

GOVERNMENT OF INDIA
RAILWAY DEPARTMENT
(RAILWAY BOARD)

INDIAN RAILWAYS

in 1922-23

Administration Report, Volume I



X415.2r
A658-
015972

SIML
GOVERNMENT OF INDIA PRESS
1923

Price Rs. 3/8/0.

**Agents for the Sale of Books published by the
Superintendent of Government Printing, India, Calcutta.**

IN EUROPE.

Constable & Co., 10, Orange Street, Leicester Square, London, W. C.
Kegan Paul, Trench, Trübner & Co., 68-74, Carter Lane, E. C., and 39, New Oxford Street, London, W. C.
Bernard Quaritch, 11, Grafton Street, New Bond Street, London, W.
P. S. King & Sons, 2 & 4, Great Smith Street, Westminster, London, S. W.
H. S. King & Co., 65, Cornhill, E. C., and 9, Pall Mall, London, W.
Grindlay & Co., 54, Parliament Street, London, S. W.
Luzac & Co., 46, Great Russell Street, London, W. C.

W. Thacker & Co., 2, Creed Lane, London, E. C.
T. Fisher, Unwin, Ltd., 1, Adelphi Terrace, London, W. C.
Wheldon & Wesley, Ltd., 28, Essex Street, London, W. C.
B. H. Blackwell, 50 and 51, Broad Street, Oxford.
Deighton Bell & Co., Ltd., Cambridge.
Oliver and Boyd, Tweeddale Court, Edinburgh.
E. Ponsonby, Ltd., 116, Grafton Street, Dublin.
Earnest Leroux, 28, Rue Bonaparte, Paris.
Martinus Nijhoff, The Hague, Holland.
Otto Harrassowitz, Leipzig.
Friedländer and Sohn, Berlin.

IN INDIA AND CEYLON.

Thacker, Spink and Co., Calcutta and Simla.
Newman and Co., Calcutta.
R. Cambray & Co., Calcutta.
S. K. Lahiri & Co., Calcutta.
B. Banerjee & Co., Calcutta.
The Indian School Supply Depot, 309, Bow Bazar Street, Calcutta, and 226, Nawab-Pur, Dacca.
Butterworth & Co. (India), Ltd., Calcutta.
Rai M. C. Sarear Bahadur & Sons, 90-2A, Harrison Road, Calcutta.
The Weldon Library, 57, Park Street, West, Calcutta.
Standard Literature Company, Limited, Calcutta.
Lal Chand & Sons, Calcutta.
The Association Press, Calcutta.
Higginbotham & Co., Madras.
V. Kalyanarama Iyer & Co., Madras.
G. A. Natesan & Co., Madras.
S. Murthy & Co., Madras.
Thompson & Co., Madras.
Temple and Co., Madras.
P. R. Rama Iyer & Co., Madras.
Vas & Co., Madras.
E. M. Gopalakrishna Kone, Madras.
Thacker & Co., Ltd., Bombay.
D. B. Taraporevala, Sons & Co., Bombay.
Mrs. Radhabai Atmaram Sagoon, Bombay.
Sunder Pandurang, Bombay.
Gopal Narayan & Co., Bombay.
Ram Chandra Govind & Son, Kalbadevi, Bombay.
Proprietor, New Kitabkhana, Poona.

The Standard Bookstall, Karachi.
Mangaldas, Harkisandas, Surat.
Karsandas, Narandas & Sons, Surat.
A. H. Wheeler & Co., Allahabad, Calcutta and Bombay.
N. B. Mathur, Superintendent, Nazir Kanun Hind Press, Allahabad.
Munshi Seeta Ram, Managing Proprietor, Indian Army Book Depot, Juhu, Cawnpore.
Rai Sahib M. Gulab Singh & Sons, Mufid-i-Am Press, Lahore and Allahabad.
Rama Krishna & Sons, Lahore.
Superintendent, American Baptist Mission Press, Rangoon.
Manager, the "Hitavada," Nagpur.
S. C. Talukdar, Proprietor, Students & Co., Cooch Behar.
A. M. and J. Ferguson, Ceylon.
Manager, Educational Book Depots, Nagpur and Jubbulpur.*
Manager of the Imperial Book Depot, 63, Chandney Chauk Street, Delhi.*
Manager, "The Agra Medical Hall and Co-operative Association, Ltd." (Successors to A. John & Co., Agra).
Superintendent, Basel Mission Book and Tract Depository, Mangalore.*
P. Varadaachary & Co., Madras.*
Ram Dayal Agarwala, 184, Katra, Allahabad.*
D. C. Anand & Sons, Peshawar.*
Manager, Newal Kishore Press, Lucknow.*
Maung Lu Gale, Proprietor, Law Book Depot, Mandalay.*

* Agents for the sale of Legislative Department Publications only.

Books and Technical Papers published by the Railway Board.

BOOKS.

- (1) Administration Report on the Railways in India. Published yearly. Price—Vol. I, Report, Rs. 3-8. Volume II, Appendices, Rs. 3-11.
- (2) Classified List and Distribution Return of Officers of all Indian Railways. Published half-yearly. Price Re. 1.
- (3) History of Indian Railways constructed and in progress, corrected up to 31st March 1923. Published quinquennially. Price Rs. 5-12.
- (4) History of Services of the Officers of the Engineer and Superior Revenue Establishment of State Railways. Published yearly. Price Rs. 2-8.

(5) Pocket Edition of the schedule of dimensions to be observed on all 5' 6", 3' 3½" and 2' 6" gauge railways in India.

TECHNICAL PAPERS.

(6) Over 200 papers have been published by the Technical Section of the Railway Board's office. The papers comprise—

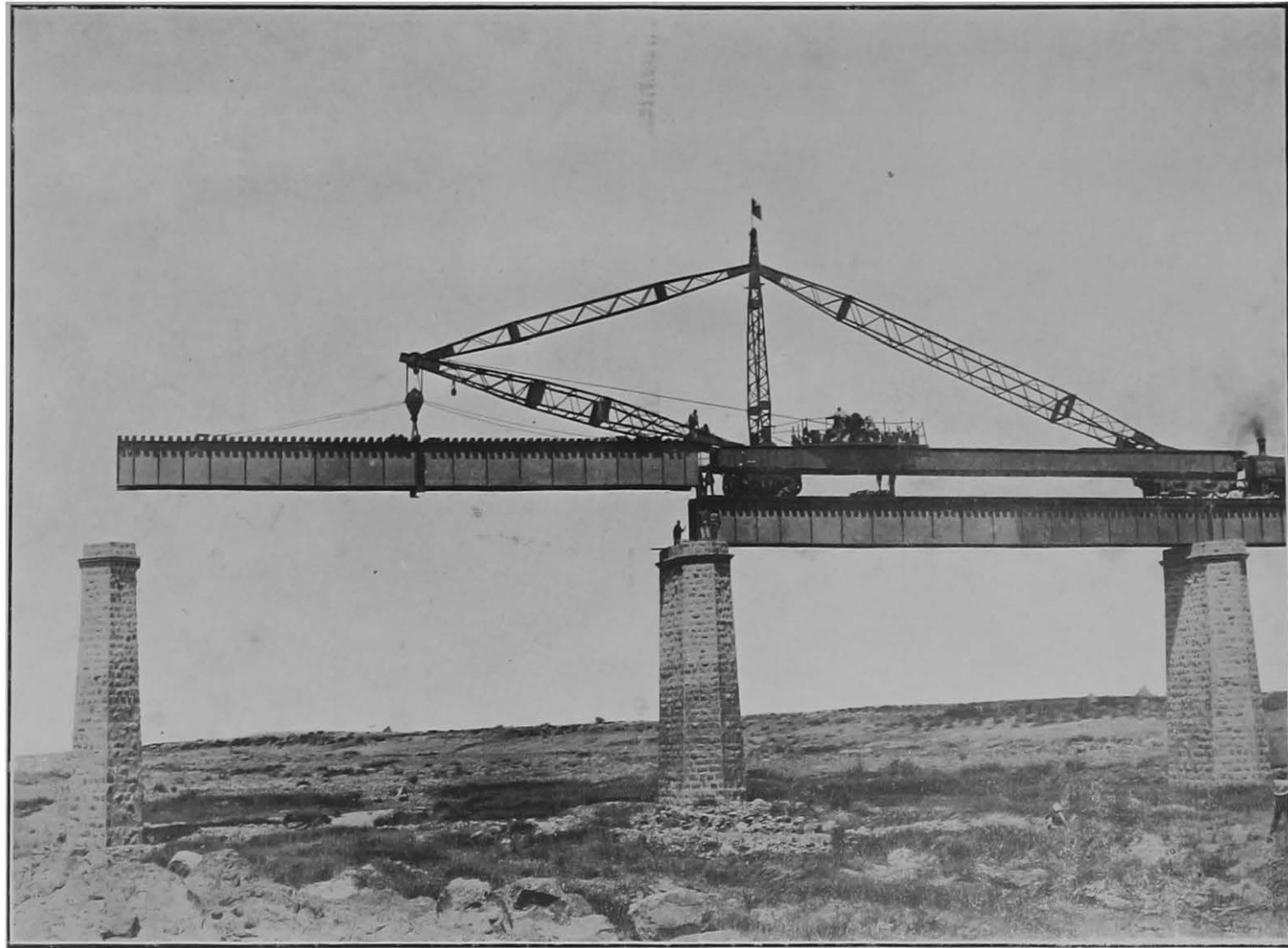
- (a) Original descriptions of Railway Works and studies of railway problems in India and elsewhere.
- (b) Reprints of articles from Foreign Engineering Magazines.
- (c) Reprints or abstracts of reports received by the Government of India on subjects connected with railways.

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

Name.	Author.
The design of well foundations for bridges ..	(Compiled).
Design of flood openings	C. W. HODSON.
The Physics of the river Indus	R. A. MOLLOY.
Trains blown over by wind	(Compiled).
Statistics of railway working expenditure ..	G. DEUCHARS.
Report on mountain railways	W. J. WEIGHTMAN.
Prevention of the spread of cholera	(Compiled).
Proportions of modern locomotives	LAWFORD H. HAY.
River training and control on the guide bank system.	F. J. E. SPRING.
Drift sand and drift snow	C. J. COLE.
Mountain railways	G. DEUCHARS.
Board of Trade methods of enquiry into accidents.	F. B. HEBBERT.
European architecture in India	J. RANSOME.
Military labour on the Agra-Delhi and Nowshera-Durgai Railways.	F. G. R. DAWSON AND S. L. CRASTER.
Slips at Mud Gorge, Sindh-Peshin Railway ..	C. W. HODSON.
Slips in cuttings and embankments	(Compiled).
Malabar timbers	A. BROWN.
Cost of fast and slow freight service	W. B. POLAND.
Ferro-Concrete in India	} G. RICHARDS.
Rules for the Preparation of Railway Projects ..	}
Oil fuel trials on the North Western Railway of India 1913-1916.	}
Ruling Gradient and the Minor Details of Alignment.	G. RICHARDS.
Note on the manufacture and use of Cement Concrete Blocks for lining large Liquid Fuel Reservoirs on the North Western Railway.	N. PEARCE.
Notes on Locomotive Design in relation to Gradients and Curves.	R. K. BIERNACKI.
Note on Locomotive Design as it affects the Bridge Engineer.	C. W. ANDERSON.
Possibilities of Steam Railway Electrification	
Control of Railway Traffic by Telephone—	
(i) Methods adopted on the Great Indian Peninsula Railway.	V. L. DEAN.
(ii) Methods adopted in England ..	Captain W. R. R. MOORE BENNET.
The Hardinge Bridge over the Lower Ganges at Sara with Supplementary Notes on the original Projects.	Sir ROBERT GARLES, F.C.H.M., Inst., C.E.
The Stability of Hill slopes	C. S. FOX.
Technical Education in Relation to Railways in America.	H. L. COLE.
Indian Standard Locomotives (5' 6" gauge) ..	H. L. COLE.

The prices of the papers vary from Annas Four to Rupees Eight.

The books and papers can be bought from the Superintendent, Government Printing, India, 8, Hastings, Street, Calcutta.



Erection of Girders on the Krishna Bridge, Secunderabad-Gadwal Railway.

GOVERNMENT OF INDIA
RAILWAY DEPARTMENT
(RAILWAY BOARD)

INDIAN RAILWAYS

in 1922-23

Administration Report, Volume I



SIMLA
GOVERNMENT OF INDIA PRESS
1924

PREFACE.

In presenting their Administration Report for 1922-23, the Railway Board wish to draw attention to the changes made in the form of the Report.

In accordance with the decision of Government on the recommendations of the committee appointed for the revision of statistics on Indian Railways, the statements in Volume II have been divided under three heads—

Financial,
Statistical, and
Appendices,

and in addition to the comparative figures for individual railways, the financial and statistical results have been summarised for India as a whole.

The text of the report in Volume I follows as far as possible the same order as that adopted in Volume II and each chapter corresponds to a statement or a group of statements found in that Volume.

The first chapter summarises the more important events and results of railway working during 1922-23, all of which are dealt with more fully in the chapters which follow.

For statistical purposes the railway administrations have been divided into 3 classes—

Class I consists of railways with gross earnings of Rs. 50 lakhs and over a year,

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

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

Class I railways now submit their statistical returns in full detail while Class II and Class III railways have to submit them in a condensed form.

Note on Indian Currency.—For the information of foreign readers of this report who are unaccustomed to the use of Indian currency and units, it may be mentioned that Rs. 1,00,000 is usually referred to colloquially as “a lakh of rupees.” Similarly 100 lakhs constitute “a crore.”

During the period covered by this report the value of the rupee approximated closely to a rate of exchange of Rs. 15 to the pound sterling the “lakh” being roughly £6,666 and a “crore” £666,666.

An anna is a 16th part of a rupee and a pie the 12th of an anna. An anna is at present approximately equal to one penny.

CONTENTS.

	PAGE.
I. GENERAL SUMMARY.	
1. General position and results of working	1
2. New construction	2
3. Rolling-stock	2
4. Railway staff	2
5. Accidents	2
6. Railway materials and stores	2
7. Headquarters organisation	3
8. Statistics	3
9. Retrenchment	3
10. Advisory councils and committees	3
11. Compensation claims and risk note forms.	3
II. GENERAL ADMINISTRATION.	
12. The Legislature	4
13. Re-organisation of Railway Board	4
14. State <i>versus</i> company management	6
15. Re-organisation problems	6
16. Revision of railway statistics	7
III. CAPITAL EXPENDITURE.	
17. Total capital expenditure	9
18. Capital programme	10
IV. EARNINGS	
19. Trade review	11
20. Analysis of railway earnings	11
21. Enhancement of rates and fares	12
22. Passenger traffic	12
V. WORKING EXPENSES.	
23. General	13
24. Traffic Department	14
25. Agency and miscellaneous	14
VI. LINES OPEN, UNDER CONSTRUCTION AND PROJECTED.	
26. Open mileage	15
27. Lines opened during 1922-23	15
28. Lines under construction during 1922-23	16
29. Programme of future construction	18
30. Replacement of lines dismantled during the war	18
31. Increase in mileage during last 50 years	18
32. Double line mileage	20
VII. ROLLING-STOCK.	
33. Additions to equipment	21
34. Purchase of rolling-stock	22
35. Standardization of stock	23
36. Automatic couplings	23
37. Repairs to stock	23
38. Illustrations of rolling-stock	24

VIII. WORKING OF INDIAN RAILWAYS.

39. Introduction of revised statistics	25
40. Financial results of working	25
41. Train and engine mileage	26
42. Rolling-stock user	26
43. Loads of trains	26
44. Density of traffic	27
45. Coal consumption	27
46. Results compared with those in other countries	27

IX. RAILWAY MATERIALS AND STORES.

47. Value of railway materials purchased	29
48. Supply of railway tools and stores	29
49. Rail supply	29
50. Sleeper supply	30
51. Railway collieries	30
52. Kargali colliery	30
53. Stores balances	31

X. RAILWAY STAFF.

54. Number of staff	32
55. Cost of staff	32
56. Training of railway officers and subordinates in India	33
57. Strikes	33

XI. ACCIDENTS.

58. Fatalities and injuries	34
59. Serious accidents	35
60. Flood damages	36

XII. GENERAL.

61. Indian Retrenchment Committee	37
62. Local Advisory Committees	37
63. Compensation for loss and damage to goods in transit	37
64. Revision of forms of risk notes	33
65. Conditions of 3rd class travel	38
66. Technical section	38
67. Indian Railway Bridge Committee	39
68. Use of maximum dimensions on the Khyber Railway	39

APPENDICES.

1. Notes on the relation of the Government to Railways in India	40
2. Memorandum regarding Local Railway Advisory Committees	47

MAPS.

- (i) A general map of India showing railways open and under construction on the 31st March 1923.
- (ii) A map of railway systems in India, Burma and Ceylon, showing each system in a distinctive colour, prepared by Mr. J. H. Trott (included only in copies of the report used for official purposes. It may be obtained by the public, on payment, from Mr. J. H. Trott, Aligarh, United Provinces, who holds the copyright).

APPENDIX I.

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

(Reprinted from the Report for 1914-15.)

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.

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 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.

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-Malwa, Northern Bengal, Rangoon and Irrawaddy Valley and Tirhoot.

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

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 :
Introduction of Modified Guarantee Terms.
 " 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.

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 (except in the case of the East Indian Railway Company, which is for special reasons to receive a terminable annuity instead of a cash payment).

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.

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.

The greater number of the powers for the detailed control of railways as described in the foregoing paragraphs are vested in the **Controlling Authority.** Railway Board. At the close of the year 1922-23 the Board consisted of a Chief Commissioner and two Members with a Secretariat establishment.

APPENDIX 2.

Memorandum regarding Local Railway Advisory Committee.

I. *Title*.—The new bodies to be known on each line as “The Railway Advisory Committee.”

II. *Constitution*.—A separate main Committee to be constituted for each administration, the number of members being decided by circumstances subject to a maximum of 12. The Agent to be *ex-officio* Chairman. The remaining members to consist of—

two Local Government members nominated by the Local Government in whose jurisdiction the headquarters of the railway in question is situated ;

three representatives of the Legislative Council of the Government in whose jurisdiction the headquarters of the railway in question is situated. These members should be selected to represent rural interests and the travelling public ;

one member from the local municipality or corporation at the railway headquarters ;

five members representing industries, commerce and trade.

The heads of departments of railways may be called in merely to advise on subjects under discussion which may affect their department and on which their technical expert advice would be useful to the committee.

The method of selection of the non-official members to be left largely to local discretion. The representatives of the Legislative Council need not necessarily be members of the Council. Members of the Central Advisory Council are not debarred from membership of Local Advisory Committees. The five members representing industries, commerce and trade would ordinarily be drawn from important local bodies representing predominant trade interests ; the actual selection of such bodies should be made in consultation with the Local Government, and once the selection is made it should be left to them to nominate or elect their representatives. The tenure of office of the members to be left to the electing or nominating bodies to decide.

Agents will consider whether it is desirable to form separate branch local committees at large centres, and in case of doubt they may consult their main committee in this matter.

III. *Scope of duties*.—The functions of the committee to be purely advisory. The sort of subjects which might suitably be placed before the committees are :—

- (a) alterations in time-tables and passenger services ;
- (b) alterations of rates and fares and changes of goods classifications ;
- (c) proposals in regard to new projects and extensions ;
- (d) proposals in regard to new rolling-stock ;
- (e) any matters affecting the general public interest or convenience.

Questions of personnel, discipline and appointments will not be brought before the committee ; subject to this condition any member may suggest a subject for discussion, but the Agent may rule out any subject for reasons which should be explained at the first meeting after the ruling has been given.

IV. *Remuneration*.—Non-railway members may be paid Rs. 32 for each meeting attended.

V. *Proceedings*.—The committee to meet once a month if there are matters to be discussed. A copy of the minutes of meetings to be furnished to each member and to the Railway Board. If in any case the Agent decides that he is unable to follow the advice given by the majority of the committee, he must bring the matter to the notice of the Railway Board in forwarding the minutes of the meeting for their perusal.

ANNEXURE A. OF APPENDIX 2.

Oudh and Rohilkhand Railway Advisory Committee.

Subsidiary Rules.

The rules for the conduct of business shall be as laid down in the Government Memorandum regarding Local Railway Advisory Committees, supplemented by the following subsidiary rules :—

1. *Constitution.*—The Committee will be constituted as follows :—

Chairman.—Agent of the Oudh and Rohilkhand Railway.

<i>Members.</i> —	The Commissioner of Lucknow.
	The President of the Board of Communications, United Provinces.
	Three representatives of the Legislative Council.
	A representative of the Lucknow Municipality.
	A representative of the Upper India Chamber of Commerce.
	A representative of the United Provinces Chamber of Commerce.
	A representative of the United Provinces Trades Association.
	A representative of the Board of Agriculture.
	A representative of the United Provinces Board of Industries.

2. The Deputy Agent of the Oudh and Rohilkhand Railway will be the Secretary.
3. Provided there are subjects for discussion, meetings will be held on the second Saturday of every month at 12 noon unless for special reasons the Chairman fixes another day in that month.
4. The Secretary will give ten days' notice of the meeting to each member.
5. Subjects for discussion which must be in accordance with paragraph III of the Government Memorandum "Scope of Duties" must reach the Secretary at least 14 days before the day of the next meeting otherwise the subject will be postponed to the following meeting but urgent matters may by permission of the Chairman be admitted to immediate discussion.
6. Subjects if passed by the Chairman will be issued by the Secretary in the form of an Agenda for the next meeting to each member of the committee at least a week before the meeting.
7. The minutes of each meeting when ready will be printed and a copy sent to each member and to the Railway Board and their confirmation will be the first subject on the Agenda of the next meeting.
8. It is not necessary that suggestions should be put in the form of a resolution.
9. Five members will form a quorum.