 Moulmein-Ye.
 Nilgiri.
 Palanpur-Deesa.§

* Taken over by the State with effect from 1st January 1925.

† Taken over by the State with effect from 1st July 1925.

‡ Although a leased line, it is, for convenience, shown under the head "State lines worked by the State".

†† The Indian State Section of this railway forms an integral part of the Jodhpur Railway. This line is worked by the administration of the Jodhpur Railway.

§ This line is owned jointly by Government and the Palanpur Durbar.

II.—STATE LINES WORKED BY COMPANIES—concl'd.

- 3' 3³/₈" gauge.—concl'd.**
Pegu-Kayan.
 Pymmana-Taungdwingyi.
 South Indian.
 Southern Shan States.
 Travancore (British Section).
 Travancore (Indian State Section).*
 Tirhoot.
- 2' 6" gauge.**
 Broach-Jambusar.
 Mandalay-Madaya Light.
 Morappur-Hosur.
 Purulia-Ranchi.
 Raipur-Dhamtari.
 Satpura.
 Tirupattur-Krishnagiri.

- 2' 0" gauge.**
 Tumsar-Tirodi Light.

III.—BRANCH LINE COMPANIES' RAILWAYS UNDER GUARANTEE TERMS.

(A) WORKED BY THE BRANCH LINE COMPANY.

- 2' 6" gauge.**
 Ahmadpur-Katwa.
 Arakan Light†.
 Bankura-Damoodar River.
 Burdwan-Katwa.
 Futwah-Islampur.
 Kalighat-Falta.

(B) WORKED BY THE MAIN LINE.

- 5' 6" gauge.**
 Hardwar-Dehra.
- 3' 3³/₈" gauge.**
 Chaparmukh-Silghat.‡
 Katakhal-Lalabazar.‡
- 2' 6" gauge.**
 Dasghara-Jamalpurgunj.

IV.—BRANCH LINE COMPANIES' RAILWAYS UNDER REBATE TERMS WORKED BY THE MAIN LINE.

- 5' 6" gauge.**
 Amritsar-Patti.
 Hoshiarpur-Doab (Jullundur-Mukerian).

* Although for convenience classed among State railways, this line is the property of the Travancore Durbar.

† Also receives a subsidy from the Arakan Flotilla Company, and a guarantee of one per cent. by the Burma Government for a period of 10 years.

‡ Also receives a subsidy from the Assam Government.

IV.—BRANCH LINE COMPANIES' RAILWAYS UNDER REBATE TERMS WORKED BY THE MAIN LINE—*concl'd.*

5' 6" gauge.—*concl'd.*

Hoshiarpur-Doab (Phagwara-Rahon).
Mandra-Bhaun.
Sara-Sirajganj.
Sialkot-Narowal.
Southern Punjab (Main Line).
Southern Punjab (Jullundur-Doab).
Southern Punjab (Ludhiana Extension).
Southern Punjab (Sutlej Valley).
Tapti Valley.

3' 3 $\frac{3}{4}$ " gauge.

Ahmedabad-Parantij.

2' 6" gauge.

Champaner-Shivrajpur-Pani Light.
Dhond-Baramati.
Ellichpur-Yeotmal.
Godhra-Lunavada.
Jacobabad-Kashmor.
Khulna-Bagerhat.
Larkana-Jacobabad.
Mayurbhanj.
Nadiad-Kapadvanj.
Pachora-Jamner.
Pulgaon-Arvi.

2' 0" gauge.

Darjeeling-Himalayan Extensions.
Matheran Light.

V.—BRANCH LINE COMPANIES' RAILWAYS UNDER GUARANTEE AND REBATE TERMS.

3' 3 $\frac{3}{4}$ " gauge.

Jamnagar and Dwarka.
Mymensingh-Bhairab Bazar.

VI.—COMPANIES' LINES SUBSIDIZED BY THE GOVERNMENT OF INDIA.

5' 6" gauge.

Delhi-Ambala-Kalka.

3' 3 $\frac{3}{4}$ " gauge.

Bengal and North-Western.*
Bengal-Dooars Extensions.*
Mirpur Khas Jhudo.*
Mirpur Khas Khadro.*
Robilkund and Kumaon.

2' 6" gauge.

Barsi Light.*
Dehri-Rohtas Light.
Shahdara (Delhi) Saharanpur Light.*

VII.—COMPANIES' LINES SUBSIDIZED BY LOCAL GOVERNMENTS.

3' 3 $\frac{3}{4}$ " gauge.

Dibru-Sadiya.

2' 0" gauge.

Darjeeling-Himalayan.

VIII.—UNASSISTED COMPANIES' LINES.

3' 3 $\frac{3}{4}$ " gauge.

Ledo and Tikak-Margherita Colliery.

2' 6" gauge.

Bengal Provincial.
Singri-Orang Light.

2' 0" gauge.

Jagadhri Light.
Kulasekarapatnam Light.
Tirupati-Tiruchanur Light.
Trivellore Light.

IX.—DISTRICT BOARD LINES.

5' 6" gauge.

Suramangalam-Salem.
Tenali-Repalle.

3' 3 $\frac{3}{4}$ " gauge.

Bezwada-Masulipatam.
Podanur-Pollachi.
Tanjore District Board.
Tinnevelly-Tiruchendur.

X.—COMPANIES' LINES SUBSIDIZED BY DISTRICT BOARD.

3' 3 $\frac{3}{4}$ " gauge.

Bengal Dooars.

2' 6" gauge.

Arrah-Sasaram Light.
Baraset-Basirhat Light.
Bukhtiarpur-Bihar Light.
Jessore-Jhenidah.
Tezapore-Balipara Light.

2' 0" gauge.

Howrah-Amta Light.
Howrah-Shenkhala Light..

XI.—INDIAN STATE LINES WORKED BY INDIAN STATES.

3' 3 $\frac{3}{4}$ " gauge.

Bhavnagar State.
Bikaner State.
Gondal.
Jetalsar-Rajkot.
Jodhpur.
Junagad State.
Khijadiya-Dhari.
Morvi.
Mysore.
Porbandar State.
Udaipur-Chitorgarh.

2' 6" gauge.

Bodeli-Chhota Udaipur.
Cutch State.
Dholpur-Bari.
Gaekwar's Baroda State.
Kolar District.
Mohari-Barauli.*

* Although, for convenience, classed among Indian State Lines worked by Indian States, this line is the property of Government.

* Receives land only from Government.

XI.—INDIAN STATE LINES
WORKED BY INDIAN STATES.—
concl'd.

2' 0" gauge.

Gwalior Light.
Pipar-Bilara Light.
Tarikere-Narasimharajapura Light.

XII.—INDIAN STATE LINES
WORKED BY THE MAIN LINE.

5' 6" gauge.

Balharshah-Warangal.
Bhopal Itarsi (Indian State Section).
Bhopal-Ujjain.
Bina-Goonna-Baran.
Jammu and Kashmir (Indian State Section).^{*}
Jind-Panipat (Indian State Section).[†]
Karepalli-Kothagudium.
Khanpur-Chachran.
Ludhiana-Dhuri-Jakhal.
Nagda-Ujjain.
Petlad-Cambay (Anand-Tarapur Section).
Petlad-Cambay (Tarapur-Cambay Section).
Rajpura-Bhatinda.
Sirhind-Rupar (Indian State Section).

3' 3 $\frac{1}{2}$ " gauge.

Cooch Behar State.
Dhrangadra.
Gaekwar's Mehsana.
Hingoli Branch.
Jaipur State.

^{*} The British section of this railway forms an integral part of the North Western Railway.

[†] The section of this railway in British territory forms an integral part of the Delhi-Umbala-Kalka Railway.

XII.—INDIAN STATE LINES
WORKED BY THE MAIN
LINE—*concl'd.*

3' 3 $\frac{1}{2}$ " gauge.—*concl'd.*

Kolhapur State.
Okhamandal.
Palanpur-Deesa.[‡]
Rajkot-Jamnagar.
Sangli State.
Secunderabad-Gadwal.
Shoranur-Cochin.

2' 6" gauge.

Jhagadia-Thawe Road.
Parlakimedi Light.
Rajpipla State.

XIII.—COMPANIES' LINES GUA-
RANTEED BY INDIAN STATES.

5' 6" gauge.

Nizam's Guaranteed State.

3' 3 $\frac{1}{2}$ " gauge.

Hyderabad-Godavari Valley.

2' 6" gauge.

Bangalore-Chik Ballapur Light.

XIV.—LINES IN FOREIGN TERRI-
TORY WORKED BY BRITISH
INDIAN RAILWAY COMPA-
NIES.

3' 3 $\frac{1}{2}$ " gauge.

Peralam-Karaikkal.
Pondicherry.
West of India Portuguese.

[‡] This line is owned jointly by Government and the Palanpur Durbar.

APPENDIX B.

Notes on the relation of the Government to Railways in India.

(Reprinted from the Report for 1914-15.)

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, three (the North-Western, Eastern Bengal and Oudh and Rohilkhand Railways) are owned and worked by the State; eight* (the East Indian, Great Indian Peninsula, Bombay, Baroda and Central India, Madras and Southern Mahratta, Assam-Bengal, Bengal-Nagpur, South Indian and Burma) are owned by the State but worked on its behalf by companies enjoying a guarantee of interest from the Government; three important lines (the Bengal and North-Western, Rohilkund and Kumaon and Southern Punjab) 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 the chief 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 Railway, 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 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

* The East Indian and Great Indian Peninsula Railways have since been taken over by the State and are now owned and worked by the State.

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, and 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, Scinde (afterwards, the Scinde, 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, 4½ and 4¼ 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 trains: 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' interests 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 chief capital expenditure on railways 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-Mulwa, 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 Naini Tal 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 Commissioners 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 of 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 Burma Railways Company was formed in 1897 to manage and develop the line in that Province that had been constructed by the State. Interest at $2\frac{1}{2}$ per cent. was guaranteed on the share capital raised by the company, and the surplus profits were originally divisible in the proportion of four-fifths to the Secretary of State and one-fifth to the company, but since 1908 the division has been proportional to the capital invested by each in the undertaking. The contract with the Burma Railways Company is terminable by the Secretary of State in 1928, or on subsequent occasions, on repayment of the company's capital at par.

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, Oudh and Rohilkhand and Scinde-Punjab and Delhi lines were purchased and transferred to State management, the last named 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 all other cases (East Indian, South Indian, Great Indian Peninsula, 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.

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' interests on the termination of old contracts.

When funds required for further capital expenditure, the Government has the option either of providing them or of calling on the company to provide them. The company receives guaranteed interest at a fixed rate on its capital; and similar payments out of the earnings are made to the Government. If, after these have been made, surplus profits remain, they are divided between the Government and the company in the various proportions provided for by the contracts. The company's share is in all cases only a small fraction of the Government's share.

All the contracts, except one, which is for a fixed term of 25 years, 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 power 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 1932 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 1932, the lines will become the property of the State in 1981 on terms much less favourable to the companies. 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, and	927 miles.
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 now constituted consists 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 is now divided on the basis of subjects and not on a territorial basis. One Member deals 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 reorganisation 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 acts as *ex-officio* Secretary to the permanent Standardisation Committees which have been appointed to deal progressively with all questions of standards of equipment.

The present superior staff under the Railway Board, therefore, consists of 5 Directors, 4 Deputy Directors, a Technical Officer, 2 Assistant Directors, a Secretary and a Deputy Secretary.

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 elected 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 subject 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 require 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 the 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 in 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 proposals set forth in this Resolution are 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 proposals 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 con-

* "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."

struction 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 amounts paid under the guarantee. Several such arrangements have already been made with Local Governments.

APPENDIX F.

Statement of Gazetted Officers and Officers of corresponding rank employed on Class I Railways (excluding Nizam's Guaranteed State and Jodhpur Railways) on the 1st April 1926 as compared with 1st April 1925.

Item.	A. B.		B. N.		D. & N. W.		D., B. & C. I.		BURMA.		E. B.		E. I.*		G. I. P.		M. & S. M.		N. W.		R. & K.		S. I.		By Board and Miscellaneous officers.		TOTAL.	
	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.
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
1. Agency Department—																												
1-01. Europeans	2	2	4	4	2	2	7	7	3	3	4	3	0	6	6	6	4	4	7	8	1	1	3	3	1†	1	53	50
1-02. Statutory Indians—																												
(a) Hindus . . . . .	..	..	1	2	..	..	..	..	..	..	..	1	2	2	..	..	2	2	1	1	..	..	1	1	..	..	7	9
(b) Muslims . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
(c) Other classes . . . . .	..	..	1	1	..	..	1	1	1	3	..	..	1	2	2	2	..	..	..	..	..	..	..	..	..	..	..	6
(d) Total . . . . .	..	..	2	3	..	..	1	1	1	3	..	1	3	5	2	2	2	2	1	2	..	..	1	1	..	..	13	20
1-03. GRAND TOTAL	2	2	6	7	2	2	8	8	4	6	4	4	12	11	8	8	6	6	8	10	1	1	4	4	1†	1	66	70
2. Engineering Department—																												
2-01. Europeans	21	21	71	71	21	21	57	51	34	36	28	31	60	61	59	69	46	46	68	72	5	4	43	53	43†	32	556	568
2-02. Statutory Indians—																												
(a) Hindus	1	2	10	12	..	..	8	12	1	1	15	17	20	27	5	9	4	12	32	37	..	..	9	14	8†	6	113	149
(b) Muslims	1	1	3	3	..	..	..	..	..	..	..	..	1	1	4	5	..	3	8	..	..	1	1	2†	1	16	20	
(c) Other classes . . . . .	..	2	12	10	..	..	5	7	4	5	4	3	2	7	7	8	1	1	12	20	..	..	..	2	6†	8	54	73
(d) Total	2	5	25	25	..	..	13	19	5	6	19	20	23	35	16	22	5	13	47	65	..	..	10	17	10†	15	181	242
2-03. GRAND TOTAL	23	26	96	96	21	21	70	70	39	42	47	51	83	96	75	91	51	59	116	137	5	4	53	70	59†	47	737	810
3. Transportation—																												
3-01. Europeans	9	10	34	34	9	11	35	33	23	25	23	24	65	38	39	45	24	23	42	39	..	..	3	12	6†	5	312	290
3-02. Statutory Indians—																												
(a) Hindus	1	..	10	10	2	2	5	6	..	..	10	10	7	5	1	2	4	5	7	8	..	..	2	1	..	1	49	50
(b) Muslims . . . . .	..	..	2	3	1	1	..	..	..	..	2	2	7	8	..	1	1	2	5	6	..	..	..	..	1†	2	19	25
(c) Other classes	1	2	2	1	..	..	4	5	5	6	1	1	4	4	4	3	2	2	6	5	..	..	..	1	1†	..	80	30
(d) Total	2	2	14	14	3	3	9	11	5	6	13	13	18	17	5	6	7	9	18	19	..	..	2	2	2†	3	98	103
3-03. GRAND TOTAL	11	12	48	48	12	14	44	44	28	31	36	37	83	55	44	51	31	32	60	58	..	..	5	14	6†	8	410	404

4. Commercial—				Included under Transportation.		Included under Transportation.								Included under Transportation.															
4-01. Europeans	1	..		5	4							6	6	16	16				7	7	2	2	15	6	..	..	53	40
4-02. Statutory Indians—																													
(a) Hindus . . . . .	..	1		..	..							7	2	7	7				1	..	..	..	1	2	..	..	16	13
(b) Muslims . . . . .	..	..		..	..							2	..	..	..				3	3	..	..	..	..	..	..	5	3
(c) Other classes . . . . .	..	..		..	..							11	13	4	4				1	1	..	..	1	..	..	..	17	18
(d) Total . . . . .	..	1		..	..							20	15	11	11				5	4	..	..	2	2	..	..	38	33
4-03. GRAND TOTAL	1	1		5	4							28	20	26	27				12	11	2	2	17	8	..	..	91	73
5. Mechanical Engineering—																													
5-01. Europeans	8	8	28	28	10	11	31	32	10	18	17	18	28	48	23	30	22	22	46	53	2	3	16	17	4	2	251	205	
5-02. Statutory Indians—																													
(a) Hindus	1	1	1	1	..	..	..	1	..	..	1	1	3	3	3	3	..	..	1	1	..	..	..	..	..	..	10	11
(b) Muslims . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	3	1
(c) Other classes . . . . .	..	..	..	..	..	..	2	1	1	1	2	4	..	2	1	..	..	..	1	1	..	..	..	..	..	..	7	9
(d) Total	1	1	1	1	..	..	2	2	1	1	3	5	3	5	5	4	..	..	2	2	..	..	..	..	..	..	18	21
5-03. GRAND TOTAL	9	9	20	29	10	11	33	34	17	19	20	23	31	48	29	34	22	22	48	55	2	3	16	17	4	2	269	206	
6. Stores Department—																													
6-01. Europeans	1	1	5	5	2	3	7	7	2	1	3	4	5	4	8	5	6	5	9	7	..	..	3	3	..	..	51	43
6-02. Statutory Indians—																													
(a) Hindus . . . . .	..	..	1	1	..	..	..	..	1	2	1	1	2	1	..	..	..	..	2	2	..	..	..	..	..	..	7	7
(b) Muslims . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(c) Other classes . . . . .	..	..	4	2	..	..	..	..	1	1	2	4	3	1	1	1	..	1	..	..	..	..	2	2	2†	1	15	13
(d) Total . . . . .	..	..	5	3	..	..	..	..	2	3	3	5	5	2	1	1	..	1	2	2	..	..	2	2	2†	1	22	20
6-03. GRAND TOTAL	1	1	10	8	2	3	7	7	4	4	6	9	10	6	9	6	6	6	11	9	..	..	5	5	2†	1	73	65
7. Other Departments—																													
7-01. Europeans	10	8	28	30	6	7	22	23	12	12	4	2	52	62	25	23	20	21	13	11	2	2	10	12	5†	0	209	232	
7-02. Statutory Indians—																													
(a) Hindus	3	3	4	4	1	2	1	1	1	1	4	3	8	8	2	4	5	3	16	17	1	1	4	4	..	..	50	56
(b) Muslims . . . . .	..	..	..	..	..	..	..	..	..	..	1	..	2	2	..	..	..	..	2	3	..	..	..	..	..	..	5	5
(c) Other classes	1	1	..	..	..	..	0	0	..	..	3	3	5	3	4	3	3	6	8	7	..	..	..	..	5†	0	33	46
(d) Total	4	4	4	4	1†	2	10	10	1	1	8	11	15	18	6	7	8	9	26	27	1	1	4	4	5†	0	93	107	
7-03. GRAND TOTAL	14	12	32	34	7	9	32	33	13	13	12	13	67	80	31	30	28	30	30	28	3	3	14	16	10†	18	302	329	

* Includes Oudh and Rohilkhand Railway.
† Revised figures.

APPENDIX F—contd.

Statement of Gazetted Officers and Officers of corresponding rank employed on Class I Railways (excluding Nizam's Guaranteed State and Jodhpur Railways) on the 1st April 1926 as compared with 1st April 1925.

Item.	A. B.		B. N.		D. & N. W.		B., D. & C. I.		BURMA.		E. B.		E. I.*		G. I. P.		M. & S. M.		N. W.		R. & K.		S. I.		Ry. Board and Miscellaneous officers.		TOTAL.	
	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.
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
8. Total—																												
8-01. Europeans	52	50	170	172	55	59	150	153	90	95	79	82	227	219	175	194	122	121	192	197	12	12	93	103	56†	43	1,435	1,509
8-02. Statutory Indians—																												
(a) Hindus	6	7	27	30	3	4	14	20	3	4	31	33	40	48	13	25	15	22	60	60	1	1	17	22	8†	7	222	204
(b) Muslims	1	1	5	6	1	1	..	..	..	..	3	2	12	12	5	7	1	2	13	21	..	..	1	1	3†	3	45	56
(c) Other classes	2	5	19	14	..	..	21	23	12	16	12	13	26	37	23	21	6	10	28	34	..	..	3	5	14†	13	166	193
(d) Total	9	13	51	50	4	5	35	43	15	20	46	55	87	97	41	53	22	34	101	121	1	1	21	28	24†	24	463	549
8-03. GRAND TOTAL	61	63	221†	222	59	64	194†	196	105	115	123	137	314	316	221	247	144	155	293†	318	13	13	114	134	84	77	1,943	2,017
9. Increase + Decrease—																												
9-01. Europeans . . . . .	..	-2	..	+2	..	+4	..	-6	..	+5	..	+3	..	-8	..	+10	..	-1	..	+5	..	..	..	+13	..	-10	..	+24
9-02. Statutory Indians—																												
(a) Hindus . . . . .	..	+1	..	+3	..	+1	..	+6	..	+1	..	+7	..	-1	..	+7	..	+7	..	+6	..	..	..	+5	..	-1	..	+42
(b) Muslims . . . . .	..	..	..	+1	..	..	..	..	..	..	..	-1	..	..	..	+2	..	+1	..	+8	..	..	..	..	..	..	..	+11
(c) Other classes . . . . .	..	+3	..	-5	..	..	..	+2	..	..	+4	..	+3	..	+11	..	-2	..	+4	..	+6	..	..	..	+2	..	+4	+32
(d) Total . . . . .	..	+4	..	-1	..	+1	..	+8	..	+5	..	+9	..	+10	..	+7	..	+12	..	+20	..	..	..	+7	..	+3	..	+85
9-03. GRAND TOTAL . . . . .	..	+2	..	+1	..	+5	..	+2	..	+10	..	+12	..	+2	..	+26	..	+11	..	+25	..	..	..	+20	..	-7	..	+109
10. Percentage of total—																												
10-01. Europeans	85.3	79.4	76.9	77.5	93.2	92.2	82.0	78.1	85.7	82.6	63.2	59.0	72.3	60.3	79.2	78.6	84.7	78.1	65.5	61.9	92.3	92.3	81.6	79.1	70.2	63.6	76.2	73.4
10-02. Statutory Indians—																												
(a) Hindus	9.8	11.1	12.2	13.5	5.1	6.2	7.2	10.2	2.9	3.5	24.8	27.7	15.6	15.2	8.1	10.1	10.4	14.2	20.5	20.8	7.7	7.7	14.9	10.4	9.5	9.1	13.0	14.3
(b) Muslims	1.6	1.0	2.3	2.7	1.7	1.6	..	..	..	..	2.4	1.5	3.8	3.8	2.3	2.8	0.7	1.3	4.4	6.6	..	..	0.9	0.8	3.6	3.0	2.3	2.7
(c) Other classes	3.3	7.9	8.6	6.3	..	..	10.8	11.7	11.4	13.9	9.0	10.9	8.3	11.7	10.4	8.5	4.2	6.4	9.6	10.7	..	..	2.6	3.7	16.7	23.4	8.5	9.6

* Includes Oudh and Rohilkhand Railway.
† Revised figures.

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 (excluding Nizam's Guaranteed State and Jodhpur Railways) on 1st April 1926 as compared with 1st April 1925.

Item.	A. B.		D. N.		D. & N. W.		D., D. & C. I.		BURMA.		M. B.		N. Y.*		G. I. P.		M. & A. M.		N. W.		R. & K.		R. I.		TOTAL.		
	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.
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	
I. Agency Department—																											
1-01. Europeans	4	..	..	..	..	..	..	..	..	..	3	3	3	1	1	1	..	..	1	1	..	..	..	..	7	6
1-02. Statutory Indians—																											
(a) Hindus	4	4	4	4	1	1	2	2	3	4	3	3	11	11	2	2	2	2	3	3	1	1	4	4	42	46	
(b) Muslims . . . . .	..	..	..	..	..	..	2	2	..	..	..	..	1	..	..	..	..	..	1	1	..	..	..	..	3	4
(c) Other classes	1	1	2	2	1	1	3	3	5	5	2	..	1	..	7	7	1	1	1	3	..	..	1	1	20	20
(d) Total	5	5	6	6	2	2	12	12	8	9	5	3	12	12	9	9	3	3	7	12	1	1	5	5	75	79	
1-03. GRAND TOTAL	5	5	6	6	2	2	12	12	8	9	8	6	14	12	10	10	3	3	8	12	1	1	5	5	82	85	
2. Engineering Department—																											
2-01. Europeans	4	2	11	11	6	5	14	14	1	1	12	14	74	55	12	10	14	12	55	24	2	2	11	11	221	162	
2-02. Statutory Indians—																											
(a) Hindus	7	6	51	52	4	4	98	105	43	44	20	22	100	122	20	12	12	14	100	111	..	..	10	25	510	601
(b) Muslims	2	2	7	7	..	..	10	11	2	2	2	2	6	9	17	22	..	..	50	54	1	1	1	2	100	116
(c) Other classes	6	4	44	52	10	10	41	42	44	45	25	27	110	127	20	24	27	22	44	55	1	1	20	20	476	522	
(d) Total	15	12	102	111	22	22	149	158	60	62	52	56	221	274	126	120	40	42	212	220	2	2	40	56	1,104	1,240	
2-03. GRAND TOTAL	20	15	118	122	20	22	163	172	60	62	72	72	305	320	140	120	54	56	262	264	3	3	57	67	1,225	1,422	
3. Transportation—																											
3-01. Europeans	4	1	20	20	9	10	42	45	5	7	22	21	460	141	214	225	9	..	122	100	Included under commercial		10	11	222	220	
3-02. Statutory Indians—																											
(a) Hindus	2	5	12	12	1	2	77	82	9	9	21	22	46	45	27	12	1	2	22	25			5	5	221	225	
(b) Muslims . . . . .	..	..	2	2	1	1	6	7	1	1	1	1	6	7	5	4	..	..	2	14			1	1	21	22
(c) Other classes	12	10	77	70	7	4	70	84	44	57	42	45	417	220	402	470	12	22	110	140			4	5	1,272	1,221	
(d) Total	15	21	92	90	9	7	150	172	54	64	60	60	460	441	492	492	12	22	122	158			10	11	1,240	1,240	
3-03. GRAND TOTAL	10	22	122	120	19	17	207	218	50	71	117	120	920	382	700	715	27	22	227	208			20	22	2,225	2,222	

* Includes Oudh and Rohilkhand Railway.

SENIOR SUBORDINATES EMPLOYED ON CLASS I RAILWAYS.

APPENDIX F—concl'd.

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 (excluding Nizam's Guaranteed State and Jodhpur Railways) on 1st April 1926 as compared with 1st April 1925.

Item.	A. B.		B. N.		B. & N. W.		B., D. & C. I.		B. R. M. A.		E. B.		E. I.*		G. I. P.		M. & S. M.		N. W.		R. & K.		S. I.		TOTAL.			
	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.	1925.	1926.		
	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. Commercial—																												
4-01. Europeans	Included under Transportation.				Included under Transportation.						15	8	3	13	Included under Transportation.				7	7	1	1	2	1	20	32
4-02. Statutory Indians—			Included under Transportation.														Included under Transportation.											
(a) Hindus	1	1			..	1							36	31	23	34	Included under Transportation.				7	11	7	4	74	82
(b) Muslims							7	4	3	4	Included under Transportation.				5	3	15	11
(c) Other classes							19	14	16	19	Included under Transportation.				3	4	5	7	1	..	44	44
(d) Total	1	1			..	1							62	40	42	57	Included under Transportation.				15	18	5	7	8	4	133	137
4-03. GRAND TOTAL	1	1			1	3							77	57	45	70	Included under Transportation.				22	25	6	8	10	5	162	169
5. Mechanical Engineering—																												
5-01. Europeans	11	8	264	259	12	12	81	77	20	17	72	65	201	395	45	50	56	57	198	163	2	1	30	32	1,001	1,145		
5-02. Statutory Indians—																												
(a) Hindus	2	3	19	19	1	1	21	34	4	5	15	16	18	19	8	18	2	5	73	51	2	1	18	18	163	100		
(b) Muslims	1	1	1	1	1	1	1	4	..	..	1	1	2	4	4	4	1	1	28	16	..	..	..	..	40	33
(c) Other classes	21	24	192	202	14	15	319	314	88	95	61	70	173	551	178	146	112	106	192	200	6	6	119	127	1,475	1,856		
(d) Total	24	28	212	222	16	17	341	352	92	100	77	87	193	574	190	168	115	112	293	267	8	7	137	145	1,698	2,079		
5-03. GRAND TOTAL	35	36	476	481	28	29	422	429	112	117	149	152	394	969	235	227	171	169	491	430	10	8	176	177	2,699	3,224		
6. Stores Department—																												
6-01. Europeans . . . . .	..	..	..	..	..	..	1	2	..	..	1	1	12	4	1	1	2	..	6	7	..	..	..	..	23	15
6-02. Statutory Indians—																												
(a) Hindus . . . . .	..	1	5	6	..	..	4	4	3	3	5	6	10	12	3	2	2	1	19	19	..	..	1	1	52	55
(b) Muslims . . . . .	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	7	8	..	..	..	..	0	8
(c) Other classes	1	1	10	10	1	1	0	8	..	..	6	6	12	25	7	7	2	4	7	0	..	..	2	2	34	73
(d) Total	1	2	15	16	1	1	11	12	3	3	11	12	23	37	10	0	4	5	33	36	..	..	3	3	113	130
6-03. GRAND TOTAL	1	2	15	17	1	1	12	14	3	3	12	13	35	41	11	10	6	5	30	43	..	..	3	3	138	151

7. Other Departments—																										
7-01. Europeans	3	6	28	21	3	3	11	9	2	1	..	..	66	74	9	6	4	3	1	1	..	..	1	1	148	123
7-02. Statutory Indians—																										
(a) Hindus	6	6	48	51	8	5	51	53	21	20	32	33	73	77	23	23	11	14	37	90	2	3	19	15	331	304
(b) Muslims . . . . .	..	..	3	..	..	..	5	4	6	5	..	..	5	6	..	..	..	..	15	23	..	..	..	..	32	37
(c) Other classes	5	4	78	78	17	10	56	50	17	19	27	23	48	68	52	41	14	23	12	11	1	1	5	3	332	331
(d) Total	11	10	129	129	25	21	112	116	44	44	59	56	124	151	75	69	25	37	114	123	3	3	24	23	745	762
7-03. GRAND TOTAL	14	16	157	150	28	24	123	125	46	45	59	56	210	225	84	75	29	40	115	124	3	3	25	24	693	697
8. Total—																										
8-01. Europeans	22	17	333	321	31	32	155	147	23	26	143	134	659	673	236	332	35	73	401	313	6	5	63	56	2,412	2,184
8-02. Statutory Indians—																										
(a) Hindus	23	26	140	144	16	14	253	231	33	32	106	109	300	323	125	175	31	33	323	325	5	4	73	72	1,432	1,593
(b) Muslims	4	4	13	10	2	2	25	28	9	9	5	5	25	31	29	35	1	1	123	118	1	1	3	3	239	247
(c) Other classes	46	50	403	420	50	56	506	515	198	221	163	171	789	1,184	603	774	173	186	378	441	13	15	158	172	3,689	4,207
(d) Total	73	80	556	574	76	72	784	824	290	312	274	235	1,114	1,538	957	984	205	237	829	884	19	20	233	247	5,410	6,047
8-03. GRAND TOTAL	95	97	889†	895	107	104	939†	971	313	338	417†	419	1,973	2,216	1,243†	1,316	290	500	1,230†	1,197	25	25	296	303	7,922†	8,181
9. Increase + Decrease—																										
9-01. Europeans . . . . .	..	-5	..	-12	..	+1	..	-8	..	-2	..	-9	..	-181	..	+46	..	-13	..	-33	..	-1	..	-7	..	-278
9-02. Statutory Indians—																										
(a) Hindus . . . . .	..	+3	..	+4	..	-1	..	+23	..	-1	..	+3	..	+23	..	+50	..	+7	..	-3	..	-1	..	-1	..	+111
(b) Muslims . . . . .	..	..	..	-3	..	..	..	+3	..	..	..	..	..	+6	..	+6	..	..	..	-5	..	..	..	+1	..	+3
(c) Other classes . . . . .	..	+4	..	+17	..	-3	..	+9	..	+23	..	+3	..	+395	..	-29	..	+15	..	+93	..	+2	..	+14	..	+518
(d) Total . . . . .	..	+7	..	+18	..	-4	..	+40	..	+22	..	+11	..	+424	..	+27	..	+22	..	+55	..	+1	..	+14	..	+637
9-03. GRAND TOTAL . . . . .	..	+2	..	+6	..	-3	..	+32	..	+20	..	+2	..	+243	..	+73	..	+10	..	-33	..	..	..	+7	..	+330
Percentage of total—																										
10-01. Europeans	23.2	17.5	37.6	35.0	29.0	30.3	16.5	15.1	8.8	7.7	34.3	32.0	43.5	30.0	23.0	25.2	29.3	24.3	32.6	26.1	24.0	20.0	21.3	18.5	30.3	26.1
10-02. Statutory Indians—																										
(a) Hindus	24.2	20.8	15.7	16.1	14.0	13.5	26.9	20.0	20.1	24.2	25.4	26.0	15.2	14.0	10.1	13.3	10.7	12.7	26.7	27.2	20.0	16.0	24.6	23.7	18.9	19.5
(b) Muslims	4.2	4.1	1.5	1.1	1.0	1.0	2.7	2.9	2.3	2.7	1.2	1.2	1.3	1.4	2.3	2.7	0.3	0.3	10.0	9.0	4.0	4.0	0.7	1.0	3.1	3.0
(c) Other classes	46.4	51.6	45.3	46.0	55.1	53.8	53.9	53.0	62.3	65.4	39.1	40.3	40.0	53.4	64.6	53.8	59.7	62.7	30.7	30.3	60.0	63.4	53.8	53.8	47.2	51.4

* Includes Oudh and Rohilkhand Railway.
† Revised figures.

APPENDIX G.

Statement showing the number of appointments created and vacancies which occurred among officers of Gazetted rank on State Railways and of corresponding rank on Companies' Railways (Class I) excluding Nizam's Guaranteed State and Jodhpur Railways, and how they were filled during 1925-26.*

Departments.	Number of new appointments created during the year.	Number of vacancies which occurred during the year.	Number of appointments abolished during the year.	Number of vacancies not filled up during the year.	Net vacancies filled up during the year.	FILLED BY				
						Europeans.	STATUTORY INDIANS.			TOTAL.
							Hindus.	Muslims.	Other classes.	
1	2	3	4	5	6	7	8	9	10	11
<i>State Worked Railways.</i>										
1. Agency . . .	2	1	..	..	3	..	1	2	..	3
2. Engineering . . .	53	24	..	10	67	34	20	6	1	33
3. Transportation . . .	9	6	..	4	11	8	3	..	..	3
4. Commercial . . .	1	2	..	1	2	2	..	..	..	..
5. Mechanical . . .	3	14	..	1	16	12	3	..	1	4
6. Stores . . .	..	6	..	5	1	1	..	..	..	..
7. Other Departments . . .	4	7	..	4	7	3	3	..	1	4
8. TOTAL . . .	72	60	..	25	107	60	36	8	3	47
9. Percentage of Europeans to number of vacancies filled.	50.1 per cent.									
10. Percentage of Statutory Indians to number of vacancies filled.	43.9 per cent.									
<i>Other Railways.</i>										
<i>Assam Bengal Railway.</i>										
1. Agency . . .	..	1	..	..	1	1	..	..	..	..
2. Engineering . . .	1	4	1	..	4	1	1	..	2	3
3. Transportation . . .	1	..	..	..	1	..	..	..	1	1
4. Commercial . . .	..	..	..	..	..	..	..	..	..	..
5. Mechanical . . .	..	..	..	..	..	..	..	..	..	..
6. Stores . . .	..	..	..	..	..	..	..	..	..	..
7. Other Departments . . .	..	2	..	..	2	2	..	..	..	..
8. TOTAL . . .	2	7	1	..	8	4	1	..	3	4
9. Percentage of Europeans to number of vacancies filled.	50.0 per cent.									
10. Percentage of Statutory Indians to number of vacancies filled.	50.0 per cent.									
<i>Bengal and North-Western Railway.</i>										
1. Agency . . .	..	..	..	..	..	..	..	..	..	..
2. Engineering . . .	..	2	..	..	2	2	..	..	..	..
3. Transportation . . .	..	1	..	..	1	1	..	..	..	..
4. Commercial . . .	..	..	..	..	..	..	..	..	..	..
5. Mechanical . . .	..	..	..	..	..	..	..	..	..	..
6. Stores . . .	..	1	..	1	..	..	..	..	..	..
7. Other Departments . . .	2	1	..	..	3	2	1	..	..	1
8. TOTAL . . .	2	5	..	1	6	5	1	..	..	1
9. Percentage of Europeans to number of vacancies filled.	83.3 per cent.									
10. Percentage of Statutory Indians to number of vacancies filled.	16.7 per cent.									

* The figures shown in this Appendix are liable to revision.

Statement showing the number of appointments created and vacancies which occurred among officers of Gazetted rank on State Railways and of corresponding rank on Companies' Railways (Class I) excluding Nizam's Guaranteed State and Jodhpur Railways, and how they were filled during 1925-26—contd.

Departments.	Number of new appointments created during the year.	Number of vacancies which occurred during the year.	Number of appointments abolished during the year.	Number of vacancies not filled up during the year.	Net vacancies filled up during the year.	FILLED BY				
						Europeans.	STATUTORY INDIANS.			TOTAL.
							Hindus.	Muslims.	Other classes.	
1	2	3	4	5	6	7	8	9	10	11
<i>Bengal Nagpur Railway.</i>										
1. Agency	1	1	..	..	2(a)	..	..	..	..	..
2. Engineering . . . . .	..	16	3	..	13	11	2	..	..	2
3. Transportation . . . . .	..	3	..	..	3	3	..	..	..	..
4. Commercial . . . . .	..	..	..	..	..	..	..	..	..	..
5. Mechanical . . . . .	..	..	..	..	..	..	..	..	..	..
6. Stores . . . . .	..	..	..	..	..	..	..	..	..	..
7. Other Departments	1	2	..	..	3	2	..	..	1	1
8. TOTAL	2	22	3	..	21(a)	16	2	..	1	3
9. Percentage of Europeans to number of vacancies filled.	84.2 per cent.									
10. Percentage of Statutory Indians to number of vacancies filled.	15.8 per cent.									
<i>Bombay, Baroda and Central India Railway.</i>										
1. Agency . . . . .	..	..	..	..	..	..	..	..	..	..
2. Engineering	2	3	1	1	3	1	2	..	..	2
3. Transportation	2	1	..	..	3	..	1	..	2	3
4. Commercial . . . . .	..	..	..	..	..	..	..	..	..	..
5. Mechanical . . . . .	..	3	..	..	3	2	1	..	..	1
6. Stores . . . . .	..	1	..	..	1(a)	..	..	..	..	..
7. Other Departments	1	2	..	1	2	2	..	..	..	..
8. TOTAL	5	10	1	2	12	5	4	..	2	6
9. Percentage of Europeans to number of vacancies filled.	45.5 per cent.									
10. Percentage of Statutory Indians to number of vacancies filled.	54.5 per cent.									
<i>Burma Railway.</i>										
1. Agency	1	..	..	..	1(c)	..	..	..	..	..
2. Engineering	17	4	5	6	10	8	..	..	2	2
3. Transportation	4	..	..	1	3	2	..	..	1	1
4. Commercial . . . . .	..	..	..	..	..	..	..	..	..	..
5. Mechanical . . . . .	..	3	..	..	3	3	..	..	..	..
6. Stores . . . . .	..	1	..	..	1	..	1	..	..	1
7. Other Departments . . . . .	..	1	..	..	1	1	..	..	..	..
8. TOTAL	22	9	6	7	19	14	1	..	3	4
9. Percentage of Europeans to number of vacancies filled.	77.7 per cent.									
10. Percentage of Statutory Indians to number of vacancies filled.	22.3 per cent.									

(a) Filled by transfer of 2 officers from Audit.
 (b) " " " " " an officer from Electric Department.
 (c) " " " " " " " Engineering Department.

Statement showing the number of appointments created and vacancies which occurred among officers of Gazetted rank on State Railways and of corresponding rank on Companies' Railways (Class I) excluding Nizam's Guaranteed State and Jodhpur Railways, and how they were filled during 1925-26—contd.

Departments.	Number of new appointments created during the year.	Number of vacancies which occurred during the year.	Number of appointments abolished during the year.	Number of vacancies not filled up during the year.	Net vacancies filled up during the year.	FILLED BY				
						Europeans.	STATUTORY INDIANS.			TOTAL.
							Hindus.	Muslims.	Other classes.	
1	2	3	4	5	6	7	8	9	10	11
<i>Madras and Southern Mahratta Railway.</i>										
1. Agency . . . . .	..	1	..	..	1(a)	..	..	..	..	..
2. Engineering	10	3	..	..	13	5	8	..	..	8
3. Transportation	2	2	..	1	3	2	1	..	..	1
4. Commercial . . . . .	..	..	..	..	..	..	..	..	..	..
5. Mechanical . . . . .	..	..	..	..	..	..	..	..	..	..
6. Stores	2	3	..	2	3	2	..	..	1	1
7. Other Departments	1	5	..	..	6	4	..	..	2	2
8. TOTAL	16	14	..	3	26	13	9	..	3	12
9. Percentage of Europeans to number of vacancies filled.	52.0 per cent.									
10. Percentage of Statutory Indians to number of vacancies filled.	48.0 per cent.									
<i>Rohilkund and Kumaon Railway.</i>										
1. Agency . . . . .	..	..	..	..	..	..	..	..	..	..
2. Engineering . . . . .	..	..	..	..	..	..	..	..	..	..
3. Transportation . . . . .	..	..	..	..	..	..	..	..	..	..
4. Commercial . . . . .	..	..	..	..	..	..	..	..	..	..
5. Mechanical . . . . .	..	..	..	..	..	..	..	..	..	..
6. Stores . . . . .	..	..	..	..	..	..	..	..	..	..
7. Other Departments . . . . .	..	..	..	..	..	..	..	..	..	..
8. TOTAL . . . . .	..	..	..	..	..	..	..	..	..	..
9. Percentage of Europeans to number of vacancies filled.	..									
10. Percentage of Statutory Indians to number of vacancies filled.	..									
<i>South Indian Railway.</i>										
1. Agency . . . . .	..	..	..	..	..	..	..	..	..	..
2. Engineering	16	6	..	1	20	13	7	..	..	7
3. Transportation . . . . .	..	1	..	1	..	..	..	..	..	..
4. Commercial . . . . .	..	..	..	..	..	..	..	..	..	..
5. Mechanical	1	2	..	1	2	1	1	..	..	1
6. Stores . . . . .	..	..	..	..	..	..	..	..	..	..
7. Other Departments	1	1	..	..	2	1	1	..	..	1
8. TOTAL	18	9	..	3	24	16	9	..	..	9
9. Percentage of Europeans to number of vacancies filled.	62.5 per cent.									
10. Percentage of Statutory Indians to number of vacancies filled.	37.5 per cent.									

(a) Filled by transfer of an officer from Traffic Department.

APPENDIX H.

List of officers of the Railway Department (Railway Board) on the 31st March 1926.

The Hon'ble Sir Charles Innes, K.C.S.I., C.I.E., I.C.S.,
Member of Council of Governor General.

Railway Board.

Sir Clement Hindley	Chief Commissioner of Railways.
Sir Austen Hadow, C.V.O.	Member.
Mr. P. C. Sheridan, C.M.G.	Member.
Mr. G. G. Sim, C.I.E., I.C.S.	Financial Commissioner, Railways (on leave).
Mr. A. M. Hayman, O.B.E.	Offg. Financial Commissioner, Railways.

Officers.

Lt.-Col. L. E. Hopkins, D.S.O., R.E.	Director, Civil Engineering.
Mr. A. J. Chase, O.B.E.	Director, Mechanical Engineering.
Mr. S. D. Gupta, M.B.E.	Director, Establishment.
Mr. S. D. Manson	Director, Traffic.
Mr. P. R. Rau	Offg. Director of Finance.
Mr. P. H. Madin, O.B.E., M.C.	Secretary.
Mr. J. Kaul	Deputy Secretary.
Mr. H. Jackson	Deputy Director, Stores.
Mr. B. Moody	Deputy Director, Statistics.
Mr. H. L. Glass	Deputy Director, Programme.
Rai Sahib B. D. Puri	Offg. Deputy Director, Finance.
Rai Sahib K. M. Singha	Offg. Assistant Director, Finance.
Mr. E. C. Rundlett	Chief Superintendent.

Attached Officers.

Mr. A. F. Harvey	Technical Officer.
Mr. R. G. Marriott	Timber Advisory Officer.

Accountant General, Railways.

Mr. J. M. Hartley	Accountant General, Railways.
Mr. R. A. O'Connor	Deputy Accountant General (Inspection).
Mr. F. W. Wilby	Deputy Accountant General (Headquarters).
Mr. P. B. Chandwani	Assistant Accountant General.

Map of Railway Systems by Mr. J. H. Trott.

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