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INDIAN RAILWAYS: RATES AND REGULATIONS

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By

N. B. MEHTA, Ph.D.

With an Introduction by

W. TETLEY STEPHENSON, M.A.

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PREFACE

PORTENTS are not lacking that the awakening demos in India is getting tremendously interested, *inter alia*, in railway matters. Resolutions and questions innumerable in the Imperial Legislature bear sufficient testimony to it. A rapid change is also overcoming the railway management. Following upon the Report of the Acworth Committee, the Railway Board has been overhauled and re-organized; a Central Advisory Council and Local Advisory Committees have been established; and the railway budget has been separated from the insalutary influence of the general budget, and for the examination of it a standing Finance Committee has been constituted. The decision of the representatives of the people that the State should take over the management of the E.I. and the G.I.P. Railways, and its acceptance by the Government, has created a landmark in the annals of Indian railways, reversing as it does, the policy initiated by Lord Hartington and Sir Evelyn Baring in 1882. These are but indications of the important hold which railways are getting on the public mind. And this is as it should be, for hitherto the lot of the railways was frankly incommensurate with their financial, economic and social importance.

Literature on the subject is, however, scanty. This constitutes the *raison d'être* and justification for the present work.

The purpose of the following dissertation is to examine the rates policy pursued by the railways in India, and the power of the Government to control it. It is attempted to show that this power over the railway companies is in the first place inadequate, and that some of it is inconvenient of enforcement or is not actually exercised. Three facts are emphasized: the preponderant financial stake of the State in the railways, the obsolescence of the theory of the automatic regulation of railway rates by competition or by the law of supply and demand, and the need, therefore, of a more rigorous yet enlightened policy of State control.

Complaints of unduly discriminatory rates imposed by the railways have been numerous and of long standing. While the law formally prohibits undue preference, its sanction is neutralized by the non-existence—for practical purposes—of a body to entertain complaints of such a nature, examine into them and decide upon them or advise the Government to do so. The absence of such a body has been grievously felt by the public, and the criticism of the continued tolerance of such a state of affairs is one which Government cannot very well face. On the other hand, the unsympathetic and short-sighted policy of the railways has turned the hands of the public against them, and State management has been the resounding cry. Yet it needs no stretch of the imagination to perceive that the stress which the public is laying upon State management is accidental. To the public the one obvious fact is the failure of railways to further the needs and aims of the country. What it essentially desires is an efficient and economical service ministering to its legitimate aspirations. Clearly, therefore, there can be no justification if the State managed railways adopt a policy detrimental to social interests. The situation in regard to the Company-managed railways is, however, on a different plane. The power of the State over them is limited by the contracts. So long, therefore, as the contracts are current what is desirable to improve the present situation is that the State should exercise an enlightened yet a more effective control over them—a control so imposed that this national property may achieve the maximum of utility for the community coupled with a reasonable remuneration to the concessionaires. It may also be possible thereby, to bring the public and the railways into more harmonious relations, and dispel mutual apprehensions. An important part of a railway's work is the cultivation of public confidence by publishing its achievements and promise of improvements in service for the future. This aspect the Indian railways have neglected. It is suggested that to accomplish this purpose a standing Railway Commission of the advisory type, inexpensive and expeditious in operation, should be appointed.

The writer wishes to express his profound sense of obligation to Mr. W. Tetley Stephenson, Head of the Department of Transport at the London School of Economics and Political Science, for his general supervision of the work and his sympathy, stimulus and critical guidance. The work bears the imprint of his valuable suggestions founded not less upon practical experience than upon theoretical learning.

SCHOOL OF ECONOMICS AND POLITICAL SCIENCE, LONDON.
March, 1925.

N. B. M.

INTRODUCTION

THE railway literature of the world steadily grows, but at a very varying rate in different countries. Each country though, presents its own special problems, and so for each country a special literature is desirable. The present volume is the second book which has been produced with special reference to the railways of India, by a student preparing a Thesis for a higher degree in the University of London.

The first was *The Rôle of the State in the Provision of Railways*, by H. M. Jagtiani, in which the part that the State should play in railway development was admirably discussed in the light of the experience of England, Prussia and India. Mr. Mehta now follows with a study of railway rates and fares, in which he examines first the principles which underlie rates and fares; then the application of those principles in practice; and finally the need for, and nature of, the control which the State should exercise to ensure the principles being applied reasonably and without undue discrimination. Throughout, India is the country preeminently in the mind of the Author.

Throughout the research which preceded the writing of the book, I was in constant touch with Mr. Mehta, and know how hard he strove to adopt an unbiased attitude, and to keep in check national feelings which might have prejudiced his judgment. The best testimony to his success in this endeavour was given by a distinguished official of one of the great Indian railways, who, having read the book in manuscript, expressed the opinion that it was the fairest, best balanced book he had ever read by an Indian.

It is worthy of note that about the time Mr. Mehta presented his thesis for the Ph.D. degree (which was subsequently awarded him) the Government of India took steps to investigate several of the problems therein dealt with. Though their conclusions did not result in practical remedies identical with those advocated in the book, they differed in such ways that it is evident that expediency rather than principle had dictated the course that action had finally taken.

Mr. Mehta's book will be useful to students of railways generally. I would, however, commend it not merely to students of railway transport, but as whole-heartedly to all concerned in railway transport in India, whether as Government officials exercising control, or railway officials, or large customers of the railways. The last will understand the railway problem better, whilst the former will get a not unkind description of the way in which their actions in the past have been viewed by the traders. The result should be a better understanding.

W. TETLEY STEPHENSON.

LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE.

CHAPTER I

A SKETCH OF THE RAILWAY POLICY OF THE GOVERNMENT OF INDIA

"It cannot be necessary for me to insist," wrote Lord Dalhousie in his memorable minute[1] to the Court of Directors of the East India Company, "upon the importance of a speedy and wide introduction of railway communication throughout the length and breadth of India. A single glance cast upon the map recalling to mind the vast extent of the Empire we hold; the various classes and interests it includes; the wide distances which separate the several points at which hostile attack may at any time be expected; the perpetual risk of such hostility appearing in quarters where it is least expected; the expenditure of time, of money and of life, that are involved in even the ordinary routine of military movements, would convince of the urgency of speedy communication." He continued, "And if the political interests of the State would be promoted by the power which enlarged means of conveyance would confer upon it of increasing its military strength, even while it diminished the numbers and the cost of the army, the commercial and social advantages which India would derive from their establishment are, I truly believe, beyond all present calculation. Great tracts are teeming with produce they cannot dispose of. Others are scantily bearing what they would carry in abundance if only it could be conveyed whither it is needed. Every increase of facilities for trade has been attended, as we have seen, with an increased demand for articles of European produce in the most distant markets of India. . . . Ships from every part of the world, crowd our ports in search of produce which we have,

[1] Dated 20 April, 1853.

or could produce in the interior, but which at present we cannot profitably fetch to them. . . . "

These lines in the able, lucid and comprehensive minute constitute the *raison d'être* of the Indian railway policy. Lord Dalhousie was pre-eminently swayed by two motives : political and commercial. When he arrived in India the map of British territories was indistinct and disconnected. His forward policy of conquest and annexation brought about an extensive territorial homogeneity the preservation of which was the motive underlying his policy of communications. As President of the Board of Trade he had had invaluable railway experience, and he was convinced of the importance of railway communication for a country. Though Solferino and Magenta were yet to be, he had visualized the strategic superiority which a railway could impart to a country of such long distances as India. The strength of an army, said Napoleon, lies in its legs. Swift despatch of troops by railway would permit of a curtailment of military strength, and it was calculated that in that way there would be a saving of £50,000 a year. There was another advantage. From Calcutta to Delhi the dak runners carried the mails in eighty days : the railway could carry them in sixty hours.

Nor did commercial advantages which would follow upon the construction of a railway escape his attention. Cotton was largely in demand in England, and it could be supplied from the rich cotton districts of India provided it was carried cheaply and safely to the ports. He saw what a vast market for British manufactures could be created " in the most distant markets of India" and " beyond our present frontier." He perceived the manifold economic and social advantages which both countries would derive by bringing to bear British capital and enterprises upon the hitherto unexploited resources of the country. He desired India to reap the similar benefits which the introduction of the railway had conferred upon Europe. The success of the experimental lines in India was one more factor which augmented his optimism. He perceived that if lines were judiciously selected, well and economically constructed, the chances were that Government would have to bear no burden of interest. He decided that the experimental lines must be quickly followed up by a systematic extension.

His zeal for the introduction of British enterprise into India swayed him into pronouncing in favour of joint-stock companies as instruments for the construction and management of railways. He thought imperially. He lived in a milieu, it must be remembered, when economic individualism was at the zenith of its vogue, and joint-stock enterprise in its full vigour. " I hold " ran his minute, " that the creation of great public works, which although they serve important purposes of state, are mainly intended to be used in those multifarious operations which the enterprise, the trade, and the interests of the community, for ever keep in motion, is no part of the proper business of a Government."

In the pre-railway regime facilities for carriage by land were fairly good, although neither sufficient to move the large quantity of traffic existing nor cheap enough to extend or cultivate the field of commerce. Travellers rode on horses or in palanquins, or in the unpretentious tonga or ekka. Goods were conveyed in bullock carts or on the backs of bullocks, buffaloes, donkeys and camels. The internal trade of India was large and in varied products but the indigenous modes of transport were inadequate to carry it in all directions. The troublous period that preceded the advent of the " iron-horse " had disorganized the means of communication in the land. The old system, again, had manifest disadvantages as compared to the mechanical carriage by railway. It was slow and costly, irregular and risky, and the distance commodities were carried and their tonnage were comparatively very small. By its very character its sphere of service was circumscribed, and it must have restricted a proper distribution of the trade of the country. Investigations in Bombay in 1846 showed for instance, that the marked decline in the cotton trade then was attributable to the heavy cost of cotton owing to the high cost of carriage. The means of transport was not adequate and during the tedious land transit there was an appreciable loss in quantity coupled with a deterioration of quality. If the monsoon was successful the flooding of rivers made the journey difficult for bullocks; while if it failed the bullocks were deprived of fodder and water. These defects were accentuated and brought into relief during a famine, when prices fluctuated furiously and there was the strange spectacle of a bumper crop in one part of the land with grains selling cheaply or lying unused in stores, with a dearth in another and abnormal prices and a starving population. During one such famine it is recorded that while coarse grain was selling at Agra at five and six seers [1] the rupee, at Goondwara it was at forty seers. At Agra there were sixty thousand paupers besides thirty-seven thousand in the Division dependent upon State relief.[2] In 1877, when the price of wheat at Bilaspur was 1s. 4d. per cwt. in the Bundelkhand District, six hundred miles away, it was 6s. 8d. The railway cannot eliminate the famine which is a resultant of complex factors, nor restore the depleted purchasing power of the people. It can however alleviate the sufferings of starvation by carrying food-stuffs cheaply and expeditiously to the necessitous area, and thus restrict mortality. A cart with its weakened bullocks of a famine year, over roads that are cracked and rutty cannot carry more than one third of a ton of grains, nor for more than thirteen miles continuously. The railway can do the work of six hundred carts and run four hundred miles a day and with proportionately a smaller number of men in attendance.[3] It was observed in 1880 that transport by cart was five times the cost of that by rail, and ten times the cost in times of famine.[4]

The early efforts to construct railways in India may be traced to 1832 when a railway was contemplated between Madras and Bangalore; and in 1836 a line in this direction

[1] Railways for Bombay, 1849.

A seer in British India equals a kilogramme or 2·2 lb. avoirdupois. A railway maund is 82·29 lbs.

[2] *Ibid.*

[3] Evidence of Sir W. W. Hunter before the Select Committee on East Indian Railways, 1884. para. 7, 142.

[4] Evidence of Sir James Caird before the Famine Commission, 1880, para. 377.

was surveyed by a Government engineer.[1] In 1842, Mr. C. B. Vignoles submitted a report to the East India Company on the possibility of constructing railways in India. In 1843, Mr. G. T. Clarke was invited to visit Bombay and his views on the subject were identical with those of Mr. Chapman who at a later period commenced the G.I.P. Railway.[2] Nothing definite however, seems to have been decided at this time. A little later Mr. Chapman, Mr. Macdonald Stephenson, and Mr. Mackay came out to India to investigate on behalf of the cotton merchants of Manchester the feasibility of constructing railways from the interior to the coast with a view to conveying cotton more cheaply.[3] After satisfying themselves that the terrain lent itself eminently for the purpose, the two former applied in 1844 for the permission and support of the East India Company to construct lines in Bengal and Bombay respectively. With the prevalence of the railway mania in England and the disturbed conditions in India, the occasion did not seem auspicious. The Court of Directors of the East India Company were, however, favourable to the request, and suggested in their despatch to the Government of India, the need for railway construction and the advisability therefore of employing British capital. Insistence was placed upon the right of the Government to purchase the trunk lines. Adverting to the prospective traffic they thought that while in England the largest returns were procured from passengers, in India the main source of earnings would be the goods. They were in favour of construction on a moderate scale, but concluded that more light on the subject was necessary and to that end suggested the appointment of a commission.[4]

The Commission was thereupon appointed. In their investigation they found that the terrain was full of extended plains without serious undulations, the value of land was

[1] Sir W. P. Andrew, *Indian Railways*, p. xvi. For early history see also G. W. McGeorge, *Ways and Works in India*, 1894, Chap. VI.

[2] Note by Capt. E. C. S. Williams, R. E., 16 July, 1867.

[3] Evidence of William Sowerby before the Select Committee on East India (Public Works,) 1879.

[4] Despatch of the Court of Directors to the Government of India, 7 May (No. 11) 1845.

low, labour and materials were cheap, and general facilities for procuring building materials extensive. Favourably impressed with these circumstances they reported that in India " railways were not only a great desideratum, but with proper attention, could be constructed and maintained as cheaply as in any part of Europe." [1]

The extent of State help to be afforded to the private companies was a subject that did not lend itself to an easy solution. Various and divergent views were held upon it, and it was not until long years of controversial correspondence had passed between the Government of India, the authorities in England, and the promoters of the enterprise, that a decision was reached. The Government of India in general viewed a free grant of land as a sufficient inducement to attract British capital and enterprise to embark on the undertaking. They did not consider it expedient or politic to guarantee a dividend either during construction or after completion of the works; and insisted upon reserving to themselves the power of regulating the profits of the railway companies.[2]

Investors, however, thought otherwise; and it was realized that if railways were to be constructed by private agency a guarantee was necessary. Lord Hardinge, the Governor-General, seems to have thought as much, for in his minute he suggested that the contribution was a *sine qua non* and that it should be given commensurately with the political, military and commercial advantages which the country would derive from a railway; that mere grant of land was not sufficient, and " on military considerations alone, the grant of one million sterling, and an annual contribution of five lacs of rupees " should be offered to the line from Calcutta to Delhi.[3]

The Board of Control was averse to the grant of a guarantee. More correspondence ensued, and what with the medley of conflicting views that prevailed the prospect of

[1] *Report of the Engineer Officers*, 13 March, 1846.
[2] Letter dated 9 May, 1846.
[3] Minute by Lord Hardinge, the Governor-General of India, dated 28 July, 1846. A lac is the equivalent of a hundred thousand and a crore of ten million.

railways for India seemed none too bright. In the meantime it was suggested by the Government of India as a solution that they might be allowed to construct the lines themselves. But the suggestion was peremptorily rejected, conflicting as it was with the great desideratum of introducing British enterprise into India.[1] To get out of this imbroglio, the Court of Directors in November, 1846, penned their decisive note to the Government of India. They held that a guarantee was indispensable and suggested its limit to four per cent on the condition that the railway company deposited a sum of one million sterling in the State treasury, agreed to an equal division of profits with the State and to a power of supervision and control over its affairs to be vested in the East India Company. The Board of Control, to whom these proposals were submitted, again took a strong exception to the guarantee. They would not have it unless it was indispensable, and then to be limited at all events to a period of fifteen years. When the modified terms were offered to the railway company, it found the limitation of the period of guarantee a handicap to raising capital. To the request of the Court that the previous unmodified terms be offered, the Board declined. After three months the Court made another effort to enthuse the promoters, but without avail. Meanwhile, the state of the money market had necessitated a guarantee of five per cent. In their exasperation the Court wrote a pressing despatch to the Board dwelling on the urgency of early construction of experimental lines and the expediency of offering "effectual assistance to any association of individuals who may be prepared to embark in the undertaking."[2] The Board yielded; and an agreement was made with the Company.

But the birth-pangs of railways in India were yet to be protracted. There was a monetary crisis in England and consequently the company failed to deposit in the treasury of the East India Company the sum of £100,000 stipulated in the contract. The whole affair thus fell through. The matter was revived in 1848 when the idea of an experimental

[1] Evidence of Juland Danvers before the Select Committee on East India (Railways) 1858.

[2] *Ibid.*

line matured by the railway company was endorsed by the Court on condition that a sum of £60,000 was deposited with the East India Company and a proof offered within four months of the ability of the private company to construct the works. The company failed once more; and again was it proposed by the Court to permit the Government of India to construct the railways themselves. The Board of Control dissented. It is strange that the Board should have vetoed a proposal which seemed to put an end to the long-drawn difficulty and insisted on a system from which all element of real enterprise had vanished. The Government felt confident that they could raise the necessary money and construct the preliminary lines themselves. There is no denying that capital in India was lacking and that foreign capital was needed for the development of the country. Railways were, however, not the only sphere. There were collieries and other mines, jute and cotton mills, and a number of other industrial undertakings wherein government agency was not required and private entrepreneurs would have reaped ample rewards, besides furthering the material welfare of the country. It may be that the Board were severely obsessed with the idea of introducing private enterprise in India; or perchance they harboured misgivings about the commercial ability of the East India Company whose exploits as traders were not such as to inspire confidence. Subsequently, more modified terms were propounded and accepted; and in August, 1849, contracts with the E.I. and the G.I.P. Railway Companies were formally executed. This period coincides with the important landmarks in the history of European and American railways. The crisis of 1847 in England terminated the infancy period of its railways; on the Continent of Europe the revolution 1848-1851, had substantial influence on railway policy; while in America with 1850 date the land grants and the beginning of the trans-continental lines.

The East Indian and the Great Indian Peninsula Railway Companies formed in 1845, after prolonged negotiations and interruptions caused by the difficulty of agreement as to terms and the condition of the English money market, were thus able to conclude their final contracts with the Secretary of State for India. These two and subsequently five other railways, namely, the Madras, the Scinde, the Bombay and Baroda, the Eastern Bengal and the Great Southern of India, were constructed under terms known as the guarantee, by which they received from the State for a period of ninety-nine years a guarantee of five per cent per annum upon capital expended by them upon their undertakings and sanctioned by the Government. A fixed rate of 22d. to the rupee as exchange for the remittance of interest charges was agreed upon. This system of co-partnership resulted in the Government contracting to exercise stringent supervision and control over the affairs of the companies from the very construction to the actual operation of railways. The Government defined the route to be followed by every line, the number, speed and times of running of trains; they approved the rates and fares chargeable, and required a reduction of these when the profits exceeded ten per cent. Mails and postal servants were to be carried free of charge and troops and military stores at reduced rates. At the end of ninety-nine years the land and the works were to become the property of the State, the rolling stock and other movable property to be paid for at a fair value. The Government had the option of purchasing the line within six months after the first twenty-five or fifty years: the sum to be paid being the full amount of the value of all shares and capital stock, calculated on the mean market value in London during the preceding three years. The Company on its side might surrender the line after completion upon giving six months' notice, when the Government would have to refund the sanctioned capital outlay. In case of default by the Company in finding capital, or in any other way, the Government had the power to take over the line on payment within six months of the capital outlay. Any surplus over five per cent was to be divided, so that one-half was to be paid to the Company and the other half to be applied in the first place towards the payment of interest on debt, and then towards the extinction of the debt itself. Thereafter, it was to be applied to pay an additional dividend over the guarantee as "inducement for an active, energetic and economical management" of the Company's affairs.[1] If the net receipts amounted to less than five per cent the sum was to be made up from the revenues of the Government of India. Finally, in case the receipts were not equal to the amount paid for working and maintaining the railway, the deficiency was chargeable against the guaranteed interest, and the dividend payable to the shareholders was proportionately reduced.

These favourable terms offered to the Companies resulted in a ready subscription of capital, and at the same time made it necessary for the Government to keep a watchful eye and exercise a salutary check over the management of the Companies. The machinery for this purpose existed both in England and in India. There was an Official Director who was an *ex-officio* member of all the Boards of the railway companies in London, and he possessed a power of veto on all the proceedings of the Directors. Questions involving expenditure, not considered by the local Governments in India, and all matters of importance, were referred to the Secretary of State. In India, there were special officers appointed for the task of supervision—later styled Consulting Engineers—whose powers and duties were defined by certain rules.[2] They were to co-operate with the officers of the railway companies, to supervise the expenditure, and to submit such cogent matters as they may think necessary for the sanction of the Government. All plans and surveys were to be submitted to these officers in the first instance. Further, they had the power of controlling all matters involving expenditure, and the extension of works over the line.[3]

The first trunk lines were laid out on the plan formulated by Lord Dalhousie. The G.I.P. first commenced working in 1853, with a line from Bombay to Thana, a distance of 22 miles; while in the following year the E.I. ran its first train from Calcutta to Raneegunje, a distance of 37 miles.

[1] Financial Letter to India, No. 27; dated 14 November, 1849.

[2] *Imperial Gazetteer*, Vol. III, Chap. VII.

[3] Evidence of Juland Danvers before the Select Committee on East India (Railways) 1858.

In 1855, 120½ miles were opened in Bengal, and 50½ in Bombay. Madras possessed a railway mileage of 65 in 1856. Altogether seven companies were laying out lines in the different parts of India. In the furtherance of the policy of construction there seemed, however, to be much delay. It was suspected that this was the result of friction between the supervising officers of the Government and the officers of the railway companies.[1] It is probable that the Consulting Engineers, recruited as they were from the ranks of military officers, were not fitted by their experience to be proper critics of the schemes of construction propounded by the Companies' officers. Nor did they exercise sufficient discretion and tact in their dealings with the latter. The result was friction and complaints from both the sides. The Committee while pointing out the existence of the vexations and annoying control exercised by the Government over the railway companies, stated that it was a minor factor and that "no very material delay . . . appears to have resulted therefrom." The main causes were: (1) these extensive and complicated public works were carried on under peculiarly difficult conditions in a distant land; (2) political disturbances like the Sonthal Rebellion and the Mutiny which destroyed much railway property and materially slackened railway progress; and (3) the natural difficulties which the face of the country presented.

In the meanwhile the superiority of the railway over the older modes of transport was being conclusively witnessed. The people and the goods responded remarkably to the stimulus which the railway gave, and the fears of those who had discounted the love of the people to travel were dispelled. The Indian proved to be an inveterate traveller, and when duty, social or religious, called him, he would undertake journeys from which many Europeans would shrink. There[2] was also an abundant material of wealth which remained partially unexchanged since the mode of transport was infacile and inadequate. With the progress of railways a

[1] *Report from the Select Committee on East India (Railways)* 1858.

[2] Despatch from Major T. T. Pears, C. B., Engineers, to Sir H. C. Montgomery, Bart., Chief Secretary to Government, Fort St. George, dated 5 March, 1851.

transformation was observed in both these directions. Between 1853-54 when the total mileage was 35, and 1858-9 when it had increased to 467, the total number of passengers carried by rail increased from 535,195 to 2,722,382 ; and the tonnage of goods from 23 to 195,431. Of the total number of passengers in the latter year 2,516,583 travelled third class, which makes a proportion of 16½ to 1 to the first and second classes put together. The impetus which the cotton trade received was also notable. In the old régime cotton of Nagpur and Amraoti was brought a distance of 500 miles to Mirzapur by Banjaras upon their oxen, each of which carried 160 lbs. and travelled about seven miles a day. The cost of conveyance was Rs.2–8 per bullock per 100 miles. If the rains fell, cotton became wet and heavy and this difficulty was enhanced by the unmetalled tracks being transformed into muddy ruts. Cotton was a valuable commodity and was largely in demand in England, and it will be recalled that the first lines were constructed by men interested in that trade. The railway eliminated the old obstacles, so that while in 1849 the United Kingdom imported 67 million pounds from India out of a total of 751 million pounds, in 1858 it imported 197 million pounds out of a total of 1,098 million pounds.[1] When transport was costly and risky there was little inducement to increase the growth of cotton, and acres of land well suited for it remained uncultivated. Indian cotton again only found a market in England when the American supply was deficient ; thus proving the need for cheap transport. With the advent of the railway Berar, Khandesh, Gujarat and Sind became more productive and India entered the markets of Europe as a rival of America for the supply of cotton.

A surging national trade followed in the wake of this improved mode of conveyance. In the inevitable period of retrospection that followed it was found, however, that the railway was proving a financial burden to the country, being worked at a loss, and the system upon which it was established came in for its share of criticism. As previously

[1] *Report to the Secretary of State for India in Council on Railways in India for the year* 1859. By Juland Danvers.

mentioned, the Court of Directors were in favour of a guarantee; while the Board of Control dissented from this view. Lord Dalhousie had looked at the subject in the same light as the Court and had recommended liberal terms to the companies both as regards time and money. Capital was not forthcoming in India, and the English investor, it was held, would not embark his capital on a scheme in a distant and little known country without the assurance of a definite return upon his outlay. It is possible that the State could have constructed the necessary railways and that it could have raised the money more cheaply than private companies,[1] but the policy enunciated for it was one of *laissez faire.* While private companies were invited and a guarantee given them, Lord Dalhousie was, however, cautious to impress that the amounts of money to be guaranteed should be based on sufficient data, that the cost of the works must be reasonable, and that the lines must be completed within a specific period. Moreover, he had the officers of the East India Company enjoined "to exact the utmost economy consistent with perfect security and efficiency" in construction.[2] Clearly, the possibility of carelessness and extravagance by the private agency was not ignored by the authorities when the system of guarantee was decided upon. Commenting upon the terms of the contract between the East India Company and the first two railway companies for the construction of two experimental lines in Bengal and Bombay, the Government of India wrote, "It was then urged upon us, that we should extend our guarantee so as to secure a dividend of five per cent. to the shareholders. To this proposal we could not assent, and chiefly on the ground, that had we done so, it would, so far as the amount of dividend was concerned, have removed all risk whatever from the shareholders, and, of course, destroyed to a great

[1] Juland Danvers in his testimony before the Select Committee on East India (Public Works) 1879, stated that the State could have raised the money more cheaply, para. 4,100. Sir Richard Strachey in reply to a question put to him by the Select Committee, 1884, gave as his opinion that the idea that the Government could not borrow the money was a 'delusion" "the probability is, in fact it is almost a certainty, that they could have borrowed the money on better terms than the Company."

[2] Minute, dated 20 April, 1853.

extent, the motives for that strict economy and energetic conduct of the affairs of the railway which would alone secure its success."[1]

With all this sense of circumspection in regard to the contracts with the railway companies, they were so defectively worded and drawn out that they militated against careful and efficient construction and management.[2] The guaranteed interest was payable, not upon expenditure incurred, but upon all the capital called up, so that the companies were relieved of all responsibility for the cost of construction, and any incentive to economy, save that supplied by the remote prospect of an eventual share of surplus profits in excess of the guaranteed interest. The greater the expenditure, the greater the capital called up; and this produced a rate of interest as high as five per cent. Government control proved ineffective what with the inexperience of the Consulting Engineers and the imperfect system of audit. The Government Director in England, who was armed with a veto, did not exercise his power either because it was not detailed enough or because he was afraid of friction with the Directors of the Companies. The shareholders of the Companies were too far removed from the scene of action to care to know anything about the details of construction or maintenance or operating expenses so long as they received their guaranteed dividend. The obvious consequence was that the first cost of construction exceeded the original estimates by a large margin,

[1] Financial Letter to India, No. 27, dated 14 November, 1849.

[2] William Thornton in his evidence before the Parliamentary Committee, 1872, gave expression to similar views on the subject of the contracts. "They contradict themselves," he said, "two or three times in the course of their several clauses, and they are seldom appealed to for the protection of Government interests without turning out to be practically worthless for the purpose . . . . This is the necessary result of the way in which they are drawn up that, a railway having been commenced on the understanding that a certain guarantee would be given by the Government whatever the railway might cost, the Government is practically bound to continue the guarantee of interest upon the expenditure. Therefore, of course, the undertakers of the railway, the Company, are deprived of one of the great inducements to economy; they know that whatever blunders they make, those blunders will not prevent their getting full current interest on their expenditure."

Paras. 1,856 and 1,857.

Infra. Chaps. IV and VI.

the companies failed to earn the guaranteed interest from their property, and the burden upon the State increased with every mile of railway.

Had the guarantee been earned, the system would have proved favourable and would have remained unimpeached. The system is not inherently unjustifiable, and it has been tried not without success elsewhere. Provision of a detailed right of supervision and the establishment of a suitable machinery for that purpose are, however, necessary for its success. The defect of the Indian guarantee was the absence of a limit to the sum that might be invested in the railways; so that construction of heavy lines was undertaken. The lines opened before 1870 built on the five feet six inch gauge cost between £17,000 and £30,000 a mile.[1] Interest on capital, and the cost of land and supervision coupled with the loss by exchange on capital transactions, began to accumulate fast. Lines which were commenced in 1848-9, did not begin to work until 1853-4, when their net receipts aggregated to Rs.77,695, while the Government paid Rs.8,69,858 as interest on capital, etc., to them, and incurred a further loss of Rs.3,78,785 by exchange. In 1860-1, the State had to pay to the companies a sum of a crore of rupees.[2]

The financial defects of the guarantee soon began to attract the attention of the Government. In 1858, Lord

[1] *Imperial Gazetteer*, Vol. III. p. 369.

Sir Arthur Cotton in a Paper read before the East India Association, 14 December, 1869, said "The highest cost of any line is 27½ millions for 1,280 miles, or adding 20 per cent for simple interest and land, 33 millions, which is £25,000 a mile." The Rt. Hon. William N. Massey told the Parliamentary Committee 1872, that the East Indian Railway had cost the exorbitant sum of £30,000 a mile.

[2] *Infra*. foot-note p. 28.

W. J. Thornton who was connected with the Indian Public Works Department, has a trenchant critique of the guarantee system. "The guarantee," he writes, "they finally resolved upon was practically unlimited. Under the contracts entered into by the companies which they called into existence, if the first estimate of a railway should subsequently prove insufficient, it might be doubled or trebled, little choice being reserved to Government but that of guaranteeing whatever amounts might successively be demanded for the completion of the undertaking, for any period, however protracted . . . If it had been desired to make the Railway Board extravagant, what more certain mode could have been adopted than that of securing to them the full current rate of interest on whatever they might expend?" *Indian Public Works*, 1875, p. 32.

Canning suggested that in future contracts, a thorough and critical estimate should be made of the whole line and the guarantee be paid on a defined gross sum and no more.[1] Sir J. P. Grant attacked the guarantee as "artificial and complicated," and wondered how it could have been adopted at all; for "objectionable as the working of the guarantee system may be in the eyes of many, that is nothing as compared to the financial objections, which nobody can dispute. The system, is, as I have said, raising money by a special public loan; but under conditions the most disadvantageous possible for the people who must be taxed for the payment."[2] In 1861, Mr. S. Laing, the Finance Member, roundly condemned it on the score that the management was non-resident and that the data as to first cost and probable traffic being uncertain, the companies looked almost exclusively to the guarantee; thus neutralizing all the advantages of private enterprise.[3]

Pronouncements such as these by persons in authority, did not fail to have an effect; and in 1860-1 the Secretary of State decided not to guarantee any new railway undertaking. The Oude Railway Company, which had already executed surveys with the approval of the Government, was ordered to postpone its works, and the amount expended thereupon was returned to it with interest. It must be understood that there was nothing to prevent the existing undertakings from constructing more lines with the assistance of the Government.

Two unguaranteed railway companies were then established; namely, the Indian Branch Railway Company, and the East Indian Tramway Company. These Companies undertook to construct certain branch lines off the East Indian and the Madras Railways respectively, without a guarantee, but a subsidy instead, the payment of which was contingent on the actual completion and maintenance of the line. Such kind of assistance was the beginning of a system which the Government intended to substitute for the much-

[1] *Vide* Note by Capt. E. C. S. Williams, R. E., on Extension of Railways in India, 16 July, 1867.
[2] *Ibid.*
[3] Minute, dated 1 April, 1861.

criticised guarantee. In both the cases Government provided nearly all the necessary land free of expense, and granted, among other concessions, £100 a mile per annum for twenty years.[1]

The Indian Branch Railway Company opened its first line for traffic on 21 December, 1863, from Nulhatee station to Azimgunje, a distance of twenty-seven miles; and the East Indian Tramway Company constructed a line from Arkonam to Conjeveram, a distance of 18¾ miles in 1864–6. These terms were not found attractive and they were consequently withdrawn. Nor did the two companies stand long on their legs; they had to be guaranteed; the first subsequently merging into the Oudh and Rohilkhand Railway Company, and the second into the Carnatic Railway Company.

The failure of unguaranteed railways, the increasing financial burden of the guarantee,[2] and yet the urgency of railway extension in the interests of the country, led to much heart-searching in the Government quarters for a solution out of the impasse. To add to the difficult financial condition of the country, there was at this period a general rise in prices and wages; while money was badly needed for improvements in every department of the administration. Matters took a still more unfavourable turn rendering the

[1] *Report on Railways in India for the year* 1863–4. By Juland Danvers

[2] The following figures show how the companies fell short of earning their guaranteed dividends, which had, therefore, to be made up by the State. Appendix No. 3. East India Railway Committee, 1920–1. (Cd. 1512).

Year	*Amount paid as guaranteed interest*	*Amount recovered from net receipts*	*Loss to the State*
	£	£	£
1858–59	838,411	232,365	606,046
1859–60	1,199,929	403,057	796,872
1860–61	1,485,745	389,413	1,096,332
1861–62	1,788,153	391,162	1,396,991
1862–63	2,166,755	625,615	1,541,140
1863–64	2,456,182	821,548	1,634,634
1864–65	2,683,787	1,129,851	1,553,936
1865–66	2,889,241	2,865,574	23,667
1866–67	3,031,087	2,347,085	684,002
1867–68	3,480,677	1,989,112	1,491,565
1868–69	3,881,013	2,229,509	1,651,504
1869–70	4,126,025	2,627,941	1,498,084

position of the Government still more embarrassing, when the land was visited by the severe Orissa famine of 1865–7, followed in rapid succession by the prolonged drought in the United Provinces and Rajputana in 1868–70. In this predicament it is not to be wondered that private enterprise and the guarantee system, which seemed to have been indissolubly connected, came in for their share of criticism. Private enterprise had hesitated to construct lines which were necessary for the development of the country without the inducement of a guarantee. The railways were again worked at a loss. This was telling seriously on the national exchequer, and no more lines were thus taken in hand. The endeavour to get companies interested in constructing railways on the terms of a free grant of land and a subsidy per mile had proved unfruitful. Nor, on the other hand, were the guaranteed companies willing to make alterations in their contracts necessary in the opinion of the Government to insure proper economy and control over their undertakings. The result was that in the previous decade the construction of lines averaged only 350 miles a year.[1] Many more were necessary to meet the growing needs of the people, and thus the direct agency of the State for their provision was contemplated.

The rôle of the State as an entrepreneur may either be to develop the country in view of the absence, apathy, or mismanagement of private enterprise, or it may be for political or military reasons. In the case of India all the factors must have weighed conjointly with the authorities. The paramount consideration was, however, the absence of economy of private enterprise at a time when the national finances were at a low ebb. The State, it was contended, could borrow money more cheaply, and construct and operate the lines as economically and efficiently as private joint-stock corporations. This subject was broached by Lord Lawrence (then Sir John Lawrence) in a proposal he made to the Secretary of State, Lord Northcote, in 1867. The latter, however, held other views on the matter. He conceded the

[1] Thornton writes that it took the guaranteed companies 20 years to make 5,300 miles of railway, an average of 265 miles annually. *Indian Public Works*, p. 33.

advantages of the State constructing political lines; but for commercial lines, he viewed that private enterprise on the guarantee terms was preferable. Again, in 1868, he expressed his opinion that "Railways are not likely to be made in India without the aid of a guarantee. The capital which has hitherto been invested has almost entirely come from England. It has gone to make probably the most profitable lines; and if even for these it could not be obtained without guarantee, it is unreasonable to suppose that it would be forthcoming for similar support for the less profitable." [1] This divergence of opinion prevented the steady pursuance of a definite policy, and the much-needed railway extension suffered a set-back.

In 1869, the Duke of Argyll was appointed Her Majesty's Secretary of State for India, while Lord Mayo succeeded Lord Lawrence as the Governor-General of India. Prior to his departure, Lord Lawrence, who was fortified in his conviction of the necessity of State agency for railways, had penned his famous minute.[2] He declared therein that he would not blindly embark upon an indefinite scheme of railway extension without bearing in mind the condition of national finance. Examining the guarantee system he pointed out that it admitted no set-off of profit against loss in the Government share of these transactions. "The whole profit goes to the companies, and the whole loss to the Government." To the plea that Government should not interfere with the investment of capital by private enterprise in large public works, he replied: "It is an abuse of language to describe, as an interference with private enterprise, what is only a refusal to support private speculators and to guarantee them from all possible loss by the credit of the State, or to allege that the investment of capital by private persons is hindered by the Government executing works, when private persons refuse to do so at their own risk." The history of guaranteed companies had shown, he added, "bad and extravagant" management. Cassandra-like, he condemned the policy of handing over

[1] Despatch No. 3 of 16 January, 1868.
[2] Dated 9 January, 1869.

commercial lines to private investors, keeping for the Government political lines. An important advantage claimed for the Companies was, that they could raise the money with greater facility than the State and could be relied upon to carry on the works vigorously without being swayed by the financial condition of the country. Lord Lawrence controverted this view. "After the last monetary crisis in England, the Government was obliged to lend money to several of the companies to admit of the necessary capital being provided; and the superior credit of the Government, and its powers of meeting difficulties of this description, were most strikingly exhibited." He considered all presumed financial advantages in the arrangement with the companies illusive.[1] Dwelling upon the enormous growth of the guaranteed capital, without any commensurate extension of the mileage of railways, and with a tendency to stationary traffic returns, he concluded that the moral to be derived therefrom was the same as "has been taught on a gigantic scale in England, namely, the urgent necessity for resisting the tendency to incur additional capital outlay, without creating clear additional paying power in return."

This was followed by a despatch to the Secretary of State from Lord Mayo's Government, based on that by Lord Lawrence and with an identical conclusion. They also insisted on the necessity of economy in construction and management of railways in a country so indigent as India.[2] In the first place they demanded "a far more rigid scrutiny" over the constant additions the companies had been making to the guaranteed capital; and argued that Government could undertake to construct railways themselves, and that a narrow gauge might prove more suitable to the needs of

[1] It is noteworthy that five of the members of the Indian Railway Committee, 1920–1, including the Chairman, arrive at a similar conclusion and particularly stress the fact that the Indian railway companies have peculiar characteristics of their own. They explain "Our conclusion is, in a word, that the guaranteed companies do not possess the essential attributes which belong to ordinary companies. To claim that, because ordinary companies possess the advantages of energy, enterprise, and so forth, therefore companies of the nature which we have described may be expected to possess these advantages, is to be misled by a mere name." —*Report of the Indian Railway Committee*, 1920–1 (Cd. 1512). § 216.

[2] No. 28. Dated 22 March, 1869.

the country. The guaranteed railways which had occupied the most profitable routes and had cost over £17,000 a mile, were earning on the average a bare three per cent. The progress of lines was again slow. The State, they computed, could build at the rate of 300 miles a year for £12,000 a mile. A cheap railway might mean provision of a greater mileage; while "an extravagantly constructed railway is a permanent financial failure," and hindered the provision of more lines. What the country wanted then was an extensive scheme of light lines with low speed and moderate charges.

The Secretary of State in reply agreed that conditions had so far altered as to entitle the Government "to secure the full benefit of the credit which it lends, and of the cheaper agencies which ought to be at its command."[1] The alteration in the views of the authorities in England in the direction of agreement with those of the Government of India was further observable in the Duke's financial statement. "Let the Government undertake the construction of lines," he said, "and you will have single authority and single management; and it will be contrary to the nature of things if you do not have a considerable reduction in the cost of Indian railways."[2]

Despite the drawbacks of the guaranteed companies, no appraisement of their work could be complete without at the same time considering the peculiar conditions under which they commenced working, and the value of their achievement. Theirs was the task of pioneers during a period of stress and strife, and they braved all the risks inherent in a new enterprise in an unknown land. Much of the material for construction had to be transported from England under difficult conditions—the Suez Canal was not yet constructed—first to a port in India and thence to the scene of operations. The Government did not have at its disposal an adequate engineering staff to undertake such huge public works. It is problematical if Government, in periods of financial stringency, would not have diverted

[1] Despatch dated 15 July, 1869.
[2] Railways (India) Financial Statement, 27 July, 1869

funds to more urgent needs, had the capital been raised as a Government loan. It is arguable whether a vacillating financial policy would have permitted the unobstructed construction by Government of a railway system of 6,000 miles during those sixteen seismic years. Their cost of construction was certainly enormous and part of it cannot bear close scrutiny; and yet there were extenuating circumstances. The originators in their enthusiasm may have reckoned the costs too low, and in their optimism under-rated the physical difficulties which the terrain presented. The Sonthal Rebellion and the Mutiny destroyed much railway property, and were responsible for wasting millions of money and augmenting the original cost. Again, Lord Dalhousie's desideratum of bringing private British enterprise into India was fulfilled; and it may be that the British shareholders began to evince a more intimate interest in the welfare of India. Good proceedeth out of evil; the Indian Government reaped valuable experience through their supervision and control over the companies; a spirit of criticism and emulation was stimulated and a feeling of self-reliance aroused, making state construction possible. Institutions are evolved to serve temporary needs of the society; with the inevitable modification in the zeitgeist, the institutions must also undergo a modification to minister to the newer needs of the society. But it is by the stepping stones of past experience, by the method of trial and elimination of error, that man improves his environment and institutions. In this light may we view the absolute guarantee system; it made state construction possible.

A new epoch dawned in the history of Indian railways when the State took upon itself responsibility for future construction and for raising the necessary money for that purpose. A tolerably complete net-work of main lines, traversing all parts of the country, and which would ultimately prove profitable was the goal laid before it. It was calculated that a further mileage of 10,000, over the existing 5,000 would provide the necessary link between the various parts of the land; and that 300 miles at a cost roughly of £12,000 each, could be opened every year; so that in thirty years, it was computed, the requirements of the country would be met without any perceptible strain on the national exchequer. The new lines proposed to be constructed were about twelve in number and were well-distributed.

In the meantime a step with far-reaching consequences had been taken by the Secretary of State in England. According to the contracts with the guaranteed railways Government had the power of purchasing their property after the first twenty-five years, and it was contemplated by the Government of India, that the G.I.P. would accordingly be taken over by them in 1874. In 1869, however, the Secretary of State entered into agreements with these companies by which in return for an equal division of the profits over the interest for the remainder of the lease, the State relinquished its right of purchasing them at the end of the first twenty-five years, and cancelled the arrears due to it by the companies for guaranteed interest. The Government of India, who were in daily touch with railway administrations, felt that they should have been informed even had they not been consulted, and possessing different views on this scheme, they despatched a note strongly protesting at a step which implied sacrifice of a great source of income, cancellation of an economical financial arrangement, and prolongation for an indefinite period of a heavy burden upon the tax-payer of India.[1] They wondered why such a concession should have been made to the companies at a time when the credit of the Government was good; the undertakings of the companies were approaching completion: their demand on the money market had almost ceased, and their stocks quoted at a considerable premium. They expressed their regret that their views concerning such a momentous subject should not have been invited.

The E.I. Railway Company declined the offer, but the G.I.P. and subsequently the B.B. and C.I. and the Madras Railway Companies accepted it, and thus the important right which was vested in the State to purchase these lines was waived for a further period of twenty-five years. "In thus losing the opportunity," wrote General Chesney, "of

[1] Note No. 80. Railways, 12 August, 1870.

reducing the high and now unnecessary rate of guaranteed interest of five per cent; an opportunity which will not recur until 1899 and 1907 respectively, a fault of omission was committed which it is difficult to extenuate."[1]

The Secretary of State in reply was inclined to be very sanguine about the future of the railways. "There would be nothing extraordinary" he wrote "in a country like India, with a traffic capable of indefinite expansion and where railway management is susceptible of such great improvement if the average of railway earnings should, seventy or eighty years hence, have advanced to the required percentage." While thus defending his action, he realized the awkwardness of his procedure and assured the Government of India that in future no such step shall be taken without a previous communication with them.[2] It may be stated, *en passant*, that in the predicament Government then were, saddled with the unprofitable railways, it might have given them financial relief had they had the profitable and unprofitable lines together, so that the profitable might not only have covered up the loss on the unprofitable ones, but might have bred more railways.[3]

The key-note to the history of railways in India is the instability of the country's finances, and this has made it incumbent upon the Government to pursue a policy of construction conformable to them. The Government have been charged with having no clear railway policy and thus of being responsible for the erratic and slow progress of the lines. The charge cannot very well be refuted so far as this century is concerned. For the second half of the last century, however, an appreciation of the financial condition of the country would go some way in mitigating it. While it is true that there was no settled policy in regard to the agency or construction or gauge of the railways, especially

[1] *Indian Polity*, p. 308.

[2] Note No. 82. Railways, dated 3 December, 1870.

[3] Apropos Sir George Chesney states "The heaviest charge on the account, however, arises from the high rate of interest still paid to the G.I.P., the B.B., and the Madras Railways"; and "the rupee being now worth only one half its value at the time when the capital raised was sent to India to make the railways, a return of nearly 10 per cent is now required to cover the guaranteed gold interest of 5 per cent." *Indian Polity*, p. 312–13.

after, 1881, it may be pleaded in defence, that until 1900, the railways were unprofitable and that consequently the railway policy was dependent upon extraneous considerations and vacillated with them.

Underlying the attitude of the Government which brought in the second era in railway history, there was the cogent consideration of economy. The guaranteed lines had involved heavy work and high expenditure, henceforth it was decided to extend the lines on "a narrow gauge track, laid on a substantial road and subway, with rails proportioned to the limited wheel loads of the improved engines now obtainable, and to the moderate speed required by the circumstances of the country." Again, the Government were convinced that they could raise loans more cheaply than private companies. After much deliberation the metre gauge was adopted for the State railways. The sum which the Government could appropriate annually was fixed at £2,000,000. Extraordinary works were to be constructed from borrowed money or from surplus balances. In 1874, Lord Salisbury laid down three rules for guidance. No works were to be constructed with loans, except those likely to prove remunerative by yielding in the shape of an annual income a sum equal to the interest on the money expended in their construction, including interest during construction; famine preventive works might be made out of the revenue of the year, but if that proved insufficient recourse might be had to borrowing; and all loans for public works should be raised in India, it being inexpedient to increase the home charges in England.

The limit of £2,000,000 fixed to annual expenditure, was found inconvenient, and in 1875 the sum was increased to £4,000,000. Extension of lines did not proceed quite satisfactorily, owing among other things, to considerable sums having been expended on the conversion, for strategic reasons, of the Indus Valley and Punjab Northern State Railways from the metre to the broad gauge. Reviewing the situation in 1879, the Select Committee on East India (Public Works) reported that "the expenditures upon railways and irrigation . . . though not remunerative in the aggregate, have, upon the whole, been beneficial to India, and although considerable sums have been wasted and certain profitless schemes undertaken the policy of continuing to borrow for productive public works, may within limits and restrictions hereinafter laid down, be continued."

The policy of State construction and management which was so enthusiastically initiated by the Government was energetically pushed on for a period of ten years. Private enterprise did not receive encouragement in any direction during this era. The greater part of the new extensions were made on the metre gauge, being mainly feeders or subsidiary lines. Broad or the standard gauge was, however, acknowledged as the best adapted for main traffic routes. The total mileage which was 4,771 in 1870, increased to 8,996 in 1880; while the capital outlay on open lines increased from £88,064,000 to £129,098,964.[1] Yet there were rifts in the lute. Between 1874 and 1879, the land was visited by that scourge of immemorial antiquity, famine, and it left in its destructive wake desolate homes, deserted fields and a general paralysis of the economic life of the country. A commission of investigation was appointed, who recommended that to safeguard the country from this oft-recurrent fury, 5,000 miles of railway was the least that should be constructed. Schemes for the extension of famine-protecting lines were then prepared, and would have been systematically accomplished had not another catastrophe befallen the country, necessitating the diversion of the State's resources and energy in a different channel. The Afghan War dealt the *coup-de-grâce* to the policy of pure State construction and management. Government finance was disorganized, and it was held that if the progress in railway extension was to continue, private enterprise and capital must be invited again, for reliance could no more be placed upon the Government to achieve that purpose.

In England a feeling of hostility towards State enterprise in India was again surging up. It is possible that there

[1] Reports on Railways in India. By Juland Danvers.

was a misreading of Indian conditions, which stood in sheer antithesis to those in England. It must not be ignored that in India, as to some extent in France, Germany and other European countries, the State has always worn a paternal garb, initiating important public works, engaging in trade and commerce, and generally taking a lead in industrial matters and encouraging private enterprise by help and advice. The old shibboleths of encouragement to private enterprise and the non-interference of the State in the construction and management of large public works were conjured up. It was contended that the Government had failed to carry out the programme of railway extension in India. The subject assumed a more practical aspect in 1877, when the question of the future arrangement with the East India Railway Company, whose lease was expiring in 1880, came up for consideration. The Government of India and Lord Salisbury, the Secretary of State, came to the decision that while on the one hand their right of purchase must not be allowed to lapse, the existing direction must, on the other, be allowed to continue.[1] It was decided thus to purchase the main and the branch lines and to retain the East India Railway Company as the managing authority of the property.[2]

This was the prelude to the reversal of the policy advocated by Lord Lawrence and initiated by Lord Mayo. In reply to a despatch from Lord Lytton's Government in June, 1880, the Secretary of State, Lord Hartington, struck the keynote to the impending policy. "In the case of railways," he wrote, "I do not doubt that Your Excellency will bear constantly in mind the importance, whenever possible, of ensuring their construction by private capital, either local or European."[3] That heretofore a guarantee was a *sine qua non* of private enterprise should not stifle attempts to encourage the raising of private capital through private agency, on the exclusive security of the success of the

[1] For these negotiations see G. Huddleston, *History of the East Indian Railway*, Chap. IX.

[2] *Report from the Select Committee on the East India Railway Bill*, 1879.

[3] Rai Saheb C. P. Tiwari, *Indian Railways*, p. 251.

undertaking. If it became apparent that this policy was not practicable, he suggested the adoption of a modified system of guarantee, so as to create among the subscribers a real interest in the efficient and economical administration of the venture. He also enunciated the line of policy to be followed with regard to expenditure upon productive public works. The sum to be borrowed yearly was limited to 2½ millions ; the question of constructing new railways was to be considered on commercial principles ; and, unless a line was likely to pay four per cent upon its outlay, within five years, it was not to be undertaken ; needless to say, a stipulation unwarranted by previous experience.

In the Financial Statement for the year 1881-2, we have the genesis of the new policy. Referring therein to the limit of £2,500,000 for yearly capital expenditure, Lord Cromer (then Sir Evelyn Baring) contended that it was transparently inadequate.[1] He did not, however, abandon hope of constructing railways with the rapidity which the needs of the country demanded. There were some lines which private capitalists might be induced to construct without aid from the Government, or with a minimum amount of help. He agreed that a railway was practically a monopoly, but on that score he would justify State supervision rather than State management. In favouring company management he was impelled by the same desire which had actuated Lord Dalhousie, of inculcating among the people a spirit of self-help and self-reliance. "I am not without hope," he declared, "that if an impulse can be given to railway construction by British enterprise, native capitalists will enter the field, either alone or in conjunction with Englishmen."[2]

Financial stress underlay the new policy which once more heralded the re-introduction of private enterprise for the extension of railways side by side with the State. The Afghan War had proved a great strain on the Indian finance, while the burden of the railways was yet substantial. In

[1] Reproduced in "*Indian Railways.*" *An Argument for a Government Monopoly in Preference to Private Enterprise,*" Calcutta, 1884.
[2] *Ibid.*

1878–9, which was an exceptional year, railways were responsible for a burden of Rs.2,36,00,000 upon the State, but it fell to Rs.20,50,000 in 1881–2. This did not permit of satisfactory progress in railway extension, and the delay was re-acting upon the trade of the country, both internal and external. British merchants were increasingly becoming interested in the country's supply of raw produce and its demand for British manufactures. While in the " forties they had urged a rapid construction of railways in India for developing cotton cultivation and trade, they now pressed for a greater mileage in the interests of the wheat trade, for which they saw prosperous potentialities. Wheat was working under the same handicap as cotton was thirty years before, namely, a slow, risky and costly method of conveyance, which laid a fairly heavy toll upon its prime cost, materially affecting its exchangeability and restricting the area under its cultivation. American competition at the time was powerful in that commodity and if the Indian product was to find a satisfactory market closer commercial relations between India and England were necessary. More wheat from India would enable England to be less dependent on America and at the same time would better the lot of the Indian rayat. A greater exchange of Indian cotton with English iron and cotton goods would also prove beneficial to both countries. " If English iron masters, instead of anxiously watching the probable requirements of America in excess of the ability of local iron-works to supply, were to turn their attention to the requirements of India, they would find there a field for the consumption of iron for railway purposes beyond their utmost sanguine expectation."[1]

The problem of the ways and means for railway extension was exercising the attention of the Government of India all this time. On the morrow of the series of famines, which revealed the urgency of a rapid net-work of lines in the country, a portion of the Famine Insurance Grant, which was created about this time, was made available under certain conditions for the construction of railways of a

[1] Indian Wheat *versus* American Protection, 1883.

productive or protective nature. In 1883, the financial situation was clearer, and it was thought advisable to appoint a Parliamentary Committee to investigate the whole railway problem and see if railway progress could not be accelerated. The Committee, after a diligent inquiry lasting for about five months, presented their report.[1] They recommended a rapid extension of railways in the interest of areas liable to famine as well as the trade and industries of the country. The greater the railway mileage the stronger the stimulus to the expansion and diversification of the economic activities of the people. Its indirect benefits they claimed, were experienced in an increase in the land revenue and the general amelioration of the economic condition of the masses.

The employment of the agency of private companies side by side with the State was urged. On the one hand, money could be raised more cheaply by the State, the construction and operation by the companies, on the other, did not involve any increase in the staff of the Public Works Department, and relieved the Government of a somewhat onerous charge; besides which, the emulation between private enterprise and the Government working tended to promote economy and efficiency.

The capital required, they suggested, might be raised in India, if possible, if otherwise, it might be raised in England. They however emphasized that extension of railways must not involve additional taxation upon the country.

These recommendations accorded with the policy enunciated by Lord Cromer and thus a great fillip was given to the construction of railways both by the State and private agency. As a matter of fact even before the appointment of the Committee, on the recommendations of the Famine Commission of 1880, a definite departure from the previous system had already been made. For instance, according to the arrangement made with the Southern Mahratta Railway Company, the property was owned by the Government, the Company having raised and deposited the capital with the

[1] *Report of the Select Committee (Parliamentary) on East Indian Railways*, 1884.

Government and receiving in its turn a guarantee of four per cent for the first seven years and three-and-a-half per cent thereafter. For working the line the Company was paid one-fourth of the net earning of the property.[1] The drawbacks of the arrangement were that the Government could not clear their interest until the Company had earned at least four per cent; and on the other hand the Company had the option of demanding their loan back at any time, say, after the first seven years during which they got a guarantee of four per cent.

Four companies were then started to undertake to construct and manage lines on the principle of private unaided enterprise as was set forth in the Financial Statement of Lord Cromer, 1881–2. These were the Nilgiri, the Delhi-Umballa-Kalka, the Bengal Central, and the Bengal and North Western Railways. This experiment, however, proved a failure; the first went into bankruptcy; the second and the third were in a bad way and on their request were given a guarantee; and the fourth was given a concession in the shape of a reduction in the Government's share of the surplus profits, and the Tirhut State Railway was leased to it.[2]

The attempt to persuade companies to take up lines without a guarantee or with a limited guarantee advocated by Lord Hartington and Lord Cromer thus had an unsuccessful termination. Subsequently, in 1885, the Indian Midland, and in 1887, the Bengal Nagpur, were undertaken on conditions similar to those of the Southern Mahratta, but with the difference that they were given a permanent guarantee of four per cent. and one fourth of the surplus profits in excess of all the interest charges. These three companies, unlike the old guaranteed companies, were only agents to work the property belonging to the Government, besides raising the money and constructing the lines. Their relations with the Government were thus different and generally the terms with them were more favourable

[1] Evidence of General Strachey before the Select Committee on the East India Railways, 1884, paras. 38, 39.

[2] *Imperial Gazetteer*, Vol. III. p. 370.

to the State. The State reserved the right to determine their contracts after approximately twenty-five years, or at subsequent intervals of ten years on repaying at par the capital provided by them. In the absence of any risk on their part, it is pure euphemism to call them "assisted companies." The State could have raised the money necessary for the construction of these lines had their powers of borrowing not been restricted by the Parliament.[1]

The policy of the Government has been to acquire these railways by purchasing them right off or paying them an annuity as provided in the contracts with them. In the case of the three early guaranteed companies, the G.I.P., the B.B. and C.I. and the Madras, Government postponed their purchase in order to secure half the share in their surplus profits.[2] The E.I. Railways Company in 1879 was paid off in the shape of an annuity, while at the same time it was allowed to defer a portion of it in the hands of the Government to be regarded as the capital of the new company. This arrangement was terminated in 1924, and the railway is now managed by the State. A similar action has been taken in regard to the G.I.P. Railways. The Eastern Bengal, the Oudh and Rohilkhand, and the Sind Punjab and Delhi were purchased and transferred to State management. The Bengal Central was also similarly purchased and incorporated with the E.B. The Madras and the Indian Midland were acquired, but left under the management of the G.I.P. and the S.M. Railways respectively with which their amalgamation was deemed advantageous. In the case of the S.I., the B.B. and C.I., the S.M., and the B.N. Railways the course adopted has been to arrange for the continuance of management after their purchase by the State, with 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

[1] Horace Bell, *Railway Policy in India*, p. 86.
[2] *Supra.*

capital, and modification in favour of the Government of the clause relating to the division of surplus profits.[1]

The financial embarrassment of the Government had not yet terminated, what with the falling value of the rupee, the fear of famine, which hovers over India like a veritable Sword of Damocles, and the fear of a Russian invasion, which necessitated the construction of costly defensive works on the North-West Frontier. The Indian Midland and the Bengal Nagpur were given sterling guarantees much against the will of the Government of India, who were of opinion that the financial situation could be considerably improved were gold guarantees offered no more. Speedy railway extension was, however, a crying need, and we therefore find the Government of India again suggesting to the Secretary of State the possibility of railway construction by themselves. The Secretary of State being averse to the suggestion, nothing further was done or heard in the matter.[2]

The strong disinclination of the Government of India to increase the sterling liabilities of the Secretary of State, which they knew by experience tended to depreciate the rupee, may help to explain the inauguration of the new policy of subsidy. In 1893, an offer of a subsidy for the encouragement of construction of feeder or branch lines was announced. A grant of free land was to be made to the branch line, and the main line was to provide the rolling stock and to work it for not more than fifty per cent. of its gross earnings, with a rebate or payment from the gross earnings of the traffic interchanged between the two lines so that the total profit of the branch line would yield a dividend of four per cent. Thus a subsidy in the shape of a rebate was substituted for the onerous guarantee.

These terms did not prove sufficiently attractive and in 1896 the branch line company was offered an alternative of an absolute guarantee of three per cent with a share of surplus profits, or a rebate to the full extent of the main line's earnings in supplement of their own, the total being limited to $3\frac{1}{2}$ per cent on the capital outlay. In course

[1] *Administration Report of Indian Railways for* 1914–15.
[2] Horace Bell, *Railway Policy in India*, p. 51.

of time even these terms were found to be unsatisfactory, and as a result of their criticism by Mr. T. Robertson in 1903, and the McKay Committee in 1907-8, the Government revised them in 1913. The main alterations made were that capital might be raised for the company partly under the guarantee and partly under the rebate terms, and the rebate permitted of an interest of five per cent per annum on the capital.

While the branch or light railways, started nearly thirty-two years ago, have served the needs of the country, and have put on the path of prosperity many a district where a heavy line would have proved uneconomical, the system upon which they are founded is defective and needs a remedy. They have aptly been called " a fifth wheel to the coach," for in some cases they necessitate a separate construction staff; and their Boards and their accounts are always separate.[1] This system does not lead either to harmony or economy and implies a retardation of a greater mileage. The McKay Committee, seventeen years ago, were impressed by the existence of the same evil; " As a rule a promoter requires rebate terms which will ensure a higher rate of interest than that at which money can be borrowed either by the Secretary of State or by the trunk line Company by which the branch will be constructed and worked; moreover, a considerable amount of money is spent on promotion and preliminary expenses, and a board of directors, a secretary, and an office staff and premises have to be paid for out of the revenues of the line, although the chief duties performed by the branch line company consist in receiving the earnings of the line from Government and distributing them to the shareholders. In a number of cases it has happened that branch lines have not fulfilled the expectations of their promoters, and the Government have been compelled either to grant improved terms or to take over the lines. We recommend that as far as possible the trunk lines should own, as well as construct and work, their branches." [2]

[1] *Report of the Acworth Committee* (Cd. 1512) para. 178.

[2] *Report of the McKay Committee* (Cd. 4111). para. 28. *Vide* also Rai Saheb C. P. Tiwari. *Indian Railways*, p. 365.

Again, these innumerable separate companies tend to form for themselves spheres of influence within which they are loath to construct new lines or permit any other railway company to do so without demanding often unreasonable financial concessions.

Conversant with these drawbacks, we must, however, not ignore the fact that the system has permitted of the construction of lines for which the Finance Department had declined to furnish capital and at a juncture when with the depreciating rupee the sterling liabilities of the Secretary of State were proving very burdensome and railway progress with loans from England had almost stopped. The system permitted of the raising of money for railway construction in the country and thus made local capital interested in these important national public works. The defects of the system lead us to the conclusion that amalgamation of these separate lines is highly desirable and that in future the main lines should be the agency for their construction as well as management. On the other hand acknowledging their utility it must be conceded that if the State is unable to provide the necessary funds private enterprise in this direction should be encouraged.[1] If the latter alternative be adopted it should be realized that the three-and-a-half per cent guarantee or the five per cent rebate terms have gone by the board and more attractive inducements should be held out.

The formation of spheres of influence is not an evil confined to branch line companies but one which must also be laid at the door of the main lines. It is a concrete symptom of the separatist tendencies of the private companies in opposition to the interests of the State which owns almost all the railways. This has resulted in obstruction or delay to many a useful line in India and the plea brought forward has been that the new line would steal its traffic and endanger its profits. This argument cannot hold much water, for the simple reason that while some traffic would be diverted to the new line, the latter by opening up an adjacent territory is likely to bring in more additional traffic to the

[1] *Report of the Acworth Committee* (Cd. 1512) para. 180

main line. It is thus found that it is easier to construct a feeder to a State line than to a privately managed line which is swayed by the paramount consideration of the effect of the step upon its profits. It is indefensible that it should be within the power of the main line to decide whether the country shall have feeder railways or not. The needs of the community must have a preponderant weight in this consideration, especially in view of the fact that these companies are guaranteed a minimum of profits by the State, which is also the owner of the major portion of their capital. In some European countries the sphere of influence of each railway is allotted by the State within which it can demand an extension by the railway concerned. And this is as it should be. Sir William Acworth thought it wrong policy to recognize spheres of influence, and considered that the central authority should have power to over-rule objections to new construction based on such grounds. He thought that a reasonable compensation might be allowed in some cases, but, broadly speaking, he considered that respect for spheres of influence should not be allowed to restrict railway development in a country like India, which could profitably construct and use a vastly larger railway system, and where the bulk of the railway capital belonged to the State.[1]

[1] *Minutes of Evidence, Acworth Committee*, Vol. III, para. 5458.

Speaking on this subject in the Imperial Legislative Council in March, 1912, Sir Vithaldas Thackersey declared that too much weight was attached by the Railway Board to vested interests in withholding sanction for new lines when such lines were likely to divert some portion of the traffic of any existing line. Referring to the objections of the main lines he asked if the interests of the commercial and trading community which would be immensely benefited by a shorter route, ought not to be considered? Ninety-five per cent of the shareholders, he urged, ought to have a controlling voice when it was a question of the economic development of the country. *Proceedings of the Imperial Legislative Council*, 1912.

In the same strain did Sir Ibrahim Rahimtoola attack the policy of the Government in holding sacrosanct the sphere of influence of the railways. "The Bombay Chamber of Commerce had to press for, I think, nearly 17 years before they succeeded in obtaining sanction for the Nagda-Muttra line, and now for the last few years they have been pressing without avail for the construction of the Muttra-Aligarh section." Government had not sanctioned it because in their opinion it would be "An invasion upon the sphere of influence of the E. I. Railway. Now, Sir, I venture to ask," continued he, "What has that got to do with the development of trade and the natural outlet of produce? Can there be any justification for talking about the sphere of influence of particular railways belonging to the Government . . . ?" *Proceedings of the Imperial Legislative Council*, 23 March, 1915.

CHAPTER II

PROBLEMS OF ORGANIZATION AND FINANCE

THE organization of railway control has existed from the very commencement, though since then it has undergone many changes with the increase in railway mileage and the peculiar needs of the time. The early contracts with the Company lines were not of a nature to create harmony of interest with the Government and consequently a system of supervision and control had to be introduced. In the early days, communication was a subject within the jurisdiction of the Military Board, and it was only later when the subject assumed a more diversified character that a Public Works Secretariat was instituted, which still remained military in character until 1866, when it was made civil.[1] From that late the Government of India turned their attention towards decentralizing railway control, and their first step in this direction took the shape of the appointment of several local Consulting Engineers. The growing complexity of business soon made the Government realize that they must have some central authority to which to delegate their powers of controlling details. Thereupon, Consulting Engineers directly under the Central Government, were appointed. The Presidencies of Madras and Bombay were allowed to appoint local Consulting Engineers in consideration of their importance. This centripetal tendency further resulted in the appointment of a Director of State Railways in 1874, followed by a single Director General of Railways exercising powers both over the State and the Company lines. In the Secretariat the Director's position was that of the Deputy Secretary for Railways. In 1896 the Civil Works and the Railway branches were separated in the

[1] *Imperial Gazetteer*, Vol. IV., p. 311.

Public Works Secretariat, though it was still retained as the instrument of the Central control over the railways.

This machinery combined the advantages of general supervision with intimate local knowledge. The Public Works Minister had direct access to the Viceroy whom he met once a week, when he discussed with him matters of important policy. Under him were a Secretary in the Railway Branch and other officers. At the headquarters of each railway there were the Consulting Engineers, who were in constant touch with the company's officials and thus kept the Secretary well-informed about the important matters connected with the Company's management.[1]

Though periodically modified, this machinery had not kept pace with the growing complexity of railway affairs and its defects thus became patent. The control of the Government Consulting Engineers and their deputies, and the Government Examiners of Accounts, in all matters connected with the administration of the railways, was found to be very extensive and reaching into the most trivial matters. It was held by Mr. Thomas Robertson, Special Commissioner for Indian Railways, 1903, that the revised contracts with most of the railway companies had brought about a state of affairs when the interests of the Government and of the companies were no longer in conflict, and that, therefore, the system of control then exercised through the Consulting Engineers "could only result in hampering development and retarding progress."[2] If the railways of India, he added, were to be raised to and maintained at the standard of usefulness at which they could and should attain, the control of the railways should be entrusted to a small board of specially qualified railwaymen, who, free from unnecessary trammels, should be allowed to conduct the railways on purely commercial principles.[3]

Pursuant to these recommendations, the Government

[1] *Report of the Acworth Committee* (Cd. 1512) Vol. IV. Statement No. 5.
[2] *Report on the Administration and Working of Indian Railways* by Thomas Robertson, C.V.O., Special Commissioner for Indian Railways (Cd. 1713) 1903, paras. 36–42.
[3] *Ibid*, para. 53.

of India abolished the Railway Branch of the Secretariat in 1905, and appointed a Board in its place consisting of a chairman and two members. All the detailed administrative duties were delegated to the Board, the Government retaining with them the power of decision with regard to the railway programme and railway policy. The Board was placed under the newly-created Department of Commerce and Industry and was thus separated from the Public Works Department which remained in the charge of the Member for Revenue and Agriculture.

In actual practice, the state of affairs did not show much improvement. The Government of India still frequently interfered with the independent exercise of power by the Board, so that it was not able to dispose of its work with either greater expedition or efficiency than the institution it had superseded. The McKay Committee investigated the situation and recommended, *inter alia*, that the Government should allow a free hand to the Board in technical and detailed matters, and that in matters of importance, the Board's opinions should be treated with special consideration. They further suggested that the Chairman of the Board should have the right of access to the Viceroy and should attend the Council when required to do so by the Government, and that, it being desirable that the power of the Board should be concentrated in one man, the Chairman should be called the President and vested with the power of over-riding his colleagues.[1] This was subsequently found to be an obstacle to facile working and in 1914 the President of the Board was divested of this power.

In explaining the necessity of the Board, Lord Curzon had stated that " the central idea of a Railway Board was that there should be a body of practical business men entrusted with full authority to manage the railways of India on commercial principles, and freed from all non-essential restrictions or needlessly inelastic rules." This hope, in spite of the modifications made in the Board was, however, never realized. It lacked the status which the financial and commercial importance of the railways

[1] *Report of the McKay Committee.* 1908. (Cd. 4111) para. 33.

warranted,[1] while from the very nature of its personnel it failed to justify its *raison d'être*. Its defects were the reverse of those which had discredited the preceding system. The control exercised by the Consulting Engineers over the railway administrations was of too meticulous and hide-bound a nature; they were not always sufficiently experienced, and consequently—so at least, the railway companies contended—much prominence was given by them to the views of the local Governments. On the other hand, the Consulting Engineers kept the Railway Department sympathetically and faithfully informed about "the needs, aspirations and tendencies of local Governments in regard to railway communications and to the commercial and technical aspects of the operations of each individual railway and their effect upon railway policy and operations at large."[2] With the establishment of the Board, the former well-diversified organization suddenly converged in the person of three isolated men, who, loaded as they were with multifarious functions, failed to give the spirited lead to the railway policy that was necessary. Its proper function was to shape policy, to watch, to think, and to plan, but this it ignored, and frittered away its energy in looking after clerical routine work. That it was overstrained with its duties, cannot be gainsaid. It was responsible for the detailed control and management of the three State railways; it had to exercise the powers of the Governor-General in Council under the Railway Act IX of 1890; it represented the Government of India as owner of the company-managed railways and finally advised the Government in respect of the general railway policy. Its numerical strength was inadequate to cope with such extensive and varied business, while the absence upon it of a member interested in traffic turned it into a ponderous, slow and impersonal machine with no eyes and ears for public needs and grievances.[3]

[1] Of the total revenue of 69½ crores contributed by ten principal heads to the Central Government in 1920–1, the share of the railways was 27¼ crores. The outstanding railway borrowings amount to 366 crores or 65 per cent of the total public debt.

[2] Written statement of the Chairman, Barsi Light Railway Company, *Minutes of Evidence, Acworth Committee*, Vol. IV.

[3] *Infra*, chap. VI.

The Board suffered from want of touch which could only be remedied by frequent tours in the different localities. And it was precisely this that its members were not able to do. To add to its sins it was powerless. The interfering hand of the Secretary of State was observable in the decision of details. Moreover, the representation of such important interests in the Executive Council by a man who was incidentally interested in the railways and who could give the subject no more than a modicum of his time and attention, did not and could not conduce to the successful administration of the Department.

The spirit of inertia and helplessness which pervaded the Railway Department was brought to the notice of the Acworth Committee by various witnesses. "We are told" state the Committee "that letters were left unanswered, that decisions were delayed indefinitely, that when charges against the companies were made, the Board referred them to the companies themselves and then washed their hands of the matter; that applications to the Board for redress of grievances had been proved to be fruitless and so had ceased to be made."[1]

Equally important was the failure of the Board to formulate a steady policy of railway construction; while in the consideration of the lines constructed under its régime future development was lost sight of. While 1,200 miles of new lines were constructed, for instance, in the Madras Presidency in the fourteen years previous to the establishment of the Board, only 535 miles were opened during its administration, and out of that 200 miles were in course of construction when it was formed, and 142 miles were constructed by district boards or by other agency.[2] When it is acknowledged on every side that the crying need of the country is for more and improved means of communication, this charge was serious and revealed unsatisfactory administration on the part of the Board.

The Acworth Committee, after a detailed review and criticism of the Board's functions and status, came to the

[1] *Report of the Acworth Committee* (Cd 1512) 1920–1, Vol. I. para. 110.

[2] Memorandum of the Government of Madras laid before the Acworth Committee, Statement No. 34. Vol. IV.

conclusion that a Member of Council in constant touch with railway affairs was needed, and that he should further have Ports, Inland Navigation, Road Transport and Posts and Telegraphs within his portfolio. He should be the chairman of the Indian Railway Commission, consisting of a Chief Commissioner, assisted by a Financial Commissioner and three territorial Railway Commissioners. Furthermore, they expressed the opinion that the Railway Department ought to have more uninterfered responsibility for its internal administration both from the Secretary of State and the Government of India, while in its turn it should leave greater discretionary authority with the local railway administrations in their daily routine business.[1]

Although a special Member in charge of railways has not been appointed, nor a Railway Commission established, the Railway Board has undergone a reorganization. A Chief Commissioner has already been appointed who takes the place of the President of the Railway Board and is solely responsible for arriving at decisions on technical matters, and is the adviser of the Government on railway policy. The appointment of the Financial Commissioner was also considered of special urgency and it was, therefore, made in 1923.[2] The new Board has been so designed as to fit the department for the work of administering the railways as a commercial concern, and is based on the principle of imparting to it such a measure of independence in its management of railway problems as is compatible with its position as a department of the Government.

Reference has been made to the perennial difficulty in India of finding ways and means for the adequate extension of railways. In 1900 there was in the country a mile of railway for every 82.36 square miles of territory, and for every 12,231 inhabitants. So that as far as railways per square mile were concerned, India was worse served than most countries in Europe. Mr. Robertson, who investigated this problem concluded that more construction was necessary to endow the railless tracts with a more suitable means

[1] *The Report of the Acworth Committee* (Cd. 1512), paras. 126–8.
[2] *Administration Report of Indian Railways*, 1922–3.

of communication. At the end of 1906, the length of railways open, without double track or sidings, was 29,097. In addition there were 3,283 miles of new lines under construction. This mileage was insufficient to deal satisfactorily with the traffic. The McKay Committee recommended therefore, that the allotments for railway construction and equipment should be increased beyond those of previous years. India required a mileage of 100,000 in the near future. To that end they fixed the annual expenditure at £12,500,000, equal to £100,000,000 in the next eight years. They suggested that the Government would be well-advised to take advantage of periods of easy money and to raise funds in excess of immediate requirements.[1] The standard proposed by them was, however, only once attained in the next eight years, and the total expenditure during this period reached 78 millions instead of 100 millions.

The war accentuated this irregularity and things went from bad to worse. The Acworth Committee, which inquired into the administration of Indian railways in 1920-1, found a state of affairs which convinced them of the need of overhauling the railway machinery on its administrative, but more especially on its financial side. The then existing financial system did not permit of proper provision of facilities or of rolling stock for the railways. In every direction and from all sections of the public there were complaints of the inability of the railways to cope with the traffic.[2] The situation was not quite new; it was markedly noticeable in the pre-war days, though the war must have enhanced the existing difficulties of the situation. Traffic restrictions were imposed on all the principal railways and the exasperated witnesses before the Acworth Committee testified to the loss the trade of the country was suffering therefrom. The manufacturers and merchants fixed their attention naturally upon the shortage of wagons and blamed the railway companies and the Railway Board. But while a more definite policy and

[1] *Report of the Committee on Indian Finance and Administration* (Cd. 4111) 1908.

[2] Cf. *The Report of the Indian Fiscal Commission*, 1922 (Cdm. 1764) § 130.

greater co-operation would have eased the situation, the root of the evil was deeper and underlay the financial system. With its irregular allotments, its programmes and its system of lapse, the whole financial machinery was equally rigid and unbusinesslike. It assumed that the concern went out of business on each March 31, and recommenced *de novo* on April 1 following. Under the programme the Railway Department was annually allotted a sum of money determined by the state of the treasury, the money market, and the prevailing condition of the country. The system had been current for a long time, and had been endorsed by the McKay Committee. That is surprising, for its drawbacks were glaring. The crux of the situation was the dependence of the railway finance upon the general finances of the Government of India. The railway revenues were applied by the Finance Member to the relief of other departments instead of being applied to the requirements of the railways. In 1919, for instance, the railways contributed four crores of rupees to the general purposes of the Government after they had paid their own working expenses, full interest on all debt outstanding on their account, and a further sum of about one crore per annum in redemption of the principal.[1]

The result was that sufficient grants for capital expenditure on development and extension, and even for the ordinary functions of renewals and repairs, were not made. In their work of regular improvements, the railways were handicapped by their allotments being made according to the condition of other departments. Again, funds were allotted, it was complained, on the personality of the Agent rather than on the need of the line. To add to this primary irregularity, funds were curtailed or largely augmented during the course of the financial year, creating an uncertainty which endangered commercial success, and resulted in waste of public money.

Nor was the control unimpeachable from the point of view of financial orthodoxy. Although the railways have

[1] *Report of the Acworth Committee*, 1920–1 (Cd. 1512) Vol. I. para. 59. *Infra*. chap. iv.

been profitable since the beginning of this century, the ordinary commercial principle of debiting revenue with its full share was not observed. There was no replacement reserve. During the war when materials were not available the Government spent the money away which should have gone to form a reserve fund to be drawn upon when stores were again available. "At a very moderate estimate £12,000,000 should have been available in a depreciation fund at the close of 1921, all accumulated during the preceding five years." [1]

Until the beginning of the present century, the Government had to make up the interest on the railway capital out of taxation, but since then railways have not only been paying their expenses but have contributed considerable sums to the public exchequer. For the last forty-five years the net earnings of the railway capital has been over four per cent, while the result of the last twenty-five years shows that this figure has gone up to five or six per cent and even more.[2] Considering that the Government have been paying three-and-three-quarters per cent upon this money it is difficult to comprehend why they should have hesitated to borrow money for a concern commercially sound and yet so essential for the country's development.

If the depreciation of such a valuable public property was to be prevented, it was clear that two reforms were badly needed, namely, a complete separation of the railway budget from the general budget of the country; and the emancipation of the railway management from the control of the Finance Department. We have seen that the system of railway finance was not pursued on the lines of accredited commercial methods, and it was necessary that maintenance and renewals must be properly financed, and that with a view to fixing hypothetical standards in advance a definite scheme of finance was hatched apart from other Government considerations. The control of the Finance Department over the Railway Budget was not salutary and could not be

[1] W. T. Stephenson, *Communications*, p. 98. It may be observed that the Legislative Assembly has decided to expend a sum of Rs. 150 crores upon the rehabilitation of railways for five years from 1922–3.

[2] *Report of the Acworth Committee*, Vol. II. para. 170.

so under the then existing system. Pressed for money from all sides, it attempted to reduce grants to the minimum, overlooking in this process the commercial character of the railway. It had no practical knowledge of commercial business or of railway operation and it ignored the ways by which a solvent concern could raise money. It is noteworthy that Mr. Robertson found the same situation in 1903. "The great railway undertakings in India" he wrote "are reduced more or less to the same level as other departments of Government and are not administered as large commercial concerns on the lines on which such undertakings can only be really successfully worked." The crux of the fallacy was the lack of differentiation between the functions of the Government as guardian of the state finances and the functions of the Government as a commercial entrepreneur. It is the fundamental duty of the Finance Minister to be cautious in meeting the claims for grants, for a greater demand from a non-revenue department can only be met ultimately by taxation. But the case of the railway was different; it was productive of revenue and consequently, in meeting its requirement, no taxation would have been involved. Its self-sufficiency was also a strong argument for raising money on its net profits. The separation of the railway budget was thus a much-needed, as well as a practicable proposition.

Another desideratum was that when once the Railway Department had met its liability to its creditors it alone must have the power of disposing of its balance either for new extensions, or to form a reserve fund, or to use it to reduce rates and fares, or improve the service. It was essential that the development of railways be made dependent on the earning power of this valuable property rather than on the unappreciative liberality of the Finance Department.

These ideas have transcended the stage of academical discussion and are now placed in the sphere of practical railway politics as the result of an Act passed in 1924, separating the railway budget from the general finances of the country. The Act marks a veritable epoch in the history of Indian Railways, sundering as it does a Gordian Knot which had continuously impeded railway progress. It involves a recognition that progressive development demands that railways be segregated from the mælstrom of democratic politics, and a realization, belated though it be, that the loss incurred on the strategic lines should be borne not by the railway revenues, but by the army or the general revenues. Military lines must be viewed in the same light as military fortifications, but hitherto the loss upon them was allowed to weigh down commercial railways with the result that the prosperity of the commercial lines was unduly discounted and the development of the railways hindered.

The Act provides for a definite annual contribution from the net receipts of railways to be made to the general revenues, and for a railway reserve fund which shall be utilized for the improvement of the service and for reduction of the charges therefor.

CHAPTER III

THE THEORY OF RAILWAY RATES

THE railway is one of the most essential industries in the economic life of a nation and by far its most powerful instrument of social progress. Transportation, and the railway is its most effective means on land, aims at diminishing the physical and geographical obstacles in the country. It permits of a greater division of labour and thus promotes the concentration and localization of industries in specially adapted areas. Bombay, for instance, needs coal for its cotton mills, but possessing none, it has to obtain it from Bengal. Bengal, on the other hand needs cotton clothing for its people, and since it does not manufacture it sufficiently it has to import some from Bombay. The railway thus fosters an exchange of commodities and thereby permits of a national and international division of labour. Were the facilities of railway conveyance absent, each locality would practically have to be self-sufficing, there would be little or no exchange of territorial products and the national wealth in consequence would remain unexchanged and undeveloped. Coal has existed in many districts of India, but until the advent of the railway which made quick and cheap transport possible, it was not mined to any great extent, and that rich mineral remained undeveloped for ages.

Conveyance, before the era of the railway, was costly, tiresome and unsafe for passengers, and expensive, slow and risky for goods. The number of passengers who travelled or the amount of freight carried was, therefore, insignificant. To-day enormous numbers of passengers and quantities of goods are carried swiftly, cheaply and safely across continents; distant markets are linked together; every locality has scope for specialization, confident of finding markets for its products and of having its wants supplied by other markets; and the luxuries of yesterday have become the necessities of to-day and are within the means of the average man.

While the railway has much in common with other industries, it has this peculiarity that it does not sell the merchandise it conveys, but merely sells its service, which is transportation. In selling its service it is motivated, like all commercial business, by the idea of making profits. Now the price of its service enters into the cost price of every commodity it carries, and this brings into prominence its national character. The miner and the mineowner, the agricultural labourer and the farmer, the factory worker and the capitalist, the retail and the wholesale merchant, everybody engaged in an industrial or commerical vocation, nay, in fact, every individual as producer or consumer, is vitally interested in the charge which this industry levies. Railway is thus the woof around which is woven our social and economic life. Verily did Bacon measure the importance of a good means of transportation when he said: "There be three things which make a nation great and prosperous, a fertile soil, busy workshops and easy conveyance of men and commodities from one place to another."

If the charges of railway service affect every hearth and home, it behoves us to examine their basic principles. Preliminary to this examination, we must comprehend the nature of two of the chief characteristics of a railway, namely, the law of increasing returns and the principle of joint costs.

As with every large scale industry, capital on a liberal scale must be provided before any appreciable earnings can be expected from a railway undertaking. Land must be acquired, road-bed made, rails laid, buildings erected, rolling-stock purchased, staff hired, in short, much capital sunk. The output or the gross receipt of this is, however, very small, in fact, one-fifth or one-tenth of the total capital invested. This is an annual turn-over much smaller than in ordinary manufacturing concerns, and marks the railway out as above all an industry of a large, fixed investment.

This point as well as the fundamentals of the theory of charging rates, is well explained by a glance at the expenses of a railway and their relation to the amount of traffic. The subject is complicated and conditions may vary so much between different times and places that it would be hazardous to lay down any definite rules. The expenses of a railway may primarily be divided into capital charges and operating charges. The proportion of the former to the latter may roughly be placed at thirty per cent to seventy per cent. Capital charges, like interest on debt, rentals, taxes and contributions to the sinking fund, have to be incurred whether there be large or little traffic, or, in other words, they are independent of the volume of traffic upon the line. Operating charges, like maintenance of way, works and stations, locomotive expenses, carriage and wagon expenses, traffic expenses and general expenses, are generally half variable with the amount of traffic and half invariable. On the whole, therefore, approximately two-thirds of the railway expenditure are constant and only one-third varies with the volume of traffic.[1]

The preponderant proportion of constant costs in the expenditure of a railway brings out clearly into relief the fact that the industry obeys the law of increasing returns or diminishing costs. This feature may be condensed in the following formula, if it costs x to deal with 1,000,000 units of traffic, 5,000,000 units, with a constant track mileage, will not mean a fivefold expenditure 5x, but something less, viz. : $\frac{1}{2}x + (\frac{1}{2}x \times 5) = 3x$.[2] It implies that until the stage of congestion or saturation is reached the railway possesses a plant which is not used to its full capacity, so that when later the volume of traffic expands, it is able to carry the denser traffic at a proportionately less cost. Or, as Sax explains, the railway is so peculiarly circumstanced that with a given degree of intensity of traffic, the cost elements require a certain minimum outlay,

[1] Ripley W. Z., *Railroads : Rates and Regulations*, pp. 55,56.
The distinction between constant and variable expenditures is important because the principle of classification is the first corollary from it.

[2] Sir W. M. Acworth and W. T. Stephenson, *The Elements of Railway Economics*, p. 55.

from which point the cost does not grow in exact proportion to the traffic but lags behind the latter.[1]

This has a special significance for the traffic manager. When traffic is scanty and the constant overhead expenses heavy on his line, he has an incentive to offer lower than ordinary rates to attract more traffic. He realizes that the constant costs go on whether a train be fully loaded or half.[2] To run it as fully loaded as possible is profitable, for every addition in the paying load largely decreases the cost of operation per ton. To attract more traffic and thus utilize more fully the unused or excess capacity of the plant, he offers specially low rates which cover the special expenses and contribute a sum, however small, towards the constant expenses. This is the genesis of exceptional or discriminative rates.

Besides the fuller utilization of the existing plant, the replacement of a less efficient by a more efficient plant also brings into play the law of increasing returns.

An equally important, yet a more controversial feature of the railway is that the expenses of its service are incurred jointly. Railway is not unlike certain other industries in which, with the same outlay, the production of one commodity inevitably results in the production of another. The classical economists had noticed this phenomenon in the case of wool and mutton, coal and coke, or beef, hide and tallow.[3] This principle has been refined, elaborated and applied to ordinary industrial undertakings by Marshall,[4] while its bearing upon the railway has been skilfully exposed by Taussig.[5] Pigou has brought interesting light to bear on the subject by arguing that the service of transportation is homogeneous and, therefore, cannot be performed at joint

[1] E. Sax, *Die Verkehrsmittel in Volks—und Staatswirtschaft.*

[2] The frictional resistance of an empty car is double that of a loaded car, weight for weight; and hence the carriage of the former is proportionately more expensive than that of the latter.

[3] Mill, *Principles*, Bk. III. Chap. xvi. S. 1. The physical joint production discussed by Mill does not obviously apply on the railway. The peculiarity of the railway is that its products are not physically inevitable and hence they can be varied according to need. Again, every joint product of the railway has some special expenses incurred for it alone.

[4] Marshall, *Principles* p. 388–90; *Industry and Trade*, p. 192–3.

[5] Taussig, *Principles* Vol. II. p. 395–9; A contribution to the Theory of Railway Rates, *Quarterly Journal of Economics*, 1891.

costs.[1] The railway installation, expensive and with a large sunk capital is devoted to the carriage of heterogeneous merchandise and differently graded passengers, and consequently the cost of moving each article or passenger is impossible of calculation. While there may appear some uniformity in the passenger service, in spite of the different classes in which they are conveyed, this is not true of the freight service. That there may be a few trains carrying a homogeneous article like coal or iron ore does not vitiate our argument. Generally, a freight train carries a medley of commodities like sesamum oil and silks, books and betel leaves, tables and tiles, etc. A few of these may be in car loads, but the others, varying in value, bulk, weight and method of packing, may probably be stowed in the same wagon and be hauled by the same locomotive on the same track and worked by the same men. Further, the rails, the bridges, the tunnels, the signals and the administrative staff which are used for the conveyance of passenger traffic, equally serve the purpose of the freight traffic. In brief, the entire railway plant is used to perform a multitude of dissimilar services and it is, therefore, impossible to calculate what portion of the total outlay should be charged to any particular passenger or consignment. In fixing rates, while the ideal plan would undoubtedly be to charge each passenger or commodity with his or its proper share of common or overhead expenses, under our ordinary system of accounting, this is incalculable. If individual costs are difficult of assignment, they cannot be used as the basis of railway rates.[2]

So far, the two salient features of railway as an industry have been discussed, but before grappling with the theories of rates, it would be profitable to revert to the discussion of the

[1] Pigou, *Wealth and Welfare*, Chap. xiii.

[2] Apropos this Sir George Gibb explains, "A railway is worked as a whole, and though many items can be separated in the accounts, and allocated to particular services, the residue, which no knowledge and no ingenuity can allocate, is so large that the result must always be a very distant and doubtful approximation to the real fact."—*Introduction to British Railway Position.*

Certain items of expenditure like loading and unloading are separable and calculable, but above these there are the large items of joint expenditure.

railway costs and pursue it farther to its logical conclusion. It was observed that of the total railway expenses, two-thirds are generally constant and invariable and one-third varies with the volume of traffic on the line. Again that, on this supposition the traffic manager was justified in charging specially low rates to attract more traffic on the line, provided they covered the out-of-pocket expenses and left something to cover the general expenses, although they did not contribute their full share towards the fixed charges.[1] On the supposition that the plant was not used to its full capacity, the traffic manager would be perfectly justified. He would use the argument that if he did not take the new traffic there would be a loss ; if he did, the loss there certainly would be, but it would be less. His position would be unassailable if in the event of two losses he preferred the smaller one.

The fundamental assumptions underlying this theory and practice are the existence of considerable constant expenses and an unused capacity in the plant. But it is possible to conceive of a situation when these fundamental assumptions lose their force and validity. In our previous consideration of the expenses of a railway, we viewed them for a limited

[1] This point is so important and the practice so frequent that it were best to illustrate it by a concrete instance. Supposing the normal profitable rate for a certain commodity is a rupee per maund and that it cannot bear a rate higher than 6 annas. Should the traffic manager take it or not ? It would seem prima facie that he should not carry it since the average charge of carriage is a rupee and the commodity in question can bear a rate no higher than 6 annas. Were it carried the railway would lose 10 annas ; and in view of the fact that a railway is not an eleemosynary institution, it would attempt to recoup the loss by charging higher in another direction. But arguing on the principle of joint costs, the traffic manager may decide to carry it even at 6 annas. He may roughly calculate that of the average rate of a rupee 5 annas cover the moving charges, 5 annas cover the fixed operating charges, and 6 annas cover the capital charges. He would much prefer to carry one article which covered all the charges. But in the present case, if the article is to be carried no more than 6 annas can be expected. The traffic manager under this predicament may reason out that this sum would cover the charge for actual movement and leave an anna for the fixed operating costs. There would be nothing left for the capital charges. But in accordance with the principle of joint costs, the constant expenses go on whether the traffic be great or small. He would then justify his action by arguing that the sum received would contribute full movement expenses, something towards fixed operating expenses, besides it would mean a better utilisation of the rolling stock, and finally, it might prevent a rival carrier from taking it.

period. But the large problems of the railway relate to long periods.

Let us suppose that a traffic manager, seeing that his line is hungering for traffic, offers low rates which attract more traffic, and this necessitates the addition of a wagon to his train. He argues precisely as in the aforementioned case, that since the constant costs go on whether the additional wagon were carried or not, it would be profitable to carry it provided it paid its variable expenses. In a way his decision would again be unimpeachable. But supposing he added three or four or five wagons on the same consideration until the tractive limit of the locomotive were reached. At this stage the potential capacity of the locomotive would be in full play, and the law of increasing returns would cease to work. Thereafter a new locomotive would perforce have to be provided, which, in the beginning, would only carry, say, three wagons. Is the expenditure of the new locomotive chargeable to these three wagons only ? Not, if we take a long-sighted view of the matter. All the wagons, in fact, which gradually overtaxed the capacity of the first locomotive and thus made the use of the second inevitable, must be held accountable for the new expenditure. All the tonnage in the wagons which were carried by the first locomotive after its hauling capacity was reached, must share the burden of the new locomotive. Thus, a gradual increase in traffic will lead to a further expenditure in the shape either of a new locomotive, or more spacious wagons, or heavier rails, or stronger bridges, or wider tunnels, which would all imply a growth in overhead costs. In other words, the constant expenses do vary, only they do so in a spasmodic manner. Viewed over a long period of time the difference between constant and variable costs disappears. In this light, we must modify our generalization and state that the railway obeys the law of increasing returns until the operating capacity of the plant is reached.[1] Without unduly stretching this point, it may then be stated that while specially low rates are justifiable when the line has poor traffic,

[1] This point is exposed in detail by Lorenz. Taking the period from 1895 to 1910, he explains that in the United States the expenditure upon the maintenance of way and structures, ordinarily classed as mainly constant,

the force underlying this practice is considerably weakened when the line is congested and the law of decreasing costs has become ineffective. If the limit to the unused capacity of the plant is reached, no railway can afford to carry additional traffic at a rate which merely covered the small out-of-pocket expenses. The full contribution of the traffic to the fixed operating charges and the capital charges must be considered.

We are now in a better position to discuss the theories of railway charges. We concluded our investigation into the nature of railway costs that the expense of performing a single service can seldom be isolated, for its performance is part of a process which is concerned with numerous services in the same class. If the prime or special cost of a service is indeterminable it cannot surely be made the basis of railway charges. Pitched against this difficulty, the traffic manager resorts to charging rates which the traffic will bear, that is, bases his rates upon the value of service or demand for it. What is of importance to him is that all the items carried must contribute a total sum to cover the total joint expenses, while the special, prime or individual cost is a matter of small moment to him.

The principle of charging what the traffic will bear, determined as it is upon the value of or demand for the service, affords an indefinite scope for the personal judgment of the traffic manager. It does not conform to the exact and immutable laws of science, it is an art to be exercised as Bagehot puts it, " in a sort of twilight . . . in an atmosphere of probabilities and of doubt." Again, so far as it is based on the principle of joint cost, it is negative and passive in character " giving opportunity and motive for price discrimination, but offering no guidance as to what

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varied from 100 to 216; while the general expenses, which ordinarily are not variable with traffic, changed from 100 to 166.—*Quarterly Journal of Economics*, 1908.

Marshall states that in the thirty years 1882–1912, the paid up capital of the British railways increased from 786 millions to 1,335 millions, although the aggregate length had increased only from 18,457 miles to 23,441.—*Industry and Trade*. p. 458.

method the discriminations will pursue." It is, therefore, at best subjective, negative and empirical. It is equally potential of promoting social and economic progress as of retarding it. On its socially useful side, the traffic manager puts a lower rate upon cheap and heavy or bulky articles than upon more valuable or lighter ones. The higher classes of freight are made to pay, not only their proportional share of the joint costs, but in addition to defray that charge of the joint costs which the lower-rated articles cannot bear to pay.[1] In this sense it is truly tempering the wind to the shorn lamb, or helping the weaker members of the community. Value being made the measure of ability to pay, this practice renders possible the carriage of useful yet cheap and bulky articles like salt, coal, lumber, iron ore, etc., which otherwise would not move. For if these articles were charged the average rate their cost of transport would be so great as compared to their prime cost, that their carriage would become an uncommercial proposition.[2]

The principle of joint costs thus permits of and justifies discrimination. It seems eminently ethical and bears many traits of resemblance to state taxation, and there is a school which presses the resemblance farther and contends that the traffic manager, in fixing charges, bears in mind the "leistungsfahigkeit"—the capacity to bear—of every passenger and article, in the same wise as does the state in

[1] *Vide* report of the Rates Advisory Committee, 1920 (Cmd. 1098). It may, however, be stated that in actual practice it may happen that the carriage of low-rated articles may be more profitable to the railway than that of high-rated articles.

[2] Sir William Acworth in *The Railways and the Traders* cites Finck to say that " A careful investigation shows that, under ordinary conditions under which transportation service is performed, the cost per ton in some instances may not exceed one-seventh of a cent. and in others will be as high as 73 cents per ton-mile on the same road."

Criticising the view " that if a railway or other partial monopoly were forced to charge the small price to all, that price would be lower than the average of its charges," Marshall explains that " there are some cases in which this result would follow. But in other cases the monopolist would simply dispense with those of his sales, which only could be made at a lower price ; with the result that some of his customers would be seriously prejudiced ; and the uniform price which he charged would probably be higher than the average of those which he had previously charged." *Industry and Trade*, p. 418'

Vide also Ripley, *Railroads : Rates and Regulation*, p. 169.

imposing taxes.[1] The first-class passenger ought to pay more than the second or third-class passenger, not because his seat is better upholstered or because he has more space or comfort at his disposal, but because he can afford to pay more. So also ought the luxuries to be charged high rates in order that the necessities may be carried at low rates. In this fashion only can the social welfare be promoted. This view is made to rest upon an ethical economic basis ; tempering the wind to the shorn lamb.

This ethical economic interpretation of what the traffic will bear has countered opposition from a school which deny any valid analogy between taxation and rate-making. They hold that the motive underlying charging what the traffic will bear is demand. Transportation service, it is explained, is produced jointly for a thousand and one heterogeneous passengers and commodities, and since the individual cost is difficult of allocation, every item is charged according to the nature of the demand for it.[2]

Whatever may be the rationale of the principle, there is no getting away from the fact that it is universally adopted in railway classification. Be it in conformity with Cohn's " leistungsfahigkeit " or Taussig's " demand," the articles which a railway carries are not all charged uniformly, but a discrimination is made. They are grouped into several classes and a rate fixed for each of these. Value thus plays a leading rôle in the classification of merchandise, although weight, bulk, shape, distance, regularity of shipment, method of packing, etc., are also factors which influence it.

The principle is backed by historical precedents and by

[1] G. Cohn, *Die enlische Fiscnbahnpolitik der letzen zehn Jahre*, p. 65–84. Cohn lays great emphasis upon the taxing power of the railway managers and continues that it should, therefore, be the state which should exercise it. He is sceptical of the wisdom and fairness of a railway official.

The analogy of railway charges with taxation, while not avowed, is implied in the writings of Hadley and Sir William Acworth. Similarly, the First Report of the Inter-state Commerce Commission stated, " The public interest is best served when the rates are so apportioned as to encourage the largest practicable exchange of products between sections of our country, and with foreign countries. This can only be done by making value an important consideration, and by placing upon the higher classes of freight some share of the burden that on a relatively equal apportionment, if service alone were considered, would fall upon those of less value."

[2] F. W. Taussig, *op. cit.*

analogous practice in commercial business. On the English canals, the tolls which were levied, apart from the cost of carriage, were graded according to the respective values of the articles. In the schedule of maximum tolls on the canals sanctioned by Parliament, we find that iron ore, for instance, was charged less than merchandise. So on the turnpike roads a dog-cart was charged as much as a heavy carrier's cart. This was against the cost principle because the cart assuredly must have done greater damage to the roadway than the light dog-cart. The main consideration even then was what the traffic will bear; and since the dog-cart was the vehicle of a well-to-do person, it was charged more than a cart which was the instrument of a poor man to eke out his livelihood. As Sir William Acworth states: "Historically this theory has been recognized and approved by English legislation from the time when Adam Smith applauded the equity of statutory turnpike tolls at the rate of one shilling for a light carriage, and eightpence for a heavy dray, through the whole series of canal Acts and railway Acts . . . to 1891-2." [1]

The shipping companies, when they carry iron, steel or some such heavy and cheap cargo as ballast, and charge it very low rates, act in conformity with the same principle. Nor is the principle practised only in the transportation business, it is common to all business where the costs are joint and indistinguishable and the overhead expenses considerable. When use was found for cotton-seed, its price was determined, not according to what it cost conjointly with cotton, for cost was indeterminable, but according to the demand for it, that is, on the principle of what the traffic will bear. The big department stores often have different prices for the same articles; higher on the first floor than in the bargain basement. They also show higher prices for articles at the beginning than at the end of the season. The dentist charges a higher fee to the patient who resides in the West End than to another who hails from the East End. All these persons act on the same principle as does the traffic manager who charges a specially low rate

[1] The Theory of Railway Rates, *Economic Journal*, 1897.

for the carriage of a commodity because of its special need, its inability to bear a higher charge.

In spite of its air of arbitrariness, the principle is potential of immense benefit to the community. As contrasted with the cost of service theory its power of developing new territories is undoubtedly great. This dynamic force is abundantly witnessed in the penetration of the west and north-west of the United States of America. All this expanse of territory would still have been the haunt of the coyote and the bison had not the railway populated it by offering to and from it specially favourable rates. There was a time when people were doubtful if the iron and steel industry could ever flourish in America when coal and iron were produced at such distant localities as Pennsylvania and the Lake Superior. The expense of transporting iron ore from the Lake to the Black District, it was feared, would add too onerous a charge upon its prime cost to enable the industry to work on anything like a profitable scale. These fears were quickly dispelled by improvements in the railway coupled with specially low rates with a view to the development of markets and the maximum flow of trade.[1]

The spectacular development and prosperity of the United States would manifestly have been delayed had the railways there been compelled to follow the cost of service principle of rate making. Now in Europe, especially in Germany, mathematical scales, based on cost and distance, are favoured. And while admitting that this restricts the liberty of action of the traffic manager and cramps certain industries, it is claimed that the system leaves little scope for personal discrimination, that it is more stable and simpler, and that it provides for a greater approximation to justice. But while in the older countries such a system may work satisfactorily, it is certain that in the United Stares with its long distances and its raw materials lying scattered about the country, a mathematical system based on costs and distance would not have proved equally efficacious.

Sir William Acworth elucidates the principle by enunciat-

[1] *Infra*, Chap. IV. for the great growth of the Indian export trade in grain after 1880.

ing three rules for the guidance of the traffic manager. (1) Get traffic. The more traffic carried, the less it costs to carry. Therefore, first and foremost, get traffic. (2) Charge no rate so high as to stop the traffic from going : subject to (3) Never make a rate so low as not to cover the additional cost incurred in dealing with the traffic to which the rate applies.[1]

We have explained the principle of charging what the traffic will bear, its historical origin, and its fortification by analogy with other business. Rightly is it the governing principle in freight classification. We have seen that if practised with an eye to social considerations its benefits are manifold, especially in a country which stands in need of development. But explanation is not synonymous with justification. It is not an impeccable principle and as actually wielded by the railway officers it has been attended with much abuse, injustice and mischief. From the very commencement it has been attacked by the traders as devoid of simplicity and definiteness of application. It has been contended that it gives to the railway management a governmental power not unlike the power of taxation, and that, therefore, any arbitrary exercise of it reacts unhealthily upon the trade and industries of the country.

It may be stated at the outset that many an objection of the trader arises from a failure to appreciate the peculiar nature of railway expenditure. He is apt to discount the usefulness of discrimination, so that he views with suspicion a system of charging in which two consignments are charged differently, notwithstanding that the conditions in which they are carried may be dissimilar. The peculiar terms in which the policy is couched, is again apt to arouse his misgivings. It would have conduced to a better appreciation of it had it been styled : not charging what the traffic cannot bear, or charging what the trade could properly and profitably pay. Further, the interests of the trader are only one-sided. He does not mind high charges so much as differential charges ; for the former he often can shift on to

[1] Sir William M. Acworth and W. T. Stephenson, *The Elements of Railway Economics*, p. 78.

the consumer. He desires that he should be treated on the same terms as his rival. And since he is told that discrimination is inherent in the value of service principle, he looks askance at it and demands that rates be fixed on the cost of service or the distance basis. But all discriminations are not unjust, and it is well to remember that the word discrimination is not derived from *crimen* (crime), but from *discriminare* (to discern).[1]

However, just and socially unexceptional the theoretical exposition of the policy may be, its actual practice has brought it into bad odour with the public. Or, to put it differently, while the principle of differential rates is just, all differential rates are not just. One of its basic principles is that no charge should be so high as to restrict the flow of traffic. But this principle has been observed in breach by many a traffic manager of the old regime. In India, until recently, the railways were pursuing a policy of charging rates which repelled rather than attracted traffic.[2] In the same way in Great Britain the Select Committee of 1888 recorded their opinion that, "According to the evidence of railway managers who appeared before us, no general principle or system of fixing rates has been adopted on any railway in this country. The charge for conveyance, they informed us, was such a sum within the power of the company as they thought the traffic would bear, having regard to competition both of other means of conveyance and other districts or markets, in other words, as much as could be got, and without reference to the cost to the company of performing the service." [3] This is not

[1] F. Fetter, *Economic Principles*, p. 381.

[2] *Infra*.

[3] Compare the following : "The day of the old railwaymen, with their purely practical training and their rule-of-thumb methods, has passed. Railway undertakings are to-day organized on so vast a scale that their management is beyond the grasp of the practical man. Millions of money can be saved on English railways, for the benefit partly of the shareholders, but in much larger degree of the community at large, if the rising railwaymen of the present and the immediate future can be taught to establish and to justify their practice on the basis of sound economic theory, continuously checking the application of theory by familiarity with that which has been done or is being done or attempted in other places outside the range of their own possible individual experience." *The Elements of Railway Economics*, Preface, *op. cit.*

charging what the traffic will bear, it is charging what, according to the traffic manager, the consignment ought to pay. It is not unlike the policy of "demander à la marchandise tout ce qu'elle peut payer." Where, again, is the guarantee that the total remuneration which a railway thus obtains shall be no more than what is socially reasonable. It is in this sense, that the principle has been largely practised in America, and it is there that its evils have been most conspicuous. The series of regulative rates laws passed there from 1887 to 1920, as well as the decisions of the Interstate Commerce Commission and the Supreme Court, are ample testimony to the dangers of the practice and the vagueness of the theory, and point to the urgency of State supervision and control.

Does the theory in any way supply a remedy against extortionate or excessive rates? It is argued that it is not in the interest of a railway to charge excessive rates and that a limit is placed upon its power in the shape of value of service to the trader beyond which no charge can be imposed without loss of traffic. A self-adjusting power is thus claimed for the railway. When the accusation of unduly high rates is levelled against a railway, it is not uncommon for its advocates to retort that there is no evidence of it. the trade goes on and therefore the rates are reasonable.[1] The assumption underlying this argument is not, however, valid. In the case of those articles which are necessaries of life, although the transport price of them is a significant factor in their market price, a slightly higher rate would not curtail the demand for them, and therefore could easily be passed on to the consumer.[2] A small extra charge upon the carriage of salt or coal would not affect the demand for them, and the consumers would have to pay the added burden. Or, it may happen that the producer, in fear of competition, would either lessen his profits or introduce fresh economies in production. The extra charge would then be borne by the producer. In any case, the railway would successfully

[1] See the reply of the President of the Railway Board to the Resolution in the Imperial Legislative Council, March, 1912.

[2] The possibility of competition or of a substitute for the article must not be overlooked.

be able to impose a tax upon the industry, and so long as it did not kill or divert the traffic in it, it would consider its action justified.

There is a further consideration. The limit of reasonable charging is not a definite point, but a margin within which the rate may be placed anywhere; and it is here that the traffic manager has scope for using his power of judgment. It must be clearly recognized that there are two limits to any rate. The lower limit is fixed by the cost of service, a rate below which the railway cannot bear as it would be unprofitable. The upper limit is fixed by the value of service, above which a rate would be unprofitable to the trader. Now, in the case of a low class article the price of whose carriage was substantial as compared with its cost of production were the rate fixed near the lower limit many marginal producers would begin to produce, for the low cost of transport would assure them some profit. A low rate thus has a tendency to expand the field of commerce. Contrariwise, a rate fixed at or above the upper limit would drive many producers off the field, and thus contract the field of commerce. But to judge whether an existing rate is high or not, a lower rate must be tried and its effects upon the traffic observed. So that to declare off-hand that an existing rate is reasonable because the trade moves out, is unconvincing. The existing rate may have prevented a stream of traffic which would have been impelled by a lower rate. It follows then that the principle of charging what the traffic will bear may be practised so as to exact all that the traffic will bear. It is thus empirical and affords no norm of what the charges shall be nor does it provide for reasonable rates.[1]

There is another objection to the principle, and that is the difficulty of differentiating between the motive to build up a business and the motive to destroy it. These motives may work at one and the same time. A discriminatory

[1] "The risk, commercial conditions, competition, what the traffic will bear, and all the other well-known factors in empirical rate-making, when taken by themselves do not afford secure anchorage. One may give due weight to all those things and be utterly at sea when really critical or nicely-shaded rate questions arise." B. H. Meyer in the *Publications of the American Economic Associations*, Vol. IX. 1908.

rate may be imposed both with a view to put an infant industry on its legs and at the same time to injure some rival industry. If questioned, the railway would always defend itself by laying emphasis upon the constructive side of its move while concealing its destructive effects.[1] Motives are always difficult to judge, and since the value theory is negative it provides no handle by which the state can judge and stop a prejudicial practice.

One more consideration obtrudes itself; can the railway be trusted to act pre-eminently according to social needs? Can we be confident that it will mete out "equitable concession to the weaker members of the community?" Were the railway managed by the State it may be presumed that in deciding which industry is weak and needs concession, social consideration would be its guiding star. But the primary motive of a privately managed railway is to earn the maximum profits tempered by competition and incidentally by its sense of service to the community. So also it is not inconceivable that in helping a weak industry it may be artificially bolstering up an inefficient and uneconomical industry while handicapping another fitter to survive. Under such circumstances it is easy to perceive that the rates policy of a railway based on this principle, may retard the industrial progress of the country.

The cost of service theory has always been a rival to the value of service theory as the basis of reasonable railway charges. Traders have often insisted that rates should be fixed on the basis of the cost of service, which they assumed was simple and easy of calculation. At first sight the theory does seem balanced, symmetrical, and definite as compared to the uncertain and indefinable character of the other. Theoretically it seems but fair that the charges levied upon two consignments should be proportional to the costs [2] incurred by the carrier in performing the two services.

[1] Marshall, *Industry and Trade*, p. 417.
"Railway officials, free from restrictions, could make or unmake manufacturing concerns in those days (1860–80) and could do so still had we not at least a court of appeal and laws against obvious discriminations." Andrew Carnegie in the *Century Magazine*, March, 1908.

[2] The term cost is used in a variety of meanings. In its broadest signification it means all the expenses involved in the performance of a service

But we have observed that in actual practice the cost of the individual service is indeterminable and cannot bear any relation, even if determined, to the expenses involved in performing that service. Thus, however desirable may certainty and definiteness be, expediency and the rule of thumb may actually be preferable as economical and socially beneficial.

Even if it be conceded that the cost of carrying a consignment were ascertainable and were charged, the result would be highly detrimental to trade. For, while the burden upon the commodities which combined small bulk or weight with great value would be lessened, it would be heavily felt by the raw materials whose bulk or weight was large as compared to their value. Traffic in the latter would be precluded for the simple reason that the charge for their carriage would be greater than they could bear. To-day these are charged so much below the average rate that any attempt to raise their charges would restrict their movement. This would tell seriously upon the tonnage and consequently upon the earnings of the railways, besides jeopardising the existence of many an industry. The impetus which silks and other high grade articles would receive by this system would be more than offset by discouragement to the low grade articles.[1]

Equally vulnerable is this theory from the ethical economic point of view. Would it seem equitable if, like weights of

from the interest on capital to operating expenses and the business profits. In a narrower and more usual sense, it implies all the operating expenses incidental to a particular service excluding interest and profit. The traffic manager who is responsible for making special rates has in mind a third meaning of the word cost which is still more restricted. The cost to him means the actual additional expenses that the performance of a service may involve. The great consideration for him is whether a specially low rate which the trader demands is likely to cover the immediate operating expense of moving that load, which otherwise would not be incurred, and thus whether his company will be better off with or without it. If it is likely to cover it he agrees to perform the service for the trader.

[1] A pertinent consideration arises out of this topic. Every commodity has a maximum level or limit to its ability to bear, a rate beyond which, no matter how great the distance, would render the business unprofitable This limit is reached earlier in the case of cheap and bulky articles like bricks than in that of more valuable articles like grains. In India the limit of the former is approximately reached at 300 miles, of the latter at 600 miles. See Ripley, *op. cit.* p. 107.

bricks and marble were charged the same amount weight for weight ? Bricks are cheap and of common use ; marble is expensive and a luxury. If the principle of the maximum benefit to the many be observed, bricks ought to be conveyed more cheaply than marble ; or, in other words, like weights of commodities of different values should bear dissimilar proportions of the total expenses of a railway.

It must, however, be explained that the modern view which favours the cost principle does not deny the efficacy of value in classification nor reject the principle of providing for fixed costs according to what the traffic will bear. The main point of difference between the two views is as to the relative importance attached to the cost or value principle in providing for the variable charges. The cost school, while conceding that individual costs are difficult of calculation, contend that the cost standard may usefully be invoked in judging of the lower limit of a rate [1] as well as a non-competitive rate. Further, that in general the level of rates ought to conform to the cost standard, or in other words that the cost principle sets a limit above which the general level of charges should not rise. Now this has been broadly recognized in the American Transportation Act, 1920, which stipulates that the level of railway rates shall be such as will enable the carriers under efficient and economical management to earn a definite rate of return upon their property.

Distance as the basis of rate making has also been suggested as a solution to the problem. Like cost, distance is certainly an important factor in rates, since in a rough fashion it measures the expense of carriage. Cost increases as distance but not proportionally. While the expenses of

[1] Generally no railway would fix a rate below the cost of service for the simple reason that it would be unprofitable. But it may do so during a rate war with a competing line, and then it is not difficult to see that ultimately neither the railways nor the community can profit therefrom. Further, it is noteworthy that according to Haines the railways in America " have in the past lost millions of dollars through sheer ignorance of railway costs, by making rates below the cost of the service as well as below what the traffic could have borne." *American Railway Management*, pp. 24–7. In India, as will be discussed hereafter, there is the additional danger of the railways neglecting the cost of service in fixing rates as they are safeguarded from loss of dividends by the guarantee.

movement proper bear some relation to the distance, terminal expenses do not. So that the costs of conveying a consignment do not vary directly with the distance but commonly according to the square root of the distance.[1] If, for instance, it costs a rupee to carry a certain weight ten miles, to carry it forty miles, it does not cost four but only two rupees. If distance cannot be the common yard-stick of costs, it cannot be the common yard-stick of reasonableness. Equal mileage rates, opposed as they are to the cost principle, are thus neither sound nor practicable,[2] and it is precisely for this reason that the rates are made tapering or telescopic.

The distance principle is also the foundation of the system of charging according to a few zones. Within each zone there is a uniform rate and the more distant zone has a higher rate. While theoretically it conforms to equity, in practice many obstacles arise. The zone system was tried in Hungary, but in face of stern facts they had to depart to a great extent from the ideal principle of uniformity. One obvious defect of the system is that it penalizes short distance traffic as well as traffic at the nearer limit of the zone as against that which is destined for the end of the zone. The distance principle is also rightly and beneficially invoked in the formulation of tapering rates, *barêmes* or *staffeltarifen* in all of which the charge decreases as the distance increases.

The modern distance school do not deny the weakness of a rates system based purely on distance. They, however, argue that the principle might be used with advantage in the determination of the reasonableness of a rate towards which the value principle offers no external guidance. The principle, they say, is unduly ignored in the elastic systems of England and America. This is undoubtedly too true, especially when a state of competition exists between two railways. The American Railways Act, 1910, which prohibits a greater charge for a shorter haul is a testimony to the realization there that distance has been unduly ignored

[1] Ripley, *Railroads : Rates and Regulations*, p. 103.

[2] *Vide* Report of the Select Committee, 1882. Sir William M. Acworth *The Railways and the Traders*, chap. ii.

and that it must not be ignored as a factor in rate making.[1] In local discriminations, therefore, distance can be made a prima facie basis of reasonableness.

Our inquiry then reveals that the value of service theory is the most elusive, yet the most potent of all to develop the country. The fixing of rates is par excellence an art, not a science. Besides, its intrinsic importance and its eminently workable character, the theory of charging what the traffic will bear, has engaged much of our attention because of its favour with the railway men. They have applauded its virtues, for it leaves in their hands a power of discrimination which, even if unreasonably exercised, is at best difficult of detection.[2] Its drawbacks were discussed not with a view to discrediting it, but to show its defects which must be obviated in the interests of the community. While the cost and distance principles are untenable absolutely, their importance must be recognized, and they ought to have due weight in the making of rates and in judging of their reasonableness.

In the United States until lately, the one striking feature of through rates was the utter disregard of cost and distance, so that there arose a network of rates,[3] which the public did not understand, and which was so manipulated as to favour one area or individual to the detriment of the other. Under the plausible cover of charging what the traffic will bear many a rate was deflected.[4]

[1] For a scientifically constructed tariff, based on distance, *vide* Ripley, *Railroads: Rates and Regulation*, Chap. X.

[2] There is no general attributes of a just and reasonable rate. In judging of a particular rate all that can be done is to give due consideration to various factors that should have weight in rate making.

[3] See the searching article by Ripley exposing the mischief caused by this policy entitled "Economic Wastes of Transportation" in his *Railway Problems*.

[4] The insufficiency of the theory of what the traffic will bear and the sins that have been committed in its name have brought the cost basis to the fore in the United States. Lorenz explains that on the important eastern lines, traffic is so dense that the law of increasing returns has practically ceased to work and that the constant element in their costs is only 10 per cent. He contends, therefore, that the scope for the value of service is restricted to this 10 per cent of the costs. He finally expresses his opinion that in the eastern districts cost of service must be held as the chief consideration, while in the south and west for some time at least value of service must be held as the more important element in rate fixing. "Cost and Value of Service in Railroad Rate Making"—*Quarterly Journal of Economics*, 1916.

In Europe the trend of opinion has been practically in the other direction. Rates there are fixed by scales, *staffeltarifen,* as they are termed in Germany, and *barêmes* in France, in which .distance as well as mathematical averages plays a more important part. They seem to prefer stability rather than flexibility of rates as a means of promoting trade.[1]

We may then conclude that of the two important principles, viz. : value and cost, none by itself can be made the basis of reasonable rates. They are both equally important and react upon each other. The cost principle based on supply fixes the lower limit below which the service would be unprofitable to the railways ; and the value based on demand fixes the upper limit above which the service would prove too costly to the trader. The actual rate must lie within these two limits. Cost alone cannot be used as the yard stick of a reasonable rate, nor can value be used as a deciding factor. The problem then as to which of the two principles should be practised in the formulation of reasonable rates does not lend itself to a categorical generalization. We have visualized the problem and placed in juxtaposition the advantages and drawback of each theory. Every case must be judged according to the peculiar circumstances surrounding it, and whether the one or the other should have predominance must be left to the decision of a body of trained, impartial experts.

[1] Referring to the problem of local discrimination, Clarke states, " It is this knot which the German cuts with the knife of a statistical average, and there are signs in America of an increasing tendency towards an effective use of the same weapon." p. 17. *Standards of Reasonableness in Local Freight Discriminations.* For further evidence of the reaction in America towards rehabilitating the cost principle, *see* Haney, " Joint Costs with Special Regard to Railways," *Q.J.E.*, 1916 ; Sakolski, " Economic phases of Railroad Rate Controversy," *Yale Review*, 1910 ; M. H. Robinson, " Railway Freight Rates," *Yale Review*, 1909 ; *Railway Rates and Cost of Service*, Owen Ely, 1924.

CHAPTER IV

THE DEVELOPMENT OF RATES AND REGULATION

1. *The Period of Experimentation and Non-Interference*

FROM the account of the peculiar relations existing between the Government of India and the railway companies chronicled in the first chapter, the rationale of the control of the State over the rate fixing powers of the Companies will be easy of comprehension. Owing to the reluctance of private capitalists to embark on the venture of Indian Railways without any support from the State, the latter had to guarantee them a certain percentage of interest upon their capital, while in return it contracted with them for stringent supervision and control over their undertakings. This feature is noteworthy, for it made the State responsible for the financial success of these concerns and consequently more cautious as to the effects of the exercise of its power over the general management of the private railways and over their rate fixing power in particular. It has been specially concerned that with proper facilities the companies earn a sufficient revenue to obviate the necessity of its having to pay the guaranteed interest.

There are other considerations which make it incumbent that the State should control the railways even though there be no financial support by it. The railway by its very nature is concerned in the performance of a public service and is therefore vested with certain state powers. It is again a conditional monopoly not regulated by the ordinary laws of trade. The circumstances that the railway track is just so many inches broad militated against its use as a free highway from the very beginning. Competition thus has not proved a regulator of its charges, and abuses have cropped up everywhere having reference to exorbitant or unjustly discriminative rates. Every public authority, therefore, deems it its duty to watch over the interests of the people against the possible mal-practices of the railway companies. Now, if in a country like England or the United States of America, where genuine private enterprise has braved financial risk and has created traffic or awaited its development, a policy of minimum of State interference is justifiable, in India under dissimilar circumstances the problem must be viewed from a different angle altogether. It may finally be added that the lack of inter-railway competition and a vigilant public opinion in India—factors which elsewhere compel the railway companies to placate public opinion—has made the State control almost a moral obligation there.

At the very outset the powers of supervision and control were conferred upon every chief Government Railway Officer in each of the local administrations. Clause 8 in the original contracts with the old guaranteed companies provided that "the companies shall be entitled to such rates and fares as are approved by the East India Company and shall not increase them without its consent and that when the net receipts of the lines have exceeded ten per cent upon the outlay they shall be reduced so as not to exceed ten per cent." The Government had, however, the right to control the charges for traffic under all circumstances. The railway companies were further bound to carry the Mails and the Post Office servants free of charge, and military officers, soldiers, and materials at special rates.

The fixing of rates was necessary from the outset, but in the absence of any precedent or reliable data the task was difficult in the extreme, and it took long before the amount of traffic was measured and its nature appreciated. It was perceived that while in England larger returns were procured from passengers than from goods, in India the conditions were just the reverse, so that the mainstay of the railway income would be the traffic in commodities.

In sending instructions to the Government of India, the Court of Directors suggested the possibility that in India more classes for passengers might be necessary than in England.[1] The rates and fares they advised might be fixed

[1] Despatch from the Court of Directors to the Government of India, dated 7 May (No. 11), 1845.

for a year so that their effect could be gauged and modifications made in them at the end of that period. As regards the profits of the Companies, they opined that any attempt at fixing them " may have the effect of stifling enterprise, energy and exertions which are best promoted by the hope of large gains."

In actual practice, however, the hopes of the Government of India were not realized. The case of the Madras Railway may be taken as typical and throws interesting light on the difficulties which existed in the way of an equitable adjustment of rates and fares ; at the same time it brings into a clear perspective the different and almost antagonistic views held by the railway companies and the Government on the principle—indefinite in itself—of charging what the traffic will bear.

Owing to the scarcity of reliable information concerning the probable traffic offering, the Government had in the beginning asked the railway authorities to put forward their suggestions in the matter of charges. The Agent and the Manager of the Company thereupon proposed the following scale of passenger fares :—

1st Class.		*2nd Class.*		*3rd Class.*	
As.	Pies	As.	Pies.	As.	Pies.
1	0	1	0	0	6

Col. Pears, the Consulting Engineer to the Government of Madras, however, proposed four classes with the following scale :—

1st Class.		*2nd Class.*		*3rd Class.*		*4th Class.*	
As.	Pies.	As.	Pies.	As.	Pies.	As.	Pies.
1	6	0	9	0	4	0	$1\frac{1}{2}$
						(slow train)	

The scale sanctioned finally by the Government was the same as that proposed by Col. Pears except for the provision of the fourth class which the Government did not think advisable to adopt then.

It was understood that this scale was fixed experimentally for a year at the end of which the charges would be modified in the light of previous experience.

[1] Select ons from the Records of the Madras Government, Nos. XXXVII and XLIII, 1856–7 and 1857, Madras.

In 1856–7, previous to the revision of the scale, the Government wished to know the results of the schedule of charges then in force and invited the railway authorities to communicate their experience as well as their suggestions for modification. In forwarding these the Consulting Engineer pointed out the direction in which modifications may be desirable.

There seems to be no doubt that in the first year of railway operation the results had failed to approach the expectations formed. While both Mr. Fletcher, the Traffic Manager of the Company, and Col. Pears, the Consulting Engineer to the Government, agreed as to this, they differed as to the causes which were responsible for this disappointment. Mr. Fletcher argued that the failure was due to the unsatisfactory arrangement of the passenger trains, and what was still more important, the great difference in the fares for the third and the upper two classes, the second class fare being more than double that for the third, and the first double that for the second, and more than four times that charged for the third. By raising the third class fare he therefore wanted the people travelling by this class to patronise the two upper classes.

Col. Pears viewed the situation differently and disagreed entirely with these arguments. He rightly contended that the people of India were poor and the reason why there was not sufficient passenger traffic on the Madras Railway was that the third-class fare was too high. On the East Indian and the Great Indian Peninsula Railways the third class fare was three pies, that is lower than on the Madras Railway. He calculated that even the three pie fare "represented at least three halfpence, half as much again as the lower classes of passengers pay in England." He was at pains to show that in the preceding ten months the daily average of passengers was four for the first class, eighteen for the second class and 436 for the third class. To him this was a significant characteristic of the travelling public in the country. When the third class traffic so overwhelmingly predominated over that of the other two, it was to him taking too narrow a view of a subject affecting millions to talk of developing the two upper classes. He was not commercially averse to developing these, but he objected to encompassing that aim by raising the third-class fare which would inevitably result in driving away thousands off the railway. As it was, the actual results he thought were notorious, for none but the wealthier classes travelled by rail, and twenty-six miles from Madras, an ordinary road running parallel to the rail, " had presented to the railway officials the unsatisfactory spectacle of thousands of people, some in bullock carriages, others on foot, passing to or from Madras."

It was the first instance, he thought, where a railway taking the place of the old modes of transport, had begun by charging higher than they did. He compared the fare of four pies a mile, with that in England of one penny, and taking the labouring man's pay there at eighteen pence a day, he found that he could travel eighteen miles for a day's pay by railway. In India at two annas a day, and six pier a mile, he could do a distance of four miles on the railway. He had, however, a family of six, with the result that he could not appreciate the privilege of riding on the railway, but put them into a bullock bandy.[1] whereby he could do twice the distance for the same money as on the railway. The merchants of Vellore in their petition to the Government bore out the contention of Col. Pears. They stated it as their unanimous opinion that of the people who travel, not more than one-eighth travel by rail in consequence of the high rate of charge, and that if this were lowered to suit their condition many more would use the railway.[2]

The freight rates then in force were ¼ pie per maund per mile for the first class, ½ pie for the second, and ¾ pie for the third, with an additional terminal charge which varied according to the weight and measurement of the article. As with fares so with the freight rates. Their assumptions were different and their conclusions varied. Mr. Fletcher went on the assumption that a large trade was already

[1] A cart. The farmers, the banjaras and most of the commercial men kept these bandies.

[2] Appendix C to the correspondence.

existing in the country which the railway had merely to carry. On the analogy with England he therefore desired that the rates should be adquately high to permit of immediate profits. The country, he said, was extensive, the railways had joined the three capitals together, while in Madras a large trade in merchandise was already existing.

Col. Pears condemned the basing of rates on the analogy with England a country which " is characterized by industry, wealth, intelligence and energy of the highest order," with India, just emerging out of disorder and depression. He held that with railways not many years old, India was more like a field which required much ploughing before a profitable harvest could be gathered. He considered it rash to expect high profits from the very beginning; the railways must wait until they had created a demand. The main object of the Government in introducing railways was to provide better and cheaper transit for the country. If the Government once gave up its control over the railways before this great end was successful, " the public credit and money would be misappropriated."

He further argued that the main reason why the traffic offering on the railway was disappointing was that its charges were not sufficiently low to attract traffic, which, therefore, continued to go by the old ways. He cited figures to prove that in one month the average daily number of loaded bandies, passing Woochery, on the Madras side of Arcot, was 1,596, or about 800 tons, while the average daily tonnage by rail from Madras to Arcot was 23, and from Arcot to Madras 32, including railway material.[1] The attractive force of the railway even for traffic passing by its terminus was thus insignificant; while it could not create any great lateral traffic or exercise any influence over a wide extent of territory. The bandies had lowered their rates in face of the railway competition. Good carts, carrying 15 maunds could be got to work between Vellore and Madras for Rs.4 or even Rs.3½, returning with a load of salt for Rs.2 or Rs. 2½. At Rs.6½ 15 maunds were carried 168 miles, averaging ½ pie per maund per mile, or less than

[1] Appendix C to the correspondence.

one anna and 2 pies per ton per mile, including collection and delivery.[1]

The Government of Madras showed themselves in full accord with the views expressed by Col. Pears and were of opinion that he had "successfully demonstrated the fallacy of the arguments" on which the officers of the Madras Railway had based their proposals for a high scale of charges for the conveyance of passengers and goods. The Court of Directors also concurred with this view and stated that "the railway should be made available, to the utmost possible extent, for the mass of the people," although the profitable working of the railway should not be lost sight of.

In his Report for 1860-1, the Government Director of Railways remarked "a revision of the rates has since been made. . . . The former high rates and other causes prevented traffic from coming to the line in the Deccan, for notwithstanding the facilities of transit offered by the rail, the amount of goods on the old high road had not diminished."

From 1849–50 to 1858–9, the Government paid £1,528,045 as guaranteed interest to the companies whose net profits during the same period amounted to £325,405. The railways were thus working at a loss and yet they did not make much effort to attract traffic and thereby make their lines profitable. The Government Director reporting in 1860–1 observed that their two great objects should be to develop the traffic and to reduce the working expenses. As regards the first, he said, it was proved "that the people of India are similar to the people of every European country in their disposition to travel." The numbers using the rail were in proportion to the inducements offered. For instance, when

[1] This policy of charging rates which the traffic could not bear and which therefore continued to go by the old ways was general at the time. Col. Cotton, a great advocate of waterways substantiated the arguments of Col. Pears. On one of the four main approaches to Madras, 3,000 men travelled per day. These men were not attracted to the Railway because of its prohibitive charges. In 1857, on the G.I.P. Railway which had an opened mileage of 89 miles the average tonnage of goods was 60, which was "insignificant considering the trade of Bombay or the expectations of the Government." Yet the rates charged were only a trifle less than by the old conveyances. In Bengal the Rajahmundry Canal carried at cheaper rates than the Railway.

a fourth class with reduced fares was established on the G.I.P. Railway, with about 350 miles open, the number ofpassengers increased nearly half-a-million in six months.".

His apprehensions of the policy of railway charges was reflected in his Report of 1863–4. He wrote, "It will be observed from some of the traffic returns, that the receipts have increased, although the traffic has diminished. If the traffic has not been reduced too much, the object has been attained. But it is possible that the rates may have been raised a little too high, and that more traffic might have been taken and at a less profit per passenger and per ton goods and yet so as to produce greater aggregate profits." [1]

He adopted a more definite tone in 1866, when he pointedly drew the attention of the Secretary of State to the tendency among the railway companies to increase their charges without considering what the traffic will bear. The Government viewed this with concern, for they had recognized by previous experience that high charges drove away traffic from the rails, with the result that the earnings of the railways fell off and their guaranteed profits had to be made up from the national treasury. While it was undoubtedly in the interest of both the parties to make the railways profitable, the Government desired this to be achieved by spreading the benefits of railway transport to the greatest number; the companies on the other hand aimed at the result with the minimum of carriage or effort. In other words, the companies strove to carry a small volume of high class traffic at high rates, while the Government, although perfectly willing to permit the companies to make reasonable profits, were anxious that they should be made from the carriage of the maximum of low-charged

[1] The view of the railway companies that in their undeveloped territory the customers should be made to pay their full profits from the commencement was not sound. The railways were constructed for supplying the needs of the future; and it was in anticipation of this that their profits were guaranteed by the state. "Apropos" of this, Haines writes "It is almost axiomatic that rates cannot be made so as to give high earnings to a poorly placed, indifferently operated, or isolated road without making the rates absolutely extortionate."—*Problems in Railway Regulation*, p. 450.

units.[1] Dwelling upon this theme the Government Director wrote: "Considering the question in the abstract, the first point to be ascertained before fixing charges of this kind, is the cost of conveyance, and then, the charge which, in addition to what is required to cover the cost, will produce the aggregate return; for it should be borne in mind, that it is not the high profit upon the unit, but the small profits upon the large numbers or quantity, which should be sought for." [2]

The failure to appreciate this principle at an early period was a common defect of the railways all over the world. and yet it is a fundamental of railway economics. The railway industry normally reacts to the law of increasing returns until the point of congestion of traffic is reached. Once a large capital is sunk in the undertaking the income from it increases out of proportion to the expenditure incurred. The greater the volume of traffic the less the cost of producing a unit and the profit necessary to produce the same returns per unit.[3] It is consequently the great aim of the traffic manager to carry as fully loaded a train as possible so that the fullest utilization of the plant may follow and profits may concurrently increase.

2. *The Period of Divergent Views of the Secretary of State and the Government of India*

The policy of *laissez-faire* which the Government had hitherto embraced was now discarded and it was decided to define more clearly the powers of the companies to impose rates and fares. This policy was first adumbrated in the Report of the Government Director of Railways for 1861–2. "A very judicious arrangement" he wrote "is proposed for the settlement of the matter, viz., that the Government instead of fixing the actual fares to be charged, approve of

[1] Mr. Neville Priestley in his Report in 1903, observed that the results on the American railways showed that they made their income by small profits per unit and large volume, while Indian railways made their income by large profits per unit and smaller volume. p. 152.

[2] *Report on the Railways in India*, 1865–6.

[3] *Supra*, Chap. III. This principle is well illustrated by the expansion of business which followed the establishment of Hill's penny postage ir England and the parcel post system in the United States.

scale of maximum rates, leaving it to the company's ficers, in communication with the Consulting Engineer of the overnment, to impose such rates from time to time, within ie prescribed limit, as may be found conducive to the iterests of the undertaking." While protecting the public om the ill-directed actions of a monopoly, it was intended › fix a maximum scale of rates within which the railway ianagers would be able to adjust their charges.

The principle of fixing maximum rates was first introuced in 1865 on the Bombay lines. Till then Government ad assumed the policy of non-interference with the rates nposed by the companies. But the tendency of the latter ›wards high charges had impressed upon them the need of ›ntrol by fixing maximum rates beyond which charges ›uld not be levied. They had determined that the burder. f the guarantee should not be allowed to press too heavily pon the people, and that therefore a firm attitude must be ıken by them *vis-à-vis* the companies as a corrective to ieir policy. It is in this light that the scrupulous solicitude f the Government for the lowest class of passengers and ›ods, which will be noticed hereafter, should be viewed.

The maximum rates on four of the important lines were s follows :—

	Rates per ton per mile. Pies.			
Classes of Goods.	*E.I.*	*G.I.P.*	*B.B. & C.I.*	*Madras.*
st	9	8	8	14
ıd	13½	10	10	18
·d	18	16	16	24
:h	27	20	20	36
:h	54	30	30	54

The policy initiated on the Bombay lines was followed y other provincial Governments, although no attempt was ıade to establish uniform maxima. A check was thus ut upon the power of the companies to charge, which as none too soon, for, as Mr. Bell observes, the railway ›mpanies had already begun to experience the pressure of ·affic, and to recognize that in the absence of competition ıey had the game in their own hands.[1]

[1] H. Bell, *Railway Policy in India*, p. 207.

Subsequently, the Secretary of State issued certain instructions to the Government of India defining the latter's powers over the railway rates. The maxima rates were to be fixed by the local Governments and in doing so, sufficient scope was to be left for the companies to exercise their power of discretion. The Central Government were not to interfere with the railway rates, but were restricted to determining the general railway policy.[1] The Government of India did not see eye to eye with the limitation of their powers. While they did not doubt that the local Governments would safeguard the interests of their people, they objected to the curtailment of their own powers so long as they were responsible for financing the railways. They argued that they ought to have the right to protect the interests of the lower strata of goods and passengers at least. Further, they expressed the opinion that the Secretary of State in his despatch, had made no recognition " of any duty on the part of the Government to protect the interests of the people." While they fully admitted that their control should not be so exercised as to compel the railway company to carry men or goods without profit, they suggested that in any " readjustment of fares of the lower classes, the accommodation of the public should be considered, so far as it was not incompatible with the interest of the company, or the means at their disposal for providing such accommodation." [2] They further differed from the views of the Secretary of State in regard to the motive of the companies in fixing fares. " It does not appear to us," they stated, " to be the interest of the railway companies to carry the maximum of passengers with the maximum of profit, but on the contrary to get the maximum of profit with the minimum of passengers ; thus it would be preferable to them to carry two million passengers in a half year at three pies instead of three million passengers at two pies." They went on to show that this was not mere conjecture, but that the case had actually happened in Madras. " The Agent of the Great Southern Railway of India raised his

[1] *Circular of the Government of India*, No. 10 R. of 1867.
[2] Despatch No. 26, dated 8 February, 1867.

lowest fare from four to five pies per mile, and thereby shut off nearly 30,000 passengers in three months and reduced the earnings of the line by about Rs. 1,500." [1]

The Secretary of State was not disposed to view the situation eye to eye with the Government of India, nor was he convinced of the antagonism of interests between the latter and the railway companies. The Local Governments were therefore charged with the settlement of the maxima, in which the Central Government were not to interfere.[2] The existing fares on all opened lines were fixed as the maxima, while on all lines which were to be opened thereafter, a fare of two pies per mile was decided upon. The Central Government were, however, allowed the power of fixing the charges for the lowest class of passengers and for food-grains and coal. The existing rates for food-grains and coal were fixed as the maxima, but on all lines to be opened thereafter, a rate of one quarter pie per maund per mile was fixed as the maximum. The resolution explained that it was not intended that the fares and rates which were laid down were to be blindly adhered to under all circumstances, but that an alteration might be made with the sanction of the Government of India. The desideratum to be aimed at was a maximum of profit, not from a minimum but from a maximum of traffic.

Subsequently to the fixing of the maxima fares, the Secretary of State advised the Government of India to have the scale of passenger fares revised in Madras so as to afford greater scope to the companies to vary their charges. The Government of India as well as the Government of Madras were both averse to any such step being taken in view of the actual results on the lines. They had, however, to submit to orders, and thereupon the first class

[1] Despatch No. 76 P.W.D., dated 25 August, 1868. Mr. Thomas Robertson in his Report in 1903 lays the blame upon the guarantee system for this state of affairs. "Railways," he says, "which show no prospect of earning surplus profits had no inducement to economy, their dividends being assured to them whatever their income might be. Railways which did a larger business in one half-year and not in the other, were thereby encouraged to confine as much as possible of their Revenue expenditure to the bad half year, since the lower expenditure in the good half year did not affect the minimum return guaranteed by the Government." §. 17.

[2] Resolution of the Government of India P.W.D. No. 1174—80 R.

fare in Madras was raised from 18 to 20 pies, the second-class fare from 5 to 6 pies and the third class fare from 3 to 4 pies a mile. In altering these maxima, Lord Mayo realized the important social and political considerations involved in the matter, and recorded his regret that the high fares had been revived. He argued that it was " 'blind policy' to neglect the interests of the masses, it was not by raising, but by lowering the cost of transport that we must hope to develop the enormous revenue that we are now only touching from this source." [1]

Similarly in the case of the Oudh and Rohilkhand Railway the considered views of the Government of India were ignored by the Secretary of State. In September, 1869, the latter called the attention of the former to what he thought was the low maximum fare for third class on that line which left its authorities no discretion in fixing the actual charge. The Government of India, with their intimate touch with the administration of the railways and their knowledge of the economic condition of the travelling public, were of opinion that the fare even then was not low enough to attract the greatest possible number, and deemed it advisable at least to leave it at the existing level. The fare was, however, raised from two to two and a half pies, the Government of India remarking that it would result in depriving the masses of the benefit of quick and safe carriage.[2]

[1] Evidence of Major Conway-Gordon before the Select Committee, 1884, para. 4317. From the evidence before the same Committee, paras. 442–9, it appears that with a length of 860 miles the Madras railways with their high cost of construction and their indiscreet policy of charging were paying only 2 per cent and during their operation of 25 years had lost £5,900,000, a burden which the Indian tax-payer had to shoulder. The heavy losses on the railways in the nineteenth century must account for the indequate provision of railway mileage in India.

[2] It may be inferred that India is best suited by her staple commodities, the economic and social condition of the people, as well as by her geographical features for railways with *petite vitesse*, scanty comforts and low charges. In this respect India affords a striking contrast to England, where the totally different economic and social conditions have been responsible for speedy carriage of goods and great comfort to the passengers. An aspect which has been overlooked even by experts is the consideration of the relative value of money and distances in India. There, as Sir Arthur Cotton said (*Journal of the East India Association*, 14 December, 1869), a ton of cotton valued at £60 conveyed 500 miles at 4d. a mile, if charged with a sum of £8 equals 13 per cent, while a ton of manu-

The maxima which were already fixed high in 1868, owing partly to lack of experience and partly because of an absence of effort to study traffic conditions were thus raised still higher in a few cases which resulted in a loss of traffic and a high operating expenditure.[1]

The year 1869 saw many important events in the history of Indian railways. The policy of State initiative in railway construction and management with a view to economy and simplification of rates and fares was instituted. The opening of the Suez Canal by De Lesseps, brought India in a closer relationship to the European markets and gave a great stimulus to her overseas trade. During the year 261 miles of railway were added to the 4,020 already existing. In the same year modified terms were incorporated in the contracts with the old guaranteed companies, whereby a more definite power of control was vested in the Government to be used over the companies; and it was arranged that any profits of the railways over five per cent were to be equally divided between them and the Government. On the other hand in return the Government arranged to keep no account of the guaranteed interest against the companies, and to cancel their past debt.

The E.I. and the G.I.P. Railways were joined at Jubbulpore in the same year, bringing together Calcutta, Bombay, Delhi and Lahore. The journey between London and Calcutta, the then capital of India, was curtailed by three or four days, and it occupied no more time than it took twenty years previously to traverse the country from one end to the other.

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factured goods worth £200 carried in England for 100 miles at 2d. a mile comes to less than ½ per cent. The inference is that what the traffic will bear is a much smaller sum in India than in England. To state, then, as it is often done, that the charges in India are the lowest in the world, while neglecting the peculiar conditions of India, is merely to indulge in a hyperbole.

[1] Sir George Campbell asked "In almost every case the rates under that provision were rashly fixed, which rates are now enormously high. I think you told us far beyond what the companies in their own interest would ever dare to work up to?" "Yes," was the rejoinder of Major Conway-Gordon "they are very much higher than what the companies actually charge. Para. 4412 *Report of the Select Committee on East Indian Railways*, 1884.

It was dilated upon previously, that the guarantee system was responsible among other evils for encouraging expenditure not warranted by the existing traffic. And since for some time at least the railway earnings were not able to meet even the guaranteed interest, little incentive existed for them to economise in operation, or to adjust rates so as to attract a maximum of traffic. In fact, a Director of the G.I.P. Railway stated distinctly that the "object of the Company was to secure the best dividends from a small traffic at high rates." [1] So also it is clear that in a case like that of the Madras line, where after a great number of years of working, its management had arrived at the conclusion that it was hopeless to earn more than the guaranteed interest, the inducement to economy must have been very small. This tendency, general at the time, was commented upon by the Government Director. "The high amount of working and maintenance expenses on certain lines seem to imply either an absence of strict economy or imperfect construction in the first instance." [2]

Further proofs of this tendency were forthcoming. After 1866, when there was a great depression in traffic receipts of the E.I. Railway, Mr. Rendel the Company's Consulting Engineer was sent out to India to investigate the problem. On examination, he found that the great growth in expenditure during the two previous years had been in advance of the natural development of the traffic; and stated that the mileage of the rolling stock was out of proportion to the work done.[3] He therefore recommended the indefinite postponement of some works; and the adoption of mixed trains, with a lowering of the third class passenger fare from three to two-and-a-half pies.

Five years later the same authority reviewed in detail the operation of Indian railways. His conclusion was that the high operating expenses upon the Indian railways were due to the unsystematic loading of trains and the consequent wasteful mileage run. He drew pointed attention, *inter alia*, to the relation between the cost of carriage and the charges

[1] *Evidence before the Select Committee*, 1884, para. 4503.
[2] *Report on Railways in India*, 1870–1.
[3] G. Huddleston, *History of the East Indian Railway*, p. 58.

levied. The failure of traffic to rise up to expectations was, to his mind, due to the heavy rates charged. He rightly explained that the rate per mile might not seem large, but the low value of the commodities coupled with the long distance they were conveyed laid an intolerable burden upon their prime cost. He was confident that low rates would make traffic in India and that with judicious management the cost of transport could be reduced to an average of about one-third of a penny per ton per mile or one-half the then existing average of all lines.[1]

With the opening of the Chord line in 1871, the East Indian completed its work of construction. Its mileage was now 1,280 of which 400 was double and the rest single line. In the first half of 1871 it was, however, found that its traffic was again seriously declining; the tonnage aggregating 580,378 as against 700,804 in the corresponding half of 1870. A loss upon a railway was a loss to the state. The finances of the Government of India were not in too flourishing a condition, and it is therefore not surprising that they should have thought fit to investigate the causes of this decrease.

Two Committees were appointed, one for Bengal and the other for the North-Western Provinces.[2] Their conclusions were practically identical and afford us some valuable material for studying the methods and the policy of the railway and the character and strength of competition by boats.

It will be recalled that in 1870, the traffic in grains was exceptionally large in consequence of a famine in the North-Western Provinces, while in 1871, besides the normal falling off in the grain traffic, the export trade in oil-seeds had diminished. The merchants on the East Indian, therefore preferred the cheaper though more dilatory conveyance

[1] *Appendix to the Report on Indian Railways*, 1871–2.

[2] The local enquiry made into the falling off of the grain and seed traffic in the Bengal Division of the E.I. Railway during the first half of 1871. The report of the Committee appointed by the Government, North-Western Provinces, to inquire into the causes of decrease of the traffic on the E.I. Railway within the limits of the Provinces during the current year.

The East Indian passed through these two provinces and hence the need of appointing two Committees.

by the river. The inconvenience and impediments experienced by the merchants on the railway further aggravated the situation. There was an absence of sympathetic contact between the carriers and their customers. The latter complained and the Commissioners testified to its existence, that there was a loss from pilferage and rough usage of bags. There were inexcusable delays in supplying wagons, and not infrequently a gratuity was expected by the railway staff. There was an insufficiency of goods-shed accommodation at some stations. The traders experienced difficulty in obtaining compensation for petty losses and redress of reasonable complaints. The form of published rates was unnecessarily confusing and complicated.[1]

The operation of these causes should have made the Company cautious as to the charges they levied. Their proper policy should have been to remedy these evils and to encourage the declining trade by making concessions when feasible, and by offering other attractions. Instead of that, as the Commissioners remarked, they "administered the death-blow by raising the rates enormously." With the opening of the Chord line, a lowering of rates was expected, since it had shortened the through distance from Calcutta to Delhi by sixty-four miles. This did not happen. On the other hand, the boats reduced their rates by twenty-five per cent.

It is noteworthy that the Commissioners found some further advantages which attended carriage by boats. With low rates the risk of loss was slight, insurance could readily be effected at four per cent, while the immunity from pilferage and wastage was far greater than on the railway. Cargo by boat was taken right down to Calcutta and could be kept on it till disposed of. The railway carried the consignment only as far as Howrah, and thus there was the additional expense of crossing the Hooghly and of storage. There was the further advantage that the consignment on the boat could be sold at any of the intermediate towns where a halt was made.

Although the moral of the magnetism inherent in low

[1] *Vide* also J. Hector, *Land and Railways in India*, 1875.

ıarges and better facilities especially for cheap and bulky ·affic, was lost upon the railway authorities, a vigorous fort was made to reduce the cost, with the result that the perating ratio of the line came down to 38.66 per cent ι the first half of 1872, and to 37 per cent in 1873.

Nor was it the East Indian alone which ignored the latent ossibility which hid behind the transportation of the aples of the country at sufficiently low rates to enable ıem to move and find a market. The other railways were qually unenlightened as to the effect of a large amount of ·affic on their costs. They were deeply enmeshed in the oils of the "cost of conveyance" heresy. They ignored ıe fact that India was, unlike England, a poor country, nd whose traffic consisted mainly of raw materials which ould not bear any but a limited cost of transport. Now the price for transporting these was increased; it would ıevitably follow that the demand for them would be curailed and the amount of traffic would fall off. It is not to e wondered then that the Government Director often omplained that "railways have not conferred upon the ountry the full benefits, nor yielded the profits which ıey might have done." [1]

It is not intended to convey that the railway companies 'ere absolute advocates of high rates and fares. It was eally the practically unconditional guarantee of a high ate of interest which had stifled in them all initiative to ıake experiments in drawing traffic. They seemed to be bsessed with two ideas which were the foundation of their olicy; the lines must be made to pay from the very ommencement, and that the cost of conveyance was a xed and invariable figure. Competition, that great spur o effort and vigilance, was again absent. Consequently, ıey were instilled with an antipathy to lower charges 'hich would mean more work, more rolling stock, and a roportionately less profit per unit. Ordinarily, competition erves a twofold purpose: it fixes the limit to competition ccording to the cost to the marginal producer, and it 'eeds out the unfit from the field. The effect of the guaran-

[1] *Report on the Administration of Railways in India*, 1875–6.

tee, however, was to prevent the inefficient from going to the wall, and to encourage an artificial sense of safety under cover of which ill-managed railways existed.

There is another factor which must be mentioned in connexion with the policy of charging rates pursued by the companies, namely, the influence of the British railway practice. The officers who managed the Indian railways were trained on British railways, and were consequently inculcated with British methods and ideals. In India, in spite of the dissimilar features of the country and the needs of the people, they followed the British practice. The Boards of Directors of the railway companies as well as the Secretary of State, who could have acted as a corrective to this, suffered from the same drawback. The result was clearly reflected in the early history of Indian railways; and this malapropism not unnaturally delayed an adjustment of charges in India in accordance with the economic needs of the country.

Wherever lower charges were tried by the railways, either on their own or on the initiative of the State, the results were, however, invariably satisfactory both from the operating, and the profit-earning points of view.[1] In 1868, for instance, a famine occurred in Bengal and the Government thought it incumbent to order a lowering of rates for grains on the East Indian to $\frac{1}{8}$ pie per maund per mile. They were cautious not to fix the rate below what they considered the actual cost of transport. In order to recoup the Company for any loss that it might incur, it was stipulated that the difference between the normal rate and the reduced rate would be made good by the Government.[2] The result was such an expansion of traffic that the company reaped a good harvest of profit. So also, during the Bengal famine of 1873-4, the quantity of food-grains which moved as a consequence of the lower rates was remarkable. 750,000 tons of grains were delivered by the railway between Rajmahal and Arrah, so that "a dire calamity had been prevented from attaining the proportions of a fearful

[1] *Vide* Administration Report for Railways, 1876–7.

[2] *Gazette of India*, 11 January, 1869.

catastrophe."[1] In 1876, the famine again was responsible for enlarged traffic on many lines, and it was realized by them that with a greater tonnage, rates could safely be lowered, for by careful and observant management full train loads could be secured and wastage avoided. And it was thus that the innate viciousness of the principle of charging the highest possible rate, although it resulted in a limited amount of traffic, was gradually perceived.

(3) *The Period of Competition and Rate Adjustments*

In the period which we just examined, the two outstanding features were the excessive interference of the Secretary of State in the railway affairs, with the result that the Government of India were handicapped in exercising their authoritative control over the policy of the railways, both as potential owners of the lines, and as the guardian of public interests. The second feature was that under cover of the guarantee and the absence of inter-railway competition, the railways levied charges which were repellent to traffic. Again, the control of the Government was not sufficient, so that while they disagreed with the policy of the companies, all that they could actually do to remedy the situation was to urge them to experiment in the direction of lowering their charges.

Now, however, they left their inertia behind and made a studied and determined move to improve the unsatisfactory situation. In 1880, they issued a resolution in which the adoption of the maximum fare of two-and-a-half pies was advocated. In 1882, fully convinced of the high third-class passenger fare on the East Indian, they ordered its reduction from three to two-and-a-half pies per mile. They were conscious that the operating expenses on the line were exceptionally low, and secondly they had observed that the Great Southern of India Railway had reduced its third class fare to two-thirds of that on the East Indian with success.[2] The Agent, the Traffic Manager and the Chief

[1] G. Huddleston, *History of the East Indian Railway*, p. 67.

[2] The Administration Report for 1878–9, stated that the lowest fare on the Punjab Northern State line was 1·8 pies; on the Oudh and Rohilkhand, and on the Madras and South Indian Railways it was 2 pies per mile.

Auditor of the East Indian all strenuously opposed this proposal as uncalled for, and as against the the interests of the shareholders. The Board of Directors of the Railway were also against the step, and contended that since the traffic was steadily increasing, and there was a shortage of rolling stock and of traffic-handling facilities, a reduction in the fare would have untoward results. But since its purchase by the State in 1879, Government had a more plenary control over the railway,[1] so that the Company had to comply with orders and the reduced fare came into operation in 1882. The following figures testify to the wisdom of the action of the Government :—

		Numbers	*Receipts in rupees*
First half of 1880	..	3,802,743	45,51,966
Second half of 1880	..	3,497,621	43,40,205
First half of 1881	..	3,905,665	45,86,459
Second half of 1881	..	3,672,028	43,50,680
First half of 1882	..	4,645,468	55,76,367
Second half of 1882	..	4,407,108	43,61,734

The chronicler of the railway remarks, " the reduction was evidently a very sore point, but the results proved from the outset that it was fully justified. Since those days, the average distance travelled by each passenger has become still shorter, but this is due, not to reduction in rates, but to the greater number of people who have gradually been induced to take the rail for short journeys, instead of walking the distance, and also to the opening of the alternative routes." [2]

The year 1880 stands marked out in the history of Indian

[1] In the renewed contract with the company, the following clause was inserted, " the Secretary of State may require the charges for the conveyance of any mineral or mineral substance, or for any article of agricultural produce, over distances of not less than 300 miles, to any rate not below one-sixth of a pie per maund per mile for full wagon loads, and may also require the fare of passengers, conveyed in closed carriages with seats, to be reduced to any rate not below two pies per mile."

[2] G. Huddleston. *History of the East Indian Railway*, p. 116. *Vide* also Administration Report for Indian Railways, 1883–4. When the G.I.P. Railway was purchased by the State in 1900, the State followed a similar policy and had its rates, which were prohibitive, lowered to the great development of local traffic. Its higher maxima rates were also brought down on a level with those existing on the State railways, and its classification brought more into conformity with that on the E.I. Railway.

railways, for it saw the rapid and successful development of state lines; it witnessed the re-introduction of private enterprise in railway construction; and it dated the birth of the Railway Conference.

From the point of view of the development of rates and competition between the railways, the opening of the Rajputana Malwa State Railway was epoch-making. Even after the opening of the Suez Canal and the junction of the East Indian and the Great Indian Peninsula at Jubbulpore, inter-railway competition was negligible. It was the policy of the Government to avoid the construction of competitive lines as far as possible. But the commencement of the Rajputana Malwa and its junction with the Bombay Baroda and Central India Railway at Ahmedabad, brought about a keen competition between the lines leading to the sea-ports, awakened among them a desire to study what the traffic will bear, and ultimately made them conscious that cost was not a fixed quantity but varied with the volume of tonnage and the distance it was carried. Experiments with lower charges in course of time taught them the same lesson which was learned much earlier in America that rates which prima facie would mean financial embarrassment could be made profitable by developing large territories and increasing the volume of traffic. The desideratum of Government to have rates which the peculiar Indian traffic would bear, was to some extent fulfilled. Bombay was drawn nearer the grain-producing districts of the north and it was able to challenge Calcutta as the great outlet for the export trade of the country.

It is a matter of common frequency in the early period of railway expansion that the only way by which a new line can induce the traffic to move by it is by offering lower rates than those on the old line. The latter considers this act hostile, and in its turn lowers its rates to meet the new competition. A rate war thus ensues, and might degenerate into cut-throat competition until some agreement is reached between them or, unless the State interferes as in India, by the fixation of minima rates.

The Rajputana Malwa State Railway was built on the metre gauge and was opened for traffic on 1 January, 1881. The distance between Bombay and Delhi by the Allahabad-Jubbulpore broad gauge route was 1,234 miles; the distance via the Rajputana Malwa was 889 miles or 345 miles less. The distance between Delhi and Calcutta was 954 miles. The B.B. and the R.M. then reduced their rate for grain from Delhi to Bombay from annas 13 to annas 11 per maund. The rate between Delhi and Calcutta by the E.I. being 13 annas, the Calcutta Chamber of Commerce petitioned the Government of India against the lower rates to Bombay which naturally had caused a diversion in the direction of the traffic from the north-west, and prayed that the rate balance be restored. That the situation was fraught with misgivings for Calcutta admits of no doubt, and the figures in the Administration Report for 1881–2, show that the displacement of traffic in favour of Bombay, especially in cotton, seeds and wheat, was considerable.

The Government of India were doubly interested in the question, for the R.M. was managed by them, and the E.I. had become their property in 1879; while both the B.B. and C.I. and the G.I.P. were guaranteed and at the time had no inducement to fix their rates at a remunerative level. In their despatch to the Government of Bombay, they explained that it was immaterial how the surplus of the country found its outlet. They held that the railways were constructed to afford carriage "at the lowest rates consistent with yielding a fair and reasonable return on the capital laid out."[1] But the interests of Bombay were against this principle, and it was argued by it that rates based on mileage would be fair to both the parties, and would have the additional advantage of simplicity. The Government of India, however, impressed by the lower costs of working on the East Indian, concluded that equality or uniformity of rates under the circumstances would be unduly handicapping a line which, owing to its peculiar position, cost less to operate.

But the Secretary of State, with whom lay the final

[1] Despatch No. 1119. R.T. 26 December, 1881.

decision in the matter, viewed it differently. He saw no reason to impose artificial restrictions in the form of increased rates on either line in consideration of geographical advantages or other circumstances. He showed himself favourable to competition because of its tendency to lower rates. The managers of the respective lines, he stated, should be allowed a free hand to fix rates, subject to the control of Government in extreme cases where, owing to the secure guarantee, the companies might be induced to charge unprofitable rates. "I am disposed to think," he emphasized, "that the interests, both of the railways and of trade generally, will be better served by accepting the legitimate consequences of competition, regulated, as it necessarily will be, by the desire to apply skill and economy to the work of management." [1]

The decision has not been viewed with equanimity by the interests in Calcutta and it is their constant grievance that the existence of a uniform mileage rate ignores the natural advantages attaching to a railway; and that it presses with undue and unnecessary severity upon the eastern ports, such as Calcutta, which are served by railways working at a low cost, inasmuch as it forces these railways to charge needlessly high rates of freight, and that it consequently gives an unfair advantage to the western ports, which are worked by railways working at high cost, but which enjoy lower rates of sea to Europe.[2]

This decision of the Secretary of State necessitated an enunciation of the general principles upon which the railways should base their charges, and this took the shape of a Circular issued by the Government of India.[3] The salient points of it were, that as regards rates in general, the fundamental aim of the management of a railway should be to attract the maximum amount of traffic the line can carry, at the best rates obtainable. These rates must be deter-

[1] Despatch No. 132, Railway, of 19 October, 1882.

[2] Vide *Report of the Acworth Committee*, Vol. iii, para. 4633. Also G. Huddleston, *History of the East Indian Railway*. For a justification of the system *Vide* Ghose, *Monograph*, Chap. VI.

[3] No. 162, R.T., 2 March, 1882.

mined in each case according to the ability of the traffic to bear, the quantity of it obtainable, and the approximate cost of hauling it; and that the cost of carriage would be one of the limits within which rates may vary, the tax which the trade will bear being the other. In determining any particular rate, it was added, the whole circumstances of the traffic must be considered. The theory of equal mileage rates had been condemned by the Royal Commission of 1867, the Joint Committee of 1872 and the Ashley Committee of 1881; it was, however, held that tapering or telescopic rates were legitimate as a longer lead involved a lower proportionate cost. In case of monopoly, the fixing of rates was a simple matter, in which the State need only interpose for the purpose of fixing maxima in the interests of the public; but where competition was possible, the basis upon which the calculation of rates must proceed was materially changed. Capital cost of construction, gradients, cost of fuel and carrying capacity might be borne in mind as elements affecting the profits earned, but the rates must eventually be governed by the necessity of attracting traffic to the line. As to the point whether in case of competition between two railways in which the State was interested these principles could be held to be affected, it was maintained that they were not. Rival routes must be left alone to attract the largest traffic they can, and there would be no interference from the State except to stop ignorant, reckless or idle rivalry which would injuriously affect its interests.

Meanwhile, the problem of greater exports of wheat to England was engaging the attention of the Indian Government. In the 'forties and 'fifties, one of the advantages of railways in India, which carried weight with the authorities, was the cheap transport of Indian cotton. In the 'eighties, the need of a cheap supply of Indian wheat for the European markets was urged. When in 1881 there was a rise in the price of wheat in Europe, owing to the small supplies from America, expectations were held that India would be able to ease the situation. If Indian wheat, it was contended, could be encouraged, America could be made to come to terms with England and the Indian agriculturist would be able to market his produce with greater profits.[1]

The opening of the Rajputana Malwa Railway coincided with a large growth of export trade in grains, especially wheat, the new line being able to tap the wheat fields of the north. American competition was, however, very powerful, and its success directed the attention of the traders and of the railwaymen to the methods of freight transportation there.[2] In course of time, competition began to affect the rates even in India especially on the lines converging from the east and the west to the north.

Thus, the policy of the Government in constructing lines themselves, managing them efficiently and economically, and of lowering the rates for the carriage of the cheap staples, both with an eye to reasonable profits for the railways and the much-needed development of the railless tracts, seemed to be crowned with success. The one great motive which underlay the era of State construction and management was cheaper lines and the distribution of the benefits of the carriage by railway to the greatest number of men and goods. The aversion of the railway companies to charge rates which the traffic could bear and the absence of Government's control in this respect, must have added force to the Government's determination. The Rajputana Malwa Railway was, therefore, used to force down the rates on the competing lines. After studying the traffic conditions, it made reductions in rates which resulted in a great stimulus to traffic. The competing railways had to join in readjusting their rates so as not to lose their traffic. In the absence of adequate control over the private companies, Government had, therefore, to resort to the creation of a healthy rivalry between the lines in order to give relief to the passenger

[1] In the case of a commodity like wheat where the Indian supply is merely a fraction of the world's total supply, its price at Liverpool dominates the Indian price. It follows, therefore, that if the price of transporting wheat is reduced in India, the Indian producer is proportionately benefited.

[2] For a brief review of how the American railways were able to reduce their charges to a seemingly unprofitable level, see *Railroad Federations* and the *Relations of the Railroad to Commerce*, by Joseph Nimmo, Jr., 1885.

and goods traffic.[1] That these reductions in the rates of grain did not affect adversely the earnings of the lines upon which they were made, was testified to by Major Conway Gordon with the presentation of relevant figures.[2]

The policy of the Government was thus in a fair way towards accomplishment, and it seemed as if the great idea of Lord Dalhousie, the progenitor of Indian railways, was materialized. Over three decades had flown over his words : " Great tracts are teeming with produce they cannot dispose of. Others are scantily bearing what they would carry in abundance if only it could be conveyed whither it is needed." 10,832 miles of railways were since then constructed, weaving together the distant cities and ports of the country ; famine lines were laid out and many a community protected from that terrible visitation ; the internal and external trade was expanding ; the agriculturist was substituting more valuable for less valuable crops, since his produce was assured of a market ; coal, iron and other minerals, hitherto not properly exploited, were now mined and marketed in distant regions ; and this prosperity was reflected in the general enhancement of the land revenue.

In 1884, a Select Committee of Parliament was appointed to inquire into the question of the extension of railways for India. Incidentally they heard a number of witnesses on the policy of the Government and of the railway companies relating to rates. In India, the problem did not pertain to secret rebates or unjust discrimination either between persons, places or commodities, but that of a proper adjustment of the level of rates so as to attract on to the rails a large traffic that was already existing. In all directions

[1] It is worthy of note that it was the State railways and not the private railways which were showing a lead in the matter of competitive rates which increased the traffic of the country. The experience of India is thus strangely in contrast to that of other countries. Major Conway Gordon, in his evidence before the Committe of 1884, also stated it as his opinion that the zeal to make experiments with charges generally attributed to private companies was not true so far as India was concerned. He explained that it took a very long time before railways were induced to reduce their charges, and that not until a famine occurred and the Government reduced them from $\frac{1}{4}$ to $\frac{1}{8}$ of a pie, promising the companies to make up the difference themselves.

[2] Vide *Report of the Select Committee*, 1884, para. 4325.

it was proved over and again that the high level of rates was restricting the flow of traffic; while the competition of the indigenous means of carriage, while effective at some places, did not force down the railway rates. The attempt of the Government to induce the Companies to levy rates which would develop the trade in the cheap staples of the country, was not always successful. The Government may be said to have a permanent interest in the railways, while the shareholders of a private venture are merely temporary tenants, and consequently occasions may arise when the policy of the latter may conflict with that of the former to whom the test of a railway's success is the measure of its benefit to the community.

It seems strange that in spite of the grant of a guarantee and some other concessions to the companies, the Government of India had and should have so little power to control railway rates in the public interest. Yet the fact admits of no doubt, and was weightily substantiated by witnesses of every shade of opinion before the Committee. A not negligible factor in this situation may be sought in the existing relations between the Secretary of State, the Government of India, and the companies. The Secretary of State used his general powers of supervision and control over the Government of India in too many matters of detail, and frequently neglected to attach due importance to the view of the administration which was on the spot and in daily touch with the problems of the land.[1] He had entered into contracts with the companies, but even in their revision and modification, the Government of India were sometimes not consulted or their suggestions not accepted. To wit, the modification of contracts with the companies in 1868, and the renewed contract with the South Indian Railway Company in 1910—events of no small consequence—were entered into by him against the express disapproval of the Government of India. The position of the latter was made still more awkward by the constant appeals of the companies to the Secretary of State whenever they happened to differ

[1] For detailed exposition, vide *The Governance of British India*, by N. B. Mehta, Chap. I.

from the instructions of the Government of India.[1] Further, the contracts were so loosely worded that the companies subsequently turned them to suit their own interests.[2] In the contracts with the old guaranteed companies the Government evidently possessed, as they were intended to possess, a power of control over the rates and fares levied by the companies. But the pertinent clause was so construed by the companies as to suggest that once the Secretary of State had exercised his power, the right to any later control had come to an end until the profits of the companies had exceeded ten per cent.[3] Since the limit of ten per cent was scarcely reached by a company, it was tantamount to the removal of all control over the charges. The absence of Government control was and has been a weak spot in the administration of railways in India. Major Conway Gordon and Mr. Rendel both concurred in their conviction of the practical worthlessness of fixing the maxima,[4] the general reluctance of the companies to lower their charges, and the need of some real control upon them in the interests both of the community and of the companies themselves.

The views of the traders were not dissimilar. The regulative force of competition, they held, was for practical

[1] *Vide* the evidence of Sir William Meyer and of the Governments of Madras and of the United Provinces before the Acworth Committee. Testifying before the same Committee, the U.P. Chamber of Commerce stated, "Theoretically the control vested in the Board (Railway) may be adequate—the companies complain that it is excessive—but a general impression prevails among the public, rightly or wrongly, that in important matters the powerful London directorates, with great influence at home and with easy access to the Secretary of State for India, often prove too strong for the Railway Board."

[2] Vide *the Report of the Committee on the East India Railway Bill*, 1879.

[3] Evidence before the Select Committee, 1884, para. 4410. Also *Infra*, Chap. VI.

[4] Even in the later contracts the opportunity of reducing the maxima was not availed of. In the contract with the East Indian in 1879, the rate for minerals and agricultural produce, for not less than 300 miles, was fixed at one-sixth of a pie per maund per mile; with the Bengal Central in 1881 at one-third of a pie; and with the Southern Mahratta and the Bengal and North Western in 1882 at one-fifth of a pie. It was brought out in the evidence before the Select Committee, 1884, that the rates and fares prescribed by the Bengal Central without any power of reduction by the Government, were "most injudiciously high." Para. 4413. The experience of England was similar. By 1892 it was seen that the maxima were of little avail in preventing excessive rates. They have no place in the new dispensation and their purpose is served by other methods.

purposes non-existent, while the control which was vested in the Government according to the original contracts was unwisely limited in 1868, for with the high maxima fixed, their control to all intents and purposes was nil. They argued that Government ought to have the power of revising and fixing rates from time to time.[1] John K. Bythell testified that in 1881 the rates on the G.I.P. were increased from 3.36 per cent to 21.79 per cent, with the result that the area served by the railway was curtailed by ten miles on each side.[2] Other witnesses contended that since the railways were guaranteed Government should have absolute control over rates ; and further, that a railway Commission on the English model would prove a great boon to the traders.[3] The Committee, struck by the almost unanimity of evidence in regard to the existing drawbacks suggested that Government should keep with them "a power of fixing or from time to time varying the maximum of fares and rates, subject to adequate provisions to secure the interests of investors."[4]

The pronouncement of 1883, which came in the wake of the Calcutta-Bombay controversy was of too general a nature to ease a situation which was waxing complex with competition. Reductions in rates were practised everywhere with the idea of retaining traffic or capturing that of the neighbouring lines; spheres of influence were formed and were jealously guarded from encroachment ; and occasions for friction between the lines became more frequent. Movements towards amalgamations, leases and agreements were also more noticeable. The stimulus imparted to the grain trade had concentrated this activity in the North-Western Provinces. Yet elsewhere there was no lack of indications that the country was passing from a simple to a more complex stage of development. The Government received increased complaints from the railways touching the unfairness of rates and calling upon them to establish justice.

[1] *Minutes of Evidence before the Select Committee*, 1884, para. 2616

[2] Ditto, paras. 3364, 65.

[3] Ditto para. 2569. Also the testimony of Juland Danvers, Government Director of Railways.

[4] *Report*, para. 27.

In a period of about a decade a transformation had come over the railway situation. In the earlier period the lines were so disjointed and isolated that competition hardly existed, and charges were levied on purely local considerations. With the extension and junction of lines, their interests crossed the local bounds and as intermediaries they became interested in rates to distant ports and cities. They had ceased to be "chemins d'intérêt local" and had expanded into "chemins d'intérêt général." Under the circumstances, the erstwhile Government policy of the minimum of interference had to give way to a policy of greater definition and closer regulation of the powers of the lines.

It was at this stage, 1885, that the Government proposed the desirability of establishing a Clearing House for the Indian railways. They were undoubtedly concerned with the strong competition which the export trade had aroused, and had conceived the idea of instituting an independent Clearing House which would settle the disputes of the railways and work in the direction of unification and simplification of the classification. But the Secretary of State was not convinced either of its utility or of the insufficiency of the Government's influence under the contracts or as managers of the State lines to settle competitive rates. While the companies, with their fast-growing separatist tendencies were too jealous of their powers to listen to the proposal, which they dreaded as an invasion upon their liberty. And yet some line of guidance besides mere influence or the enunciation of broad principles was necessary. In 1887 consequently, the Government of India issued a resolution in which the following schedule of maxima and minima rates for goods was fixed :—[1]

	Maximum Pies per maund per mile	*Minimum Pies per maund per mile*
First Class	$\frac{1}{3}$	$\frac{1}{10}$
Second Class	$\frac{1}{2}$	$\frac{1}{2}$
Third Class	$\frac{2}{3}$	$\frac{2}{3}$
Fourth Class	$\frac{5}{6}$	$\frac{5}{6}$
Fifth Class	1	1

[1] No. 1446. R.T., dated 12 December, 1887.

The maxima rates have also been fixed in other countries as protection to the public from excessive railway charges. The minima were, however, peculiar to India; they were based on the average cost of haulage, their sole aim being to protect the State from reckless or ill-considered charges which a railway in competition may be tempted to impose under cover of the guarantee and imperil the financial stability of the State. They thus ensure the observance of the principle of charging not less than what the railway will bear.

The resolution explained that charges to the public may be divided into mileage charges and terminals. For the latter no maxima were fixed, but in case of dispute Government had the authority to fix them reasonably.[1] Within the maxima and minima complete latitude to any alterations by the companies was reiterated. The urgency of affording through facilities was insisted upon, all railway administrations were enjoined to aim at public service as if they were under one management and be contented to receive for their share of the through rate less than the ordinary local rate. Undue preference was condemned. The classification of goods existing on the East Indian was proposed for adoption by all, unless it was unsuitable, or was repugnant to the terms of the contract.

The resolution was no sooner promulgated than it was revealed that the schedule therein was taken objection to by the companies. In the rates for goods, except for the first class, the maxima and minima were the same, and it was rightly contended that the freedom of the companies to alter rates was, therefore, nil. Rates could only be changed by altering the classification, for the uniformity of which Government had all along been endeavouring. It was, therefore, decided to fix separate maxima and minima; but no alteration in classification was to be permitted without the sanction of Government.

[1] British experience on this point was found profitable. The attempts in Great Britain in 1861 and 1866, to fix a maximum for terminals had broken down because the maximum agreed upon between the railways and the traders was actually much higher than the existing charge.

The revised schedule was published in 1891, and was as follows :—[1]

	Pies per maund per mile Maximum	Minimum
First Class	$\frac{1}{3}$	$\frac{1}{8}$
Second Class	$\frac{1}{2}$	
Third Class	$\frac{2}{3}$	
Fourth Class	$\frac{5}{6}$	
Fifth Class	1	
Special Class	$\frac{1}{3}$	$\frac{1}{10}$

The problem of the level of rates on Indian railways was reviewed in the early years of this century by two railway experts who had travelled both in India and in America and had studied there the respective traffic conditions and the policy of rates. The light which they throw on the comparative level of rates in the two countries and their suggestions to remedy the situation in India are even to-day distinctly valuable. The problem of the comparative level of rates in the two countries, with dissimilar economic, social and physical environment, is one requiring the most delicate judgment and involves a minute valuation of a multitude of factors. These difficulties need not, however, evoke despair, and the result achieved, even though approximate, is likely to prove an important source of improvement and guidance.

Mr. Robertson in his Report [2] calculated that the actual payment made for railway transport in India was lower than in England; the proportion being 6.72 pies per ton per mile for merchandise in India to 23.76 in England; while for minerals, it was as 3.55 to 9.34. But after taking into account the different circumstances in the two countries, he came to the conclusion that before rates in India could be regarded as equal to those in England, the rates for merchandise in the former country should be lowered by from thirty per cent to sixty per cent, and those on coal by from forty per cent to sixty per cent. This was surely

[1] No. 56. R.T., dated 16 July, 1891.

[2] *Report on the Administration and working of Indian Railways*, 1903.

a large reduction which he suggested, but that it was not impossible of adoption could be gathered from the fact that despite the higher cost of construction and operation, the rate for merchandise in America averaged under 4,344 pies per ton per mile; while maize, under the stress of water competition, was carried at less than two pies. He argued that, considering the long distances, the rates in India were too high for the development of traffic,[1] especially those on coal which forced it to go from Calcutta to Bombay by sea. He further suggested that the rates in India should be on a tapering scale so that there may be a sufficient reduction in rates for long distances. For through traffic, he emphasized the suggestion made in the resolution of 1887, that the reduction in rates should always be applied on the whole distance and not merely on the local distance of the individual railway.

Mr. Priestley, in his report,[2] felt struck by the perfectly commercial manner in which the railway business was conducted in America, and yet with an eye to the general development of the country. The rates there were lower than in any other country, the average charge per ton per mile in 1902 being 5.08 pies; while it was 5.68 pies in India. In the same year the returns on the railways in both countries were 4.92 per cent, notwithstanding the fact that the American railways "charged very large sums to operating expenses which would be charged to capital in India." He agreed with Robertson that the success of the American railways was accountable to their low rates which had developed their traffic enormously. "The American railways," he went on to say, "make their income by small

[1] "If in America," says Weld, "transportation charges form such an important part of the difference between what the producer receives and what the consumer pays for perishable goods, the need of reducing the cost of transport in the Orient is very much greater, for three reasons: in the first place, the eastern countries have not the close reticulation of efficient means of transportation such as England and America possess; again, the bulk of the product of the Oriental countries is agricultural, and much of this product is perishable goods; also the heat of the climate causes the danger of deterioration of perishable goods to be much greater than in western countries." *India's Demand for Transportation*, p. 38.

[2] *Report on Organization and Working of Railways in America*, 1903.

profits per unit and large volume, while Indian railways make their income by larger profits per unit and smaller volume," a feature which, as noticed previously, has restricted the progressive utility of the "iron horse" in India. He noted that for approximately the same distance, the rates per ton per mile for grain were: On the North-Western, 3.14 pies, on the East Indian 2.92 pies, on the Bombay Baroda and Central India, 3.22 pies, and on the Great Indian Peninsula, 2.91 pies; the corresponding average American rates being 2.07 pies for export and 2.67 pies for domestic use. The average haul of the traffic was 158 miles in India and 131 in America; the advantage thus was on the side of the former.

The passenger fare by an ordinary car in America was 11.88 pies per mile, while in India the third-class fare was 2.33 pies , and was thus much lower than in the former country. But in discussing what the relative traffics could bear, he figured out that the wages of an unskilled American labourer were Rs.3.14.6 per day, and that of an Indian varying from Rs.3.12 to Rs.7.8 a month. By the expenditure of one day's wages the American labourer could travel sixty-three miles, while his Indian contemporary could do no more than 10 miles for them. In fact, therefore, the third-class fare was higher in India than in America. He concluded that if low charges were found necessary in America to ensure an adequate development of business, their need was greater in India, where the margin as well as "the whole sum available for expenditure by the multitude was so small."

During the war and after the trend of prices was upwards the world over. Railways, or for the matter of that, all communications, have a tendency to equalize prices and wages within a country, and create a more sympathetic bond between the distant territories of the world. Thus the rise in prices and wages in Europe had its effect in India. The operating expenditure increased fast, the earnings fell off and consequently it was decided to raise the charges on Indian railways.

Besides, this was the period which saw the final cessation of competition in rates and fares between the railways. After a long period of competition among themselves, they had realized the advantages of combination or agreement for the division of traffic and had practically mapped out their own spheres of influence. These two factors combined to make enhancements in charges necessary and possible; and these were effected from 1 October, 1916. Note must be made of the fact that the rise in the rates was effected for the most competitive traffic which was that to and from the ports.

In the meantime, the exigencies of the war had checked the expenditure of any further capital upon the railways, and the situation was aggravated by the difficulty of obtaining materials from England. Repairs and renewals were heavily suspended. Much material was also despatched outside the country to the field of war. The abnormal situation thus created was reflected in the increased operating expenses. In order to ease it, a curtailment both of passenger and freight services was decided upon, and this was accomplished in 1917 by raising the maxima for passenger fares, and imposing a surcharge upon the carriage of goods by railway.

The income out of the surcharge was treated not as regular railway revenue, but was taken over by the Government for their general purposes. The surcharge was further increased in 1921. The peculiar arrangement placed the railway companies in the unenviable position of having to collect a tax which brought no grist to their mills. The contention of the Government that it was a war time measure, and that an alteration in the general maxima charges, as demanded by the companies, would require an amount of attention which could only be bestowed after the war had terminated, carried no conviction with them. They complained, and with justification, that it was unfair to them and constituted a breach of contract on the part of the Government.[1] From the point of view of the traders

[1] *Report of the Acworth Committee*, Vol. I, para. 73.

the surcharge was equally objectionable, for they had to pay it as if there was an increase in the rates and yet they derived no compensating advantages which would have accrued to them had this revenue been expended upon railway property. The Government laid themselves open to the charge of imposing a transit duty upon the traffic for the general purposes of the country. From the commercial point of view they had appropriated money which should rightly have been applied for the maintenance and improvement of the property from which it was obtained, and of which, in fact, the railway stood sorely in need.

With the gradual resumption of normal conditions, the operating ratio again commenced to soar. While it had sunk to 45.12 per cent in 1917-18, in 1920-1 it rose to 65.54 per cent. The percentage of earnings on the total capital also began to fluctuate. While in 1918-19 it was as high as 7.53 per cent, in 1921-2 it came down to 2.75 per cent. Thus, for the first time after 1900, the railways were operated at a loss to the State. The general deterioration of the railway service and the rise in wages and in the price of the materials, compelled a stern facing of the situation. Charges, it was decided, must again be increased. A substantial rise in railway charges had already been accomplished in other countries. In India, on the other hand, the rise both for passengers and goods had only amounted to thirty per cent. The Acworth Committee, in their cursory review of the situation, remarked that the charges were not exorbitant; on the contrary, they thought that they were among the lowest in the world and that a general and substantial increase was overdue.

In 1922, the surcharge was replaced by higher maxima, thus affording hard-pressed lines to make both ends meet by re-adjusting their charges. While the commercial community was averse to any increase, it was realized by the Government that efficient service, implying certain and prompt conveyance, though it might involve a slightly higher payment, was preferable to a service which was liable to break down at the slightest pressure of increased traffic. The new schedule of maximum and minimum class rates for conveyance of the more important lines is as follows :—[1]

	Pies per maund per mile Maximum	Minimum
First Class	·38	·100
Second Class	·42	
Third Class	·58	
Fourth Class	·62	
Fifth Class	·77	
Sixth Class	·83	·166
Seventh Class	·96	
Eighth Class	1·04	
Ninth Class	1·25	
Tenth Class	1·87	

It will be observed that the former five classes with one special class are now increased to ten classes. This will permit of a better adjustment to be made in the classification of different articles. While the new schedule has enhanced the limit of rates by from fifteen per cent to twenty-five per cent, the railways are not charging anything like the maxima permissible.

During the period under review, the policy of charging rates underwent a significant modification. The Rajputana Malwa Railway heralded the introduction of a careful study of traffic conditions on the basis of which rates were profitably lowered. Competition had commenced and efforts were directed to capture extra local traffic. The other lines had to follow this method, so that a period of rate-cutting, especially for the competitive traffic to the ports began. The trade of the country re-acted to this stimulus. Nowhere, however, did these practices assume the unscrupulous and demoralizing forms which they did in America. Rate-cutting could not, and did not last long. Where combination is possible competition is neutralized. Realizing the futility of competition, and influenced partly, no doubt, by English precedence, the railways entered into agreements one with the other in the matter of routing and the division of traffic. The period of competition ended in 1916, from which date we may mark a spirit of reorganization, and a

[1] For coal the minimum is still lower and varies with the distance the consignment is conveyed. Terminal and short haul charges are extra.

not unnatural tendency to raise rates which had been cut previously. This tendency received an impetus during and after the war, when to meet newer conditions, rates were increased on all the lines.

(4) *Problems of Unification and Co-operation*

The marked individualistic tendencies of the railway companies have been responsible for divergent classifications and an un-uniform and complex tariff. Since the 'eighties, the Government have expressed themselves in favour of greater uniformity for the facility of through and long distance traffic. The lack of simplicity pervading the tariff of the East Indian was noted in 1872 by the two Committees which inquired into its rates policy. So also, on other lines the merchant was experiencing difficulty in making calculation of the charges on his consignments.

The urgency of a solution to this problem became so imperative that Government in 1876 called a conference of the traffic officers of the several railways. The main points which Government wanted it to discuss were the feasibility of a Clearing House for India, and the simplification and reduction of the goods tariff. Owing to famine the Conference, however, could not meet. A minor one met in 1879, and another in 1880; but the subject did not receive sufficient attention until 1887, when the Government themselves attempted to formulate a policy of guidance. "The various railway systems," they suggested, "should, as far as possible, serve the country as if they were under one management, and the dealer in country produce should not be hampered in his operations by the necessity to base his calculations on as many different scales of rates as there may be railways between the starting point and the destination." [1]

The Railway Conference of 1888, did not accept this view of the Government, and resolved that though the end was desirable, each railway should endeavour to make its own classification and conditions uniform with others as far as may be practicable. The resolution of 1887 was accordingly modified by the Government in 1888.

[1] No. 1446 R.T., dated 12 December, 1887.

In 1885, the suggestion of the Government of India for the establishment of a Clearing House did not meet with the approval either of the Secretary of State or of the various companies.

Mr. Robertson, in his Report in 1903 found that no headway towards uniformity or simplification of the tariff was being made, and reiterated the advisability of instituting a Clearing House for India on the English model.

The lack of any progress in this direction, it may be argued, has been, owing to the difficulties in the way of its achievement. It may be contended that in the different territories served by railways, the importance attached to the commodities may vary, and that, therefore, a uniform classification may tell upon the earnings of some lines. While undoubtedly this would be a serious obstacle in some countries, in India its force is minimized. For there a few of the staples form by far the most preponderant element in the carriage of practically all the railways. The real difficulty lies in the reluctance of the companies to move in the matter. They have put their interest always before the interest of the community they serve and have in that spirit looked with scepticism and distrust upon many a useful innovation suggested by the Government. Yet throughout the history of railways, we have ample evidence of the need of reforming the tariff for the easy movement and development of the trade.

Col. J. G. Medley did not overdraw the picture when, dwelling upon their attitude, he remarked that each guaranteed line had become " an imperium in imperio " and that " Government had often had a hard task to compel uniformity of action in the joint interests of through traffic. . . . The complication and want of uniformity in the goods classification of all Indian lines has been a subject of reproach and almost a standing jest to the public." He added that the most elaborate rules were framed about the carriage of articles which were of comparatively little significance to the railways.[1]

These views were endorsed by the successive Government

[1] Col. J. G. Medley, *Railways in Upper India*, 1884.

Directors of Indian Railways. As a result, in 1905, the Government appointed the Tariff Simplification Committee, which consisted of railway officers. Some uniformity was attempted by this Committee, and the Railway Board, accepting their Report at first put into effect the general classification as proposed by them. The commercial community, on being apprised of it, however, objected to the scheme on the ground that in securing uniformity the Committee had levelled the charges up and that it was, in consequence, detrimental to trade.[1] The scheme was, therefore, rejected by the Railway Board. Although the idea of uniformity did not materialize then, the railways are realizing, rather tardily, the advantages of it, and are working towards its accomplishment.[2]

In pursuance of the resolution of 1891, railways are not entitled to transfer goods from one class to another without the prior sanction of the Government. If any railway desires an alteration in the classification of any commodity, the procedure to be followed is to refer the case to the Classification Committee of the Railway Conference, who would forward the proposal, after consideration, to the Railway Board for their approval. The Secretary of State, however, possesses the power to make any alteration in it on his own initiative, although ordinarily he must give a three months' previous notice. It may be explained that the power which the Government of India possess in the matter of fixing the rates for parcels and luggage—for which there are no separate maxima and minima—is delegated to the Railway Conference Association. The public have no right of appeal regarding these from the decision of the Association. The Association has no power over rates and fares, which may be settled by two or more lines among themselves. The Association, in short, is mainly a consultative body framing regulations for the management of administrative details, and acts in an advisory capacity to the Government.

The problem of through rates has not yet been grappled

[1] See para. 4797 *Minutes of Evidence, Acworth Committee.*

[2] For tariffs which give rise to much delay and misunderstanding. *Vide* R. S. Chandrika Prasada Tiwari, *op. cit.*, p. 451.

with in a satisfactory manner by the railways. The provision of through facilities and tapering or telescopic rates is required and expected of the lines by the rules formulated by the Government in 1887, as well as by the Indian Railways Act, 1890, but the companies with their particularistic proclivities have not yet been sufficiently convinced of their benefits to themselves to act upon it. Each company, at the present day, gives the benefit of telescopic rates to traffic passing over its own line as far as the junction, so that traffic passing over two lines loses the benefit due to it if the rates were calculated as chargeable over one line.[1] This is anomalous in India where the bulk of the railways are the property of the State. It amounts to levying an indirect toll on through traffic and is detrimental to the development of commerce. This adds strength to the conviction that the policy of Government after 1880, until recent times, of handing over their lines to be managed by joint-stock companies, has not redounded to the credit of the country. The lack of development of certain areas and the absence of a better exchange of commodities between the south and the north, especially between the Central Provinces and the Madras Presidency in cotton, can only be explained as the result of withholding telescopic rates—*à base décroissante*—which imposes a burden which the traffic cannot bear.[2]

Both Mr. Robertson and Mr. Priestley drew attention to this impolicy, the former stating that according to the Railways Act, 1890, the railways were expected to offer lower through rates, though it was rarely done in practice. He also explained it as a potent factor in the high level of rates extant in the country.[3] The Indian Industrial Commission, in their Report harped on the same

[1] For exceptions *vide* Ghose, *Monograph*, p. 225. In India only a railway can demand a through rate. In England and in America both the trader and the railway are entitled to it. The Interstate Commerce Law requires the railway companies "to afford all reasonable, proper and equal facilities for the interchange of traffic between their respective lines," and it prohibits all devices intended to prevent the carriage of freight from being continuous from one place to the other. *Vide* also the British Railways Act, 1921, sec. 47.

[2] *Minutes of Evidence, Acworth Committee*, para. 2814.

[3] *Report*, sec. 195.

chord.[1] Even in England and America, where the railways are private concerns, tapering through rates are offered to the trader, for in the long run they work out profitably to the lines. So in India, tapering rates calculated over the whole distance on the different lines would, by increasing the flow of traffic and the prosperity of the country, prove equally beneficial to the companies.

Finally, but not the least, we should consider the influence which the community can bring to bear upon the management of the railways. It was explained elsewhere that the besetting sin of the Railway Board was its lack of touch with public needs and commercial opinion. The evidence before the Acworth Committee brought the same defect out into prominence as regards the relation between the users and the managers of the railways. That no railway undertaking can be successful unless there is a feeling of harmony and a sense of appreciation of mutual difficulties is an accepted postulate, and yet it cannot be over emphasized. Equally is it a truism that harmony and sympathy of interests are difficult to attain, for the interests of the trader or of the passenger, inspired as they are by ideas of personal gain or comfort, are often difficult to reconcile with the interests of management, especially if that management be guided primarily by its duty to its shareholders. For in the latter case, development of dividends is the essence of its being and the criterion of its success.

The feeling in India that railways which are leased by the State to the companies were managed out and out commercially and not as essential communications for public convenience, found evidence in the testimony before the Acworth Committee.[2] A caveat must be thrown in that the surgent spirit of democracy imputed crimes to the companies for which they were not entirely to blame. The Armageddon had disorganized the economic fabric of the nations and India and her railways did not remain unaffected. Furthermore, the condition of the national

[1] *Report of the Indian Industrial Commission*, 1919 (Cd. 1765), Chap. XIX.

[2] Also before the East Indian Railway Investigating Committee, 1871, and the East India Railways Committee, 1884.

exchequer and the uneconomical policy of the Government towards the railways were not a little responsible for the deterioration of railway property and service. Over these evils, railway companies had no control. At the same time, the policy of the companies did not a little to exacerbate a situation which was already uneasy. Under the shibboleths of lack of rolling-stock and the parsimony of the Government, they strove to shelter themselves for many of their own sins of commission and omission.

The public complained that the policy of the companies was one of unmixed commercialism, and that consequently they were indifferent to the needs and the aspirations of the public. The managers of the railways attempted to make out that the relations between themselves and the public were good and capped it by stating that complaints were few and these were satisfactorily attended to. The statements of the witnesses did not bear out this contention. The mercantile community explained the scanty number of complaints on the score of the prevailing feeling of helplessness and despair of remedy. The altitude of public agitation against company management, it was mentioned, could be gauged by the number of non-official resolutions in the Imperial Legislature.

The same conflict of opinion existed as to the need of raising charges. On one hand it was contended that the fares which were increased in 1917 were mainly for the purpose of restricting traffic, though it was admitted that an increase in earnings had thereby resulted. Further, that the value of the commodities had exceeded forty-four per cent, which was more than the increase in charges, so that the railways were still charging less of the value of merchandise than formerly. A rise in charges was unavoidable if a seven per cent return on capital was to be maintained.[1] The increase in average rates since before the war was comparatively less in India, being thirty per cent as against

Lt.-Col. E. Barnardiston, representing the Government of Madras, stated before the Acworth Committee that the South Indian Railway were very reluctant " to add to the capital of their line for fear of reducing dividends even temporarily." This meant inadequate facilities for dealing with traffic.

[1] *Minutes of Evidence, Acworth Committee*, para. 4056 *et. seq.*

one hundred and twelve per cent in England and eighty per cent in the United States.[1]

The claim of the traders was that while the railways must charge sufficiently to be self-supporting, they must not be worked, public property, as they were, mainly with a view to earning dividends like ordinary commercial concerns. They should aim at earning sufficiently to be able to balance working expenses and interest charges and a small surplus to ensure being on the safe side.[2] The two Madras railways were earning 9 per cent and upwards, which were "substantiatial dividends," and the Chairman concurred with this view.[3] Taking all the lines together, good and bad, their average earnings were found to be 6¼ to 7¾ per cent, which, it was argued, were very satisfactory for railways. This again includes the deficit on the military lines, so that if an adjustment of accounts were made and the deficit charged to the military budget, the earnings would show still better results.[4] And this is a perfectly legitimate attitude, for, as previously observed, strategic railways should surely be viewed in the same light as military fortifications and their expenditure debited to the military account. It was further urged that charges must not be increased until a deficit was proved, and after all the avenues of economy were exhausted.[5] The principle upon which the Port Trusts are worked was recommended for adoption on the railways. If a rise in rates was inevitable, much of its hardship, it was pleaded, could be obviated by a re-classification of goods, removal of anomalies, increase in the minima for comparatively costly articles, and enhancement after a careful examination of the rates to and from the ports.

These points are worth consideration. Railways, it is now acknowledged, could be run as profitable concerns not so much by raising their charges as by efficiency of manage-

[1] *Ibid.* 5499.
[2] *Ibid.* 4682.
[3] *Ibid.* 4688.
[4] *Ibid.* Vol. IV., p. 171.
[5] *Ibid.* The Southern India Chamber of Commerce represented before the Acworth Committee that they were not opposed to an increase of rates so long as it was not done as a means of earning larger dividends.

ment and economy of operation. It is by these means that American railways have been able to work with commercial success in spite of their low charges. This aspect of the problem has been neglected in India, but that sufficient scope in that direction exists is testified to in the Report of the Inchcape Retrenchment Committee.

One more failing of the Indian railways in the eyes of the commercial community is that classification and charges are frequently altered without intimation to the public. The Southern India Chamber of Commerce laid emphasis on the fact that they knew nothing of what was in view until changes were actually announced. They desired that in fairness they should be given an opportunity of representing their views before action is decided upon.[1] The grain merchants of Bombay complained that proposals for increase in rates or formulating new rules put forward before the Railway Board by the companies, were sanctioned without being placed before the public for the expression of its views.[2]

Since the contracts with the majority of the companies have still to run for a number of years, it was proposed by many witnesses on both sides that the institution of advisory Councils would go a long way in mitigating the present situation. In view of the fact that 95 per cent of the capital of railways has been raised and owned by the Government, it was claimed by the traders that the public were entitled to some share in the management of the property. Their difficulties, they added, should be discussed and settled across the table, instead of being delayed on the plausible explanation that they were referred to London or to Delhi. It must be added that on two of the railways, the East Indian and the Eastern Bengal, there were advisory councils, but their personnel left much to be desired. So that on the whole, there was really no machinery through the medium of which the railway managements could keep

[1] *Ibid.*, para. 4918. Classification cannot be altered without the sanction of Government. What was meant was that a number of special rates were withdrawn by the railway companies without notice, so that the ordinary class rates became applicable.

[2] Vol. IV., p. 183.

themselves in touch with the requirements of the public.[1]

Personal contact in the industrial dispensation engenders sympathy and sympathy is a psychological cure for many an evil. The public *en masse*, of course, cannot dictate policy to the railway executive except through the channel of their elected representatives in the parliament or legislature. But influence it could have by exerting pressure in representative advisory councils. The Acworth Committee realized the urgency of such bodies and pertinently illustrated it by stating that though in no country was the railway control more autocratic than in Prussia, still " it would probably be true to say that, in the generation before the war, the railways of Prussia were subject to less hostile criticism from their public than those of any other country." [2] They recommended a Central Advisory Railway Council to meet at the capital, and Local Advisory Councils [3] for all railways administrations. It was anachronistic that such a large public business should have been managed, until recently, without such councils. Their establishment now is but in conformity with prevalent zeitgeist, and they have already done much in educating public opinion and in creating a sense of unified interests between the railways and their patrons.

[1] *Apropos* the statement of the Select Committee of 1882 in England may, with greater force, be applied to the situation in India. " Private persons have often a great difficulty in approaching a railway company, and fail to seek for or obtain information which ought to be at their disposal. In the present relation of railway companies to the public, it is eminently to the interest of both parties, as it is the right of the public, that the dealings of the companies should not, like the dealings of private traders, remain a matter of private arrangement to be disclosed or not as they think fit, but that they and the reasons for them should be open to all the world."

[2] *Report*, para. 139. *Vide* also Schumacher in *State in Relation to Railways*. Railroad Ownership in Germany in Ripley's *Railway Problems*. *Report of the Board of Trade Conference* (Cd. 4677).

[3] See Memorandum regarding Local Railway Advisory Committee. Administration Report of Indian Railways in 1922–3.

CHAPTER V

COMPETITION AND RATES DISCRIMINATION

THE *raison d'être* of preferential and differential rates lies in the very nature of the railway business as it is conducted to-day. The three characteristics which explain and justify their existence are that the industry partakes of a monopolistic form ; it reacts to the law of increasing returns ; and its service is produced at joint cost.

Owing to the remarkable influence which the British railway theory and practice have had upon Indian railway management, and because British experience is the oldest and most typical, it would be instructive to trace the experience of Great Britain in the matter.

On the morrow of the construction of the pioneer railway there, an unforseen development presented itself which, while differentiating the new from the old modes of transport, imparted to it a practical monopoly. It was expected before its advent, that it would conform to the principles and methods prevalent on the turnpike roads, that the railway company would own the road-bed in the same wise as a canal company owned its canal, and that any individual could own cars and run them, as were the barges, on the payment of a toll. It was anticipated on the basis of this resemblance that competition would exist between the diverse carriers on the railway and thus prove instrumental in regulating their charges. This was, however, not to be : it was found that the most convenient system would be for the owners of the road-bed to supply the motive power and the rolling stock. This combination of functions at once differentiated the railway from the turnpike or the canal and virtually eliminated competition from that sphere.

It seemed as if sufficient scope for inter-railway competition did exist ; and the early legislators who combined a great faith in competition with an abhorrence of monopoly, strove to promote competition between the railways themselves, and between them and the canals. The one great advantage which, it was held, competition would bring about, was the establishment of reasonable rates. The ineffectiveness of competition was discovered quite early in Great Britain, and since then the prevalent belief has been that railways are essentially monopolies and should "both legally and adminsitratively be treated as such." [1] The recent increase of harmonious relations between the railways and the progress of consolidation and amalgamation among them has accentuated still further the existence of monopoly conditions in the railway service. It is acknowledged not only that it is a monopoly, but that in public interest it had best be conducted as such with the provision of state supervision and control over it.[2]

Now the object of a monopolist is to take advantage of the absence of competition and the consequent limitation of supply, to charge such a high price that the gain netted from the rise in price is offset by the restriction in business done. In fixing his price, he considers the intensity of the demand for the article, the capacity of the article or service to bear the charge, and also the possibility of some substitute entering the market. He can earn a high profit by charging a uniform high price, but it can be higher if he charges differential prices according to the capacity of his customers to pay. In some cases it may so happen that the charging of a uniform price would be unprofitable, while differential charging would prove remunerative. A peculiar outcome of the system of differential charging is that some of the goods may be sold at less than the average cost of production, without on the whole entailing a loss upon the monopolist.

The railway again is an excellent illustration of an industry

[1] Ripley, *Railroad Problems*, Introduction.

[2] Railway is called a monopoly, because at intermediate points upon it there is no competition. In certain respects, however, it may be held in the light of a semi-monopoly rather than a complete or an essential monopoly inasmuch as there is the possibility of competition by other railways or modes of transport; and secondly, its power of charging is limited by the State as well as by the operation of the law of supply and demand.

which operates according to the law of increasing returns or diminishing costs. Once a large capital is invested in the undertaking, it is comparatively less costly for it to handle a dense than a light traffic. For, since the capital costs and the fixed operating costs continue to be incurred whether a particular consignment be carried or not, it is permissible for the railway to carry it at a rate which covers its movement expenses and contributes even a disproportionately small share to cover the constant expenses. The railway, by the action of the law, is thus invested with the power of deciding whether an article shall pay a small or a large share towards the constant expenses and thus whether the rate upon it shall be high or low.

The railway industry again is large scale, involving an enormous permanent investment, and thus the costs of its various products or services are joint and incapable of mathematical allocation. When commodities are produced jointly, the problem of their price transcends the stage of simple competition and the price depends upon the intensity of demand for them. This feature thus invests the traffic manager with the power of delicately judging the ability of the articles to bear a particular charge—in fact, with the power of discrimination.[1]

The principle of discrimination thus resolves itself into charging what the traffic will bear. It is not inherently objectionable and is a feature common to all business, and its absence would be detrimental to the best interests of society. Equitably practised, it may be tempering the wind to the shorn lamb, and presupposes an unbiased consideration of the needs of society, and justice to the users and the owners of the railway. The antithesis of discriminative rates is equal mileage rates, the imposition of which would prevent the growth of the country. While perfectly legitimate discrimination has a prejudicial notion in the mind of the public because this power has been exercised in an empirical and often arbitrary manner by some of the

[1] Charging what the traffic will bear on the principle of joint cost, must be distinguished from charging what the traffic will bear on the principle of monopoly. Generally the former is in the public interest, the latter is not so.

traffic managers to strengthen the hold of capitalists and corporations upon business against public welfare.[1]

Discriminations may be classified into those between commodities, places and persons. Undue discrimination between commodities is neither so important nor so widespread as the two categories hereafter to be described. All commodities are classified in the classification lists of railways, and any departure from them without a justification is invalid. In certain countries classification is the work of the government, and no change in it by the railways without due sanction is permitted. Railways generally are, however, entitled to levy exceptional or commodity rates as differentiated from class rates, and thus they have a power still left to discriminate unduly. This species of discrimination is thus concerned with the relative rates on different commodities, e.g. between wheat and flour, oil seeds, oil cakes and oil, gur and refined sugar, etc., or between identical commodities if their weight, volume or the distance they are conveyed be not the same.

A more frequent practice is local discrimination, by which a charge is imposed which apparently conflicts with the principle of distance. Local discrimination is, in a way, based on the difference between fixed and variable expenditure. The traffic manager with a view to utilize more fully the unused capacity of his plant, is willing to take through traffic provided it pays its operating expenses and leaves a small surplus. Local discriminations may then be justifiable or may not be so, according to the facts of the case.

It is a common complaint of the traders that a railway, in a war for traffic against its neighbour, lowers its competitive rates to an unremunerative level, and that in order to recoup itself for this loss, it raises its rates upon the local traffic. The railway history reveals that the suspicion of the traders is well-founded and that such nefarious practices are of

[1] Dwelling upon the complex motives hidden behind discriminations, Marshall explains: " Some discriminations are paternal sacrifices for the benefit of weak industries, from which the railways hope to reap their rewards in due time. Some are strategical movements for the capture of traffic, which otherwise would not come to them ; and these occasionally have in the background an evil purpose of destroying competitive routes, in order to strengthen a monopoly." *Industry and Trade*, p. 481.

common frequency. A higher charge for the shorter distance on the face of it seems inequitable. Yet under the stress of competition conditions may so far alter that the charging of a higher rate to the nearer locality may not only prove justifiable, but positively beneficial to it and to its customers.[1]

Personal discrimination denotes preferential treatment to one trader to the detriment of his rival or rivals. Of the three forms of discrimination, this is the most insidious and demoralizing. It is incompatible with the democratic and equitable ideal of equality of opportunity to all, and tends to bring out the element of the friendly patronage of the railway in commercial success into undue prominence. It seems as if, under competition, a railway would show favour to all its traders alike so as to keep their custom and meet the competition of its rival; but, in fact, by personal favouritism the same goal is reached more effectively. It selects a smart trader with an extensive business and, by offering him concessional rates, enables him to capture or "scoop" the business. The trader is not concerned with absolutely low rates as much as with relatively lower rates than his rivals, so that he can undersell them. The railway again wants tonnage, and a single trader, who has been helped by secret concessions is more reliable for it than a crowd of traders who are likely to let out the secret of concessions and haggle for more.[2]

The interests of the railway and of the traders are diverse and opposite, based as they are on the elementary economic motive of self-interest. It is, therefore, idle to expect perfectly harmonious relations between the two parties. In India, the problem of discriminative rates has never assumed those proportions, multiform, intense and aggressive, which have been characteristic of America. In India, as in England, personal discrimination has practically had no place. Complaints of discrimination between com-

[1] See the classical oyster case in Hadley's *Railroad Transportation*, p. 116. H. G. Brown, *Transportation Rates and their Regulations*, chap. v, § 1.

[2] A remarkable instance of how personal discrimination resulted in fostering a huge monopoly and how that business dictated what rates shall be levied upon its rival, is given in Tarbell's *The History of the Standard Oil Company*, pp. 77–86.

modities have also been few and far between, while those of local discrimination, either in the shape of special export or import rates or breach of the short and long haul clause have been many and of long standing. But while complaints may reveal a lack of co-operation and understanding between the managers and the users of railways and may point to the urgency of some institution by which a closer *rapprochement* between the two parties may be reached, they do not *per se* signify bad faith on the part of the railways.

Competition is the most dynamic force which spurs a railway on to discriminate, and we have had sufficient proof of this in the history of Indian railways.[1] It was previously observed how competition was inconspicuous before 1880. The Rajputana Malwa Railway brought in the era of competition between the railways which lasted roughly till 1916, when they realized the benefits of mutual agreements in the matter of rates, routes and the spheres of influence. Yet even during the era of competition, the influence and the control of the State had prevented the lines from sliding into the demoralizing and destructive forms of competition.[2] The State has not permitted, so far as possible, the construction of competitive lines; it has laid down, off and on, certain wise saws for the regulation of competition in healthy channels, and softened its vagaries by fixing maxima and minima rates. While competition between the railways themselves is insignificant, that

[1] *Supra*, chap. iv.

[2] It cannot, however, be maintained that the power of the Government over the companies is adequate. We have the notable instance of the E.I. and the G.I.P. railways which waged an intermittent rates war with each other from 1881 till 1906, and rejected the offer of the Government to arbitrate between them. So significant was the case, that when cited before the Acworth Committee, its Chairman was constrained to observe that "the position seemed rather absurd that Government, the predominant partner, should look on while the junior partners were disputing." *Infra*, chap. vi.

It is also symptomatic of the insufficiency of Government's power over the railway companies that when the Acworth Committee visited Madras, the Agent of the South Indian Railway, nine-tenths of the capital of which is provided by the Government, was forbidden by the Directors of the Company to help the Committee except to give information on points of fact. Vide *Minutes of Evidence*, Vol. III, para. 6296.
Infra, chap. vi.

between the railways and the waterways or the roadways is still more so. As a matter of fact, the superiority of the former over the latter is so decided, that competition can only exist if the line be inconveniently laid, if it be congested, or if its charges be excessive.

Competition between the railways and the waterways, while not intense, has all along existed in some territories, and has given rise to doubtful railway practice. The case of the Tirumalavasal port has some striking features about it and deserves examination. It was cited before the Acworth Committee as showing the tendency among railway companies to crush water competition by unfair means.

Tirumalavasal, a port on the eastern coast of the Madras Presidency, seems to have competed successfully with the South Indian Railway for the carriage of rice traffic from the adjacent districts for export to Colombo by sea, until 1905, when, as a result of an agreement between the Railway Company and the British India Steam Navigation Company which used to call there, the boats of the latter company ceased to call at the port. The trade of the port, in consequence, was seriously crippled. While it exported 91,629 bags of rice to Colombo in 1903, and 58,418 in 1904, in 1905 its exports were reduced to 7,115. The port revenue showed the same tendency.[1] Not content with this, the Railway Company then urged upon the Government the need of closing the port altogether on the plea that Government had greater financial stakes in the railway, and that the competition of the port was robbing it of much revenue. The leading merchants of Tirumalavasal, on hearing of this, petitioned the Government against taking such a step. They stated in great detail that there were great facilities for husking paddy near the port and that there were special advantages in the export by sea.[2] They concluded that they had no confidence that the railway would continue to charge them the same rates, were the port to be closed.[3] The Government inquired into their grievance and found

[1] *Report of the Ackworth Committee*, Vol. III, pp. 136, 137.
[2] *Ibid.*, p. 138.
[3] *Ibid.*, p. 138.

that their representations were substantially correct.[1] Although the agreement was allowed to continue, the port was not closed.

As a result of continuous discontent of the traders, Government re-examined the situation. The examination revealed that the agreement was responsible for the decay of the port ; that owing to it all rice in the Tanjore district had to be sent by rail via Dhanushkodi or Tuticorin ; that the transport by rail possessed no compensating advantages in the shape of reduced freight or quicker transit ; in fact, merchants at Shiyali had to pay two or three annas more per bag for the transport by rail to Colombo, and that owing to the shortage of wagons bags of rice were being detained at the railway stations and stocked there in insecure sheds or in the open, so that there was considerable delay in the consignment reaching its destination.[2]

The case involves a number of considerations which are, however, not pertinent to our inquiry. Whatever the merit of the agreement, it was sanctioned by the State and hence, although not published for the information of the public, it was not secret. Nor do we consider the advisability or otherwise of protecting or encouraging transport by water. But we are concerned with this fact, that by an agreement between two transportation agencies, both of them public carriers, competition, which was beneficial to the public, was eliminated, and monopoly conditions favourable to the railway were created and were turned to its peculiar benefit.[3] Surely, the State should have provided that this agreement could not be turned to public disadvantage.

Another doubtful practice which has resulted from competition is the imposition of "block rates" upon

[1] The Government Officer in his despatch to the Government, stood for the geographical advantages of the port. He stated that were the port closed, it would be "an arbitrary interference with the natural trade of the whole of this tract of the country, the population of which, has adapted itself to the occupation and means of livelihood rendered available for them from generations under proper arrangements, the Customs revenue at the port may well be expected to go beyond half a lac, and I do not see that any case has been made out for allowing the sea-borne export trade to be carried by the railway to the great inconvenience of merchants and the bulk of the population." *Ibid.*

[2] *Ibid.*, p. 91.

[3] *Ibid.*, Vol. IV, Statement No. 38.

traffic.[1] While such rates are imposed elsewhere also, the term is peculiar to India. A block rate is a high rate imposed by the originating line upon traffic with a view to having for itself as long a lead as possible and preventing it from passing off to a rival or foreign route. It thus resolves itself into a problem of routing traffic and the issue is whether this diversion of traffic by a higher charge does or does not involve a breach of the long and short haul rule and hinder the normal flow of trade.

Far the most notable case of this character is the Broach case, and it brings out into clear relief the delicate points involved in the consideration of such a problem. Two hundred miles to the north of Bombay, near the confluence of the Narbada with the sea, lies the port of Broach whose entrepot trade can be traced to immemorial antiquity. The B.B. and C.I. Railway, which passes by it has not felt to any significant extent the competition of the indigenous sailing vessels. In 1908, however, this competition took a more active form when a Bombay firm started a steamship service between Bombay and Broach, further calling at Cambay and Karachi. The steamship rates were lower than those on the railway and so it happened that goods were brought from the north to Broach by rail and then shipped on to Bombay by boat, and vice versa. The mercantile community found the new service profitable as, in spite of a transhipment, it was cheaper than the railway service. But the railway company resented this competition as an encroachment upon its sphere of influence. A steady diversion of traffic to the new route was proceeding. The legitimate remedy for it would have been to lower its rates to the legal minimum to meet water competition. Broach might have lost the traffic, but the public might have got cheaper cotton. The railway, was, however, apprehensive of the effect of such a step upon its profits, and applied to the Railway Board of the Govern-

[1] This practice seems to have made its appearance with the competition on Indian lines. In their Despatch No. 55, March, 1890, to the Secretary of State, Lord Lansdowne's Government stated that "the multiplication of agencies was an evil to be avoided, and more especially as regards working companies which were always exposed to the temptation of trying to divert traffic into their own lines, and to block other lines by prohibitive rates." Cited by Horace Bell *op. cit.* p. 53.

ment of India to permit it to raise the classification for some of the competitive commodities, so that it might levy sufficiently high rates to render their carriage to and from Broach by sea unprofitable.[1] It was urged in justification that Government had greater pecuniary interest in the railway than in the steamship line.[2] Strangely enough, the Board assented to the proposal and subsequently on four out of the ten commodities block rates were levied.[3] Obviously they were levied in order to secure for the railway the longest lead possible for the incoming and outgoing traffic and prevent an intermediate station from diverting this traffic to the sea. The problem of charging a higher rate on a shorter than a longer distance cropped up, for an intermediate place was charged an excessive rate as the result of a change in the classification. In the case of sugar, for instance, its classification was raised from the first to the fourth class, thus increasing fourfold the railway's power of charging. This resulted in the prima facie paradox that it cost six times as much to carry sugar from Ahmedabad to Broach, an intermediate station, 106 miles as from Ahmedabad to Bombay, 310 miles.[4] In other cases the rates were enhanced by as much as two hundred per cent.[5]

The legality of the procedure was doubtful. Under contracts with the railway companies, Government are allowed to fix maxima and minima, but nowhere is it stipulated that "a special high maximum will be permitted for traffic to and from a particular station."[6]

It became unprofitable for the traders to patronize the steamship service, in any direction, and it was, therefore, taken off. The mercantile community then had a petition sent to the Railway Board through the Government of Bombay, protesting against their decision. In their reply, the Railway Board justified their action by arguing that

[1] *Report of the Acworth Committee*, Vol. I, para. 153.
[2] *Report of the Acworth Committee*, Vol. III, para. 5589.
[3] *Report of the Acworth Committee*, Vol. III, para. 5367.
[4] *Ibid.*, Vol. III, para. 4120.
[5] Resolution of Sir Vithaldas Thackersey in the Imperial Legislative Council, 1 March, 1912.
[6] *Vide* S. C. Ghose, *A Monograph on Indian Railway Rates*, p. 190.

railway administrations were universally allowed greater latitude when competing among themselves.[1] Even after the removal of the steamship competition, these block rates were retained by the railway on the added plea that competition by country craft still existed. The public continued the agitation for the removal of the block rates,[2] and finally in 1919, after ten years, the Railway Board recanted their decision and discontinued their sanction to the exceptional increases in the railway's classification.

The case like the previous one brings into prominence the need for an impartial commission which could entertain such complaints, inquire and advise the Government to decide upon them.[3] The Government, being financially interested in the railways, the decisions of the Railway Board might carry a suspicion of one-sidedness; that in order to justify its existence and show fair railway earnings, it might be induced to justify a practice among railways which ordinarily it would not do. The Broach case might offer such an example; for by false analogy it permitted and justified an unfair and a mischievous practice. The railway company was certainly entitled to meet the low rates of the sea route, but not to crush competition by

[1] *Ibid.*, Vol. I, para. 153.

[2] In 1912 Sir Vithaldas Thackersey brought forward a resolution in the Imperial Legislative Council requesting the Government to appoint a committee to inquire, *inter alia*, into the policy of railway rates and its effect upon the development of Indian industries and inter-provincial trade. Commenting upon the Broach case, he expressed wonderment if the State was justified in killing the port of Broach for its own revenue. He suggested that both the routes should have been kept open on fair terms and let the traders choose that which was more convenient to them. The resolution was not accepted by the Government, the President of the Railway Board expressing the opinion that a railway should not "be prevented from competing with sea-borne traffic"; that the high rates were necessary for securing sufficient profits to the company; and finally that under the existing contractual relations with the company competition and block rates could not be prevented by the Government. It may be mentioned that the mover of the resolution, in reply, explained that as regards the power of the Government to prevent the imposition of the block rates, para. 25 of the contract with the railway, 1907, says "the Railway Board may at any time require the company to quote over the railways comprised under the undertaking such rates in respect of the conveyance of passengers and goods to and from western ports lying between Karachi and Bombay inclusive, as may be necessary in the opinion of the Board to secure the carriage of trade to and from such ports on equal terms."

[3] *Report of the Indian Industrial Commission*, chap. xix.

unfair manipu'ation of its rates. While the Railway Board justified the action of the railway, it did not cite any instance in which the protective measure adcpted by a railway against water competition took the form not of reducing rates within its ordinary powers of charge, but of imposing block rates upon the railway route before the commodities reached the sea. What the imposition of block rates amounted to was that a public highway could levy upon one trader four times the tolls it levied upon another under identical circumstances, simply because the former preferred to forward his goods to the destination partly by another route which was cheaper.[1] The Railway Board had really no legitimate grounds upon which to base its justification for an increase of rates so as to divert traffic from reaching a port.[2] The intermediate rates were again prohibitory and exorbitant. It is noticeable that even after the steamship service was "killed" and the need of block rates had disappeared, the rates were retained in spite of public protests. In the situation the public had good grounds for their suspicion that the railway had removed a rival carrier from the field to create monopoly conditions on the strength of which it could levy a heavy toll upon certain articles; although the natural flow of the country's trade was thereby restricted. By preventing the carriage of these articles the block rates acted like tariffs between the port of Broach and the communities which lay northward.

The steamship company is willing to start the service again provided it encounters fair competition of the railway. It is apprehensive of block rates against which it acknowledges its inability to compete.[3] The Railway Board has failed to enunciate any clear policy so that western India is deprived of an alternative means of transportation.

The case of the Buckingham Canal affords many parallel features to the one just described. While no block rates were involved here, it reveals that the Indian railways possess practically an unchecked power in meeting competition of other modes of conveyance, and proves the need of a legally

[1] *Report of the Acworth Committee*, Vol. III, para. 5590.
[2] *Report of the Acworth Committee* Vol. III, para. 6318.
[3] *Ibid.*, para. 5327.

constituted body which would safeguard the interests of roadways and waterways, and introduce co-operation and co-ordination among all the public carriers. The Buckingham Canal was constructed at a cost of Rs.86,14,000 and provided cheap and easy communication between the town of Madras and five districts, including the important towns of Cocanada, Bezwada, Masulipatam, Ongole and Nellore. It was an efficient canal for transport purposes and was commonly used by boats of three feet draught and of as much as forty tons burden, and had an increasing trade in provisions, salt, food grains, firewood, building materials, coal, etc.[1] Since the opening of the railway, its long distance traffic had materially declined, so that although in ordinary years traffic upon it amounted to twelve and a half million tons, its revenue was insufficient to meet its working expenses, and a deficit of about Rs.20,000 was disclosed.[2] It, however, carried considerable quantities of salt and firewood, and was especially valuable in bad seasons as it connected the two fertile deltas in the north with the poorer country further south. The decline in its traffic was due to the competition of the railway which it was alleged was not fair. The details of the case are meagre. It was admitted by the railway that in order to divert traffic from the canal it put in force such low exceptional rates as to leave it a very small margin of profit. The traders took the view that this was another instance of the anxiety of the railways to kill competition of the waterways so as to be free to levy monopolistic rates. They were able to point out that after the worsting of the canal, the railway had raised its charges, so that " to-day, rice, chillies and firewood have to pay heavier rates than when competition by the canal existed." [3]

With the scanty materials at our disposal, it cannot be charged that the railway deliberately lowered its rates to kill competition by the canal. The subject of railway versus canal competition is still in a controversial stage, and we cannot say for certain whether traffic decreased on the canal because of deflection of rates by the railway, or

[1] *Report of the Acworth Committee*, Vol. III. p. 91, note 2.
[2] *Imperial Gazetteer of India*, Vol. IX, pp. 32, 33.
[3] *Report of the Acworth Committee*, Vol. IV, Statement No. 38

because it was the more efficient mode of transport. If the latter, the decay of the canal was, after all, beneficial to the community. But the railway cannot be permitted to arrogate to itself the powers of a public functionary and decide as to which one of the two means of conveyance was for the public benefit. Anyway, all these cases lend themselves suitably to an inquiry. The Acworth Committee expressed their opinion that the Communications Department suggested by them would be a fit body to undertake inquiries of this nature.[1] Further, they were not favourably impressed by the defence of the railway companies in the three cases above mentioned involving competition between railways and waterways and stated "the Broach case, though the most surprising, is not the only instance where railway companies have been accused, in dealing with water competition, of going or attempting to go to a length which seems to us indefensible."[2]

Block rates are not practised by the railways against water carriers only but are imposed against one another as well. For the motive underlying block rates is simple and easily explicable: it is but an expression of the desire of a railway to carry traffic as far as possible upon its own line and to hand it over to another when it can carry no farther. This is but fair, for a route is not unreasonable because it is proposed to hand over to the receiving company traffic only a few miles distant from its destination, although such company could receive it at a point further distant from its destination. It is clear that were there no alternative competing routes, the problem would not arise. Were the lines belonging to the State worked as a unified undertaking, the problem would cease to exist. If the railway carried the traffic to its destination according to the direction of the trader or by the most convenient route, little difficulty would be encountered. The existence of block rates signifies, however, that this motive, when translated into action, takes forms which are not always justifiable. Block rates in practice are the maximum rates permissible with

[1] The Indian Industrial Commission observed that the absence of a representative of waterways had enabled railways to prevent attention being bestowed on them. *Report*, chap. xix.

[2] *Report of the Acworth Committee*, Vol. I, para. 155.

oft-times a high terminal charge levied generally at junction points for the artificial diversion of competitive traffic. Their peculiarity in India is that as between railways they are imposed to direct traffic to the port served by one railway as against the port served by its rival.

To illustrate: two railways diverge from Nagpur, the Bengal Nagpur towards the east to feed the port of Calcutta, and the Great Indian Peninsula wending its way westward to Bombay. Grain is produced on the Bengal Nagpur and is marketable in both the directions; but if it were to be despatched to Bombay, the lead of the Bombay Nagpur would be shorter than if it were marketed to Calcutta. Apparently the traders prefer the former route and by that route would the grain go under fair competitive conditions.[1] But the Bengal Nagpur, intending to carry it to its own port, Calcutta, so manipulates its rates that the trader has the alternative of either sending his goods to Calcutta or paying high mileage rates to Bombay. It imposes block rates on grain to Bombay which consist of the maximum rate plus a terminal charge of eight pies per maund; while for the identical service on its own route, in spite of two terminal services, no terminal charge is levied and the rate is according to the ordinary schedule.[2]

The rates for grain from two stations, Drug and Raipur, on the B.N. line to Nagpur for Bombay and to Calcutta respectively, work out as follows:—

	Miles	*Total rate per maund* *As.*	*P.*	*Per maund per mile* *Pie.*
To Nagpur Junction for Bombay				
Drug	165	5	3	·38
Raipur	188	5	11	·38
To Calcutta				
Drug	537	7	9	·18
Raipur	514	8	3	·19

[1] This was admitted by the representative of the Bengal Nagpur Railway before the Acworth Committee, para. 4047.

[2] S. C. Ghose, *A Monograph on Indian Railway Rates*, p. 211. In India the imposition of terminal charges is absolutely left to the discretion of railway officials, and no sanction of the Railway Board is requisite therefor. If a complaint were made against the fairness of any terminal charge, the Governor-General might appoint a Commission to inquire into it.

It will be observed that the rates on grain traffic to Bombay are charged on a higher basis than to Calcutta; that they are further increased by the imposition of the terminal charges from which the traffic to Calcutta is exempted; and that although Raipur is nearer Calcutta and probably offers a larger traffic to the railway than Drug it has to pay a higher rate. The railway levies a higher charge for a smaller distance than for a greater under substantially similar circumstances. The competition of the G.I.P. Railway is said to be responsible for it, but the competition, to justify the practice, must be material and substantial, not conjectured. If it be explained that the railway acts upon the principle "Why sacrifice revenue when you can get a higher rate?"[1] then it implies that the principle followed by the railway is to charge the maximum that the traffic will bear irrespective of social considerations.

Let us analyse the case further. It appears that in spite of the block rates, the grain traffic continues to go to Bombay by reason of the cheaper steamship freight rates which are charged from it than from Calcutta. The maximum charge, plus the terminal, which the Bengal Nagpur levies then constitutes a veritable tax upon trade. India, having no monopoly of grain, these rates are paid, not by the foreign consumer, but by the Indian agriculturist. On the other hand, were the traffic successfully diverted to Calcutta, it would mean that the traders were compelled to send their goods, not by the route which gave them the easiest access to the market, but by the route which brought the greatest profit to the railway which happened to pass by their door.[2]

[1] *Ibid.*, p. 213.

[2] It is instructive to find that the Interstate Commerce Commission in the well-known Milwaukee case, 1909, enunciated a clear line of guidance, although the railways there are private property. It remarked that the railway company "cannot force its services upon a shipper or insist upon carrying his shipment to one market when he desires to reach another market. It has no right to insist that a shipment shall go to the end of its rails if the shipper desires it to be diverted at an intermediate point to another market off its rails, nor may the carrier accomplish these results indirectly by an unreasonable adjustment of its rate schedules with that end in view."

Vide H. G. Brown, *Transportation Rates and their Regulation*, chap. x, §. 2.

This is not an exceptional instance where excessive or prohibitive rates are levied by railways. So far as they are within the maxima and minima fixed by the Government, they are not illegal.[1] But that is not synonymous to saying that they are reasonable, or, in the public interest. The State ought to see that competition between public carriers, if at all permitted, takes place on a plane consistent with public morality. The stronger and more compelling is the duty of the State to see to this where, as in India, the railways are its own property. The practice of block rates does not savour of healthy emulation ; it is more like a scramble of managing companies—companies whose profits are assured, but whose interests are divergent—to capture the same traffic. Whichever company gains the State can be no gainer, and it is not inconceivable that, acting like a tariff wall the block rates restrict the normal flow of traffic in the country. The practice is objectionable. The need for a good law of undue preference to stop it clearly emerges into view.

The problem which has exercised the public mind more intensely is the alleged policy of the railways of giving specially favourable rates to the export and import traffic. "The inequitable working of the railway rates," deplored the United Provinces Chamber of Commerce, "has been the greatest grievance of the Indian industries against the railway policy. The rates are so framed as to favour the import of manufactured goods into the country and the export of raw materials out of it."[2] This problem is germane to the problem of block rates, for it is alleged that one of the motives of the lines underlying the imposition of block rates is to encourage export and import traffic on their own lines. This class of traffic is particularly remunerative as it gives them a long lead with a heavy load. It is contended that in doing so the interests of the local traffic are neglected, and the concessions for the carriage of foreign merchandise

[1] The British Railway and Canal Traffic Act, 1894, required a railway company to justify any increase in rates, and the mere fact of these rates being within the prescribed limits was not sufficient. In Germany and in Austria, all exceptional rates "must bear the approval of the Government as a public certificate of good moral character."

[2] *Report of the Acworth Committee*, Vol. IV, p. 225.

enables it to compete successfully with indigenous products. The indigenous industries, being infantile, are by their very nature unable to take advantage of concessional rates or to stand the competition of foreign articles. In short, that this practice involves undue discrimination against local industries, which is prejudicial to the industrial development of the country and results in a breach of the short and long haul rule. Considerations of a diverse character enter into an understanding of this problem. Again, for lack of judicial decision, our task must be limited to unravelling the cases and balancing relevant factors.

The low industrial level of the country and the protectionist proclivities of the people have aggravated the situation and turned it into a festering sore. The absence of advisory councils had widened the breach between the railway management and the public and a lack of mutual understanding had been the basis of many a complaint of the trader. But more potent than all the absence of an impartial body before which the sceptical trader could go and lay his case of unfair treatment by the railway, had prevented dissemination of the methods of railway rating among the public, and had resulted in the use of arbitrary power by the railways. Such a Commission is provided for by the Railways Act, but owing to the "cumbrous and inept" procedure of setting it up, it has never been appointed. Such a body would have evolved from its own experience a set of principles in harmony with the economic relations and tendencies of the country and would have achieved a closer *rapprochement* between the trader and the railway.

Starting from the advent of railways in the country, two distinct streams of traffic have been discernible: the raw materials making their way to the ports for export, and the imported manufactures going from the ports into the interior.[1] This has been by far the most important current of traffic in the country, and the situation is substantially true to-day. Lord Dalhousie, the father of Indian railways, had correctly visualized the need of the country, and it is clear from his minute that he desired to develop the exports

[1] *Report of the Indian Industrial Commission* (Cd. 1765), chap. xix.

of raw materials and the imports of manufactures. This was highly beneficial to the country, and the policy was sedulously fostered in later times. The railways also found this policy advantageous as, in those days when they were hungering for traffic it gave them a steady stream of heavy and long-distance traffic. Thus arose the formation of special rates for this sort of traffic.

It is true that a large volume of traffic carried over a great distance is more economical than local traffic consigned in small quantities for a number of short-distance stations. Therefore a railway ordinarily wishes to extend its long-distance traffic. But if this is to be carried, it must be offered special rates. For it stands to reason that a consignment carried a thousand miles cannot bear the same mileage charge as another commodity destined for ten miles. The long-distance traffic hence must be treated like cheap and bulky articles which cannot bear a high rate. From the point of view of the difference between fixed and variable expenditure, any rate on through traffic which pays more than the operating expenses is profitable.[1] The export and import traffic in India was of this description. Competition between the railways feeding the various ports again led to a decrease in rates for this class. This tendency got an impetus from the competition of boats on the Ganges and the Brahmaputra as well as those engaged in the coastwise trade.[2]

The gradual transformation which is coming over the industrial life of the people has undoubtedly been accelerated by the railway. The cheap carriage of raw materials, labour, and machinery and the possibility of extensive distribution of the manufactured products have resulted in the establishment of factories and workshops; and articles which were largely imported a short time ago are now produced in the country itself. The economic life and needs of the people have changed. It is no wonder then

[1] But the difference between a car-load and less than a car-load rate must be proportional to costs. Even this cannot be observed as a universal rule; for car-load rates may lead to create or foster monopolies much against the interests of society.

[2] *Report of the Industrial Commission.*

that the old policy of the railways has clashed with the new interests of the people. It is an accepted view now that the unconsidered policy of encouraging exports of raw materials and imports of manufactured products is detrimental to the interests of the country; since on the one hand the home manufactories—except at the port towns—are not able to obtain the raw materials which they need on terms relatively as favourable as those which the exports receive; and on the other the preferential treatment to imported manufactures enables them to compete successfully with indigenous wares.[1] In both ways the progress of the country is retarded. The railways must shift their angle of vision so as to fall into line with the economic and commercial needs of the people. It is pointed out that while railways must be worked as commercial undertakings, it must not be overlooked that they are an important organ of national life and must subserve rather than dominate its interests.

There is the other side which cannot be neglected. It may be stated *ab initio* that special rates upon goods imported or exported as against rates upon goods destined for home consumption do not exist in India. Thus cotton to Bombay for consumption in the local mills is given the same rates as cotton carried to Bombay for export. It must be reiterated in judging the complaints of the traders, that a great many preferences are given everywhere by railways, for instance to a man who gives tens of tons over another who gives a few tons; to a man whose consignment is a car-load or train-load as against another whose consignment is less; or to a man whose consignment is properly packed as against another whose consignment does not meet this stipulation. These preferences cannot be termed undue or arbitrary so long as they are based on the difference in the relative costs of handling, are published, and are avail-

[1] When asked to give an instance of the manner in which railways had endeavoured to encourage traffic to and from the ports rather than internal traffic, Mr. Ghose explained to the Acworth Committee, that when a new line was opened, special rates for the staple produce of the district were quoted to the ports, and similarly for return traffic from the ports. He admitted that if attention was drawn to the inequalities arising as regards internal traffic, they were sometimes adjusted, but that complaints were not dealt with in all the cases. Para. 4444, Vol. III.

able to any consignor who fulfils the necessary requirements. Whether preference is due or undue is a point not of law, but of fact: it hangs upon the merit of the individual case.

The Indian law of undue preference, although modelled on the British, is not so definite in scope. The Railways Act, 1890, Section 42 (2) says: "A railway administration shall not make or give any undue or unreasonable preference or advantage to or in favour of any particular person or railway administration, or any particular description of traffic, to any undue or unreasonable prejudice or disadvantage in any respect whatsoever." And further Section 43 reads: "Whenever it is shown that a railway administration charges one trader or class of traders or the traders in any local area lower rates for the same or similar animals or goods, or lower rates for the same or similar services, than it charges to other traders or classes of traders, or to the traders in another local area, the burden of proving that such local charge does not amount to an undue preference, shall lie on the railway administration. . . . In deciding whether a lower charge does or does not amount to an undue preference, the Commissioners may, so far as they think reasonable, in addition to any other consideration affecting the case, take into consideration whether such lower charge is necessary for the purpose of securing, in the interests of the public, the traffic in respect of which it is made." [1]

The match industry in India is in an infant stage, and the special rates which, it is contended, are given to foreign imported matches, work against its development. Animadverting on the railway policy, Sir Vithaldas Thackersey alleged that as a rule matches from Calcutta, Bombay, Karachi and Madras were quoted favourable rates, while match factories in the interior had to pay higher rates.[2] The North-Western Railway, for instance, quoted special mileage rates to imported matches from Karachi, while matches from Ahmedabad, where there was a match factory, were carried at higher rates, being placed in a higher classi-

[1] *Vide* Appendix.

[2] *Proceedings of the Governor General's Legislative Council,* 1912. The Indian law does not provide against preferential rates offered to foreign goods as does its British model in clause 2, section 27 of the Act of 1888.

fication. The Bombay Baroda and Central India Railway gave a special rate below the second class to imported matches from Bombay to Delhi, while matches from Ahmedabad for the same destination were charged fourth-class rates. It is doubtful if foreign matches required concessional rates. The distance from Ahmedabad to Delhi is shorter by about three hundred miles than that from Bombay ; yet the charge from both these places was the same, namely, Rs.2.11.11. per maund. The rates seemed to have been fixed in inverse proportion to the natural advantages of these cities apparently with a view to equalize commercial conditions. The distance factor was ignored. Now, while it is not true that costs vary in exact proportion to the distance, it is true that the greater the distance, the greater the costs of carriage. The railway, in defence, pleaded that the quantity carried from Bombay was greater than that available from Ahmedabad ; and secondly, that the Bombay rate was decided by the East Indian Railway rate to Calcutta—a rate which was depressed because of competition by river transport. The Bombay rate was thus a resultant of competitive forces which did not exist at Ahmedabad.[1]

Two distinct problems were involved in the case. Were the circumstances such as to justify the charging of the same rates to two localities unequally situated ? No geographical advantages can *per se* be held sacrosanct ; for the aim of all transportation is the annihilation of distance. Maintenance of original differences of situation would imply equal mileage rates, which would fortify the monopoly of the situation to the detriment of the commerce of the country. On the other hand, a railway cannot be allowed to override differences of distance arbitrarily, for that would be tantamount to governmental power. It would then be able to discriminate unduly and decide where a particular industry should be concentrated. The second problem was whether the lower mileage charge accorded to imported matches from Bombay was necessary in the interests of the public. This is a wider consideration and is founded on the fact that the railway, unlike a merchant, has public obligations and

[1] *Report of the Acworth Committee*, Vol. III., para. 5580.

hence cannot treat its charges merely as a commercial question.

The merchants of Ahmedabad complained, and after ten years of agitation, the Ahmedabad rate was reduced to Rs.2-2-11 per maund, while subsequently the Bombay rate was increased to Rs. 3-7-2 per maund. During this long period, it was complained, the geographical advantage of Ahmedabad was discounted and its infant industry suffered a temporary set-back. The preferential rate, it was complained, was tantamount to giving " a bounty to the foreign manufacturer equivalent to the whole cost of carriage between Bombay and Ahmedabad." Special rates for matches from the ports still exist.[1]

There is again the oft-criticized case of sugar. Imported refined sugar conveyed from Bombay to Cawnpore, 840 miles, was charged Rs.0-13-6 per maund, while indigenous sugar consigned from Cawnpore to Akola, 649 miles, was charged at the rate of Rs.1-2-4 per maund. Refined sugar, mostly imported, consigned from Bombay to Barsi was charged Rs.0-6-0 ; while jaggery, which is inferior and rough indigenous sugar, was charged Rs.0-9-9 or fifty per cent more from Barsi to Bombay.[2] It was deprecated that while the Government and the people were anxious to revive the sugar industry, and were spending vast sums for that purpose, the railways were imposing upon it a heavier burden and thus retarding its growth. Not only were lower rates offered to foreign sugar as against home-made sugar, but even as against gur or jaggery, a much less valuable product and largely consumed by the impecunious masses.

It would be fallacious to argue that the industry is

[1] *Ibid.*, 5514. A general consideration may here be stated. If the local industry be inefficiently managed or unsuitably located, any concession to it in rates is merely putting a burden upon the railway and the public, and it would then be beneficial to import the goods. Again, it may be that by co-operation or by better organization the local producers of the goods can be made to despatch large and regular consignments and so to receive from the railway the same favourable terms which foreign consignments receive. Regarding British experience in the matter of preferential rates, *vide* the report of the Board of Agriculture, 1906 (Cd. 2959).

[2] Speech of R. B. Mudholkar in the Imperial Legislative Council, March, 1912.

decaying solely owing to the policy of railway charges. There were some important factors which combined to make sugar production in India an unprofitable enterprise. That is not germane to our inquiry, we are concerned to find if preferential railway rates were offered to foreign sugar, and if under the circumstances they were reasonable and in the public interest. That the sugar industry has fallen upon evil days is indisputable. Vasco da Gama, in the fifteenth century, remarked how a flourishing trade was carried on in Indian sugar from Calicut to Europe. Not long ago, the sugar of Kotchandpur, Keshabpur, and Manickgunj in Bengal, and of Kashi was well known. Between 1884-5 and 1913-14, the imports of foreign, bounty-fed sugar increased from 79,638 tons, valued at 2 crores, to 890,869 tons valued at 15 crores. *Pari passu* the area of land under the sugar cane declined from 3,100,232 acres in 1891-2 to 2,410,141 in 1911-12.[1] The sugar industry was thus fast declining and no causal relation could be traced between it and the railway rates. But it is striking that the large imports of Java sugar coincided with the lower rates accorded to it from the ports of Calcutta and Bombay in 1904, and still further in 1905, following upon competitive rate-cutting by the E.I. and the G.I.P. railways.[2]

It is manifest that if lower mileage rates are offered to sugar from Calcutta which is foreign, than to the home sugar from Cawnpore, say to an intermediate station, Cawnpore sugar would not be able to stand in competition with foreign sugar and it would be ousted from its market. And herein lies the irony of the situation : it is the weaker members of the community who stand in need of concessional rates and yet it is the more powerful who get them. In the present case, it may be pleaded in defence, that the imported sugar was accorded lower rates because it was heavy and long-distance traffic, and such traffic costs less to handle than many small consignments destined for local stations.[3]

[1] *Vide* Resolution of Rai Bahadur Sita Nath Ray on the Indian Sugar Industry in the Imperial Legislative Council, 17 March, 1915.

[2] *Report of the Indian Industrial Commission*, chap. xix.

[3] *Cf.* The famous Southampton case in England, E. A. Pratt, *Railways and their Rates*, p. 112, H. W. Disney, *The Law of Carriage by Railway*, pp. 285, 286.

But this was not so in the present case. Special rates to imported sugar were quoted not on wagon-loads, but on actual weight, so that it could be carried to stations which could not afford a wagon-load. For instance, while special rates for sugar in small lots were given from Karachi to certain stations, no such rates were available from Amritsar or Gurdaspur where there were sugar works. Again, foreign sugar was conveyed at railway risk, so that in many cases these rates were lower for a like distance than those charged to indigenous sugar even in wagon-loads and at owner's risk.[1]

In the case of a country like India where the exports are in heavy and bulky commodities, and the imports in light and small ones, it is recognized that the rates on imports may be exceptionally low, so as to induce the movement of traffic in the direction of empty cars, provided these rates covered the costs incidental to the actual movement of the traffic. This is a salutary principle inasmuch as by equalizing the flow of traffic there is a greater utilization of the rolling-stock with the concurrent elimination of non-paying car movement. In fact, it is a good criterion of efficient management. This is an important consideration; but it loses its force in the case of Calcutta because in consequence of the coal traffic the flow of empty cars is from the north and the north-west towards Bengal. It might, then, have proved profitable to the railways to quote specially low rates for sugar from the United Provinces and Bihar to Calcutta. Lower rates to imported sugar cannot then be justified on the basis of a difference in the cost of service. Further, there is the economic consideration whether the reduction in rates on imported sugar benefits the ultimate consumer, or is appropriated by the manufacturer or the middleman; and whether any of these persons really need the concession. The prime cost of sugar in Java was calculated roughly at Rs.5-8-0 per maund, while its selling price in Calcutta was Rs.11-4-0. The steamer freight was inconsiderable. It seems then, that rates on imported sugar were lowered not because the article was in need of them, but because of railway competition as admitted by the

[1] S. C. Ghose, *op cit.* p. 230.

railways themselves.[1] "Even if the rates for Java sugar were maximum rates, the railways would not have lost the traffic, but the profits of the Java producers would have been less." This step would have proved equally beneficial to the railways, the home industry and the State.

Finally, there is herein involved the consideration of the State policy. It is a controversial point as to how far should fiscal motives be permitted to influence the policy of rates. It is generally preferable to keep the railway business aloof from extraneous implications, for it is the experience of many democratic countries that politics corrupt the railways and the railways corrupt politics. But this generalization cannot imply that railways could be permitted to pursue their policy irrespective of its effect upon the broader policy of the community.[2] Reverting to our case, the State in India had resolved to protect the infant sugar industry and with that aim had levied a duty of five per cent upon all imports of that article and a higher one upon bounty-fed sugar. The policy of the State was to shut off foreign sugar from the home markets to some extent so that the indigenous industry might receive some protection. By offering preferential rates to foreign sugar then, the railways were obviously pursuing a line of action which was short-sighted and contravened the intention of the legislature.

Gur, as compared with sugar, is a semi-manufactured competitive article and its market price was less. It was available in large loads and the risk of its carriage was not higher. It is not contended by the railway that sufficiently strong competition existed to justify the discriminative rate

[1] *Ibid.*

The Agent of the G.I.P. Railway testified before the Acworth Committee that the rates from Nagpur were determined by the B.N. Railway competition, and if that railway would agree to put up their rates to Calcutta, the G.I.P. Railway would do so for the Bombay rates.

[2] In accordance with section 43 (2) of the Indian Railways Act, a railway must not charge a lower rate to a traffic unless the acquirement of that traffic be also in the interest of the public.

"Then the question of unequal preferential treatment really resolves itself into the old question of protection *v.* free trade?—Yes, it does, the railway company acting the part of a providence, sometimes beneficent and sometime maleficent." *Report of the Select Committee on Railways n Great Britain*, 1882, para 392.

from Barsi to Bombay. It should have been offered lower rates, for in general the greater the value of the article, the greater the rate should be. If the lower rate for the more valuable article was reasonable to the carrier, the higher rate for the less valuable article could not have been reasonable to the trader.[1] An equal charge with sugar must have restricted its movement and proved a hardship to the poor consumer and a handicap to the manufacturer of refined sugar in the country.

Closely related to the above problem and in many cases incidental to it, is that of charging a higher or an equal rate for a shorter distance. If the first be justified then this practice, which is involved in the first, stands also unimpeached. A breach, however, of the long and short haul principle is *prima facie* evidence of undue discrimination, because distance, expressing as it does a difference in the cost of service, is regarded as a factor in rate making. If rates do not increase with the distance travelled, it should be incumbent upon the railway to justify the departure. In actual practice, discrimination in favour of the longer distance may be necessitated in the interest of the intermediate station. Competition, direction of traffic, gradients and a multitude of other factors must enter into its consideration. It may be revealed that were lower rates not offered to the longer-distanced traffic, it would be lost to the line and the result would be that this loss would have either to be recouped from the intermediate traffic in the shape of higher rates, or else the service would have to be taken off altogether.[2]

The only line of guidance on this specific subject is found in the Resolution of the Government of India, 1887, which said, " The question whether the charging of a lower or an equal rate for a longer than for a shorter distance does or does not constitute 'undue preference' appears to be at

[1] The possibility of divergence from this rule must be recognized. The Interstate Commerce Commission once permitted a lower charge upon finished and, therefore, more valuable furniture than upon unfinished. They were satisfied that the former was better to load and gave a better tonnage. *Vide* H. G. Brown, *Transportation Rates and their Regulation*, chap. xi.

[2] *Vide* Hadley, *Railroad Transportation*, p. 116.

present unsettled in England, although the weight of the legal authority is very much against the practice, and it seems to be at least settled that the charging by a railway company of a lower or even an equal rate for a longer than for a shorter distance does constitute *prima facie* evidence of undue preference." [1]

Cotton from Chandausi to Cawnpore, 236 miles, was charged Rs.0.5.0. per maund; to Delhi, 128 miles, it was charged Rs.0.6.7., *i.e.*, a nearer locality was charged at a higher rate.[2] Both Cawnpore and Delhi are manufacturing centres and in need of raw material cotton. It was argued that the preference was given because of the influence of the European Chamber of Commerce at Cawnpore. If it be so, it would be a case of local discrimination intermixed with and based upon personal discrimination. It may be that the railway was able to show, in justification, either stronger competition or lower costs of carriage from Cawnpore, or social considerations. On the other hand, the two towns being in competition, the offer of a lower rate to Cawnpore would be a departure from the long and short haul rule, would ignore the geographical advantage of Delhi, and place its traders in an unfavourable commercial position. This the railway has no right to do without extenuating circumstances. It is recorded in fact, that this discriminative treatment resulted in the closing down of some cotton mills at Delhi.[3]

The charge for leather per maund from Cawnpore to Howrah, 633 miles, was Rs.0.5.3.; while, from Delhi to Cawnpore, 271 miles, the charge was Rs.0.6.4. per maund even for one hundred maund lots. If the difference in rates

[1] The rule in the Indian Railways General Classification of Goods says: "Provided it be specially notified that the Differential Rule as to distance applies, when goods of the same description and booked in the same direction are charged at different rates according to the distance, the charge for the lesser distance shall not exceed the charge for the greater." The rule is thus negative and is not applicable unless notified.
In the United States the prohibition of this practice is embodied in the 4th section of the Interstate Commerce Law. In France, it is known as the "Clause des stations dénommées," and in Germany, the "Princip der hintergelegenen Stationen." Exceptions to this are, however, allowed everywhere to meet important factors like competition or long-distance traffic.

[2] *Proceedings of the Imperial Legislative Council*, 1912.

[3] *State* versus *Company Railway Management of Indian Railways*, by an Ex-Railway Official, 1916. See also the report of the Acworth Committee, para. 6028, Vol. III.

was based on the cost of service the railway did not show it.[1] Cawnpore, which is a centre for the leather industry, suffered because its own leather was carried away by cheap rates, while it was handicapped in meeting its requirements by higher railway rates. "What I want to point out is," added the witness, "that the same facilities were not granted to Cawnpore, at the same time, as were allowed to Calcutta Port, in the way of low rates for 360 maund lots. The whole idea was to encourage traffic to the ports." This is a case which the traders would have brought before a tribunal or a commission for decision, were such a one existing, for it affords a clear instance of the breach of the long and short haul rule. The distance yard-stick was unreasonably laid aside. While, all this time the United Provinces Government were complaining of the difficulties of the local industries of Cawnpore, the railways were taking away from Cawnpore and the neighbourhood the raw materials which the local industries badly required. This grievance was substantiated by the Director of Industries in the United Provinces, who stated in his report that the export of hides and skins was telling upon the local industry which had lost all share even in the preliminary process of dressing the goods exported.[2]

The quotation of more favourable rates from Cawnpore than to it had manifestly the effect of denuding its supplies of raw materials and restricting its obtaining them from outside. The complaint of the local Government implied at once a denunciation of the rates policy of the railway coupled with its lack of power over it. The Government cannot be charged with harbouring an undue solicitude for the well-being of the commercial community. Even an impartial commission, after carefully sifting the evidence, has stated it as its opinion that "the grant of port rates nearly fifty per cent less than the internal rates, has cer-

[1] *Report of the Acworth Committee*, Vol. III, para. 4502.

[2] *Ibid.*, paras 4444 and 4490.

See also Ghose, *Lectures on Indian Railway Economics*, Part III, p. 36. He explains that the reduced rates to the ports, for wheat, sugar, hides, etc., practically amounted to a "subsidy paid by the Indian Government to foreign manufacturers," and further, that they were "admittedly opposed" to the interests of the indigenous industries.

tainly discouraged Indian tanning, and enabled certain foreign industrialists to obtain a hold on a class of raw material of which India possesses a partial monopoly."[1] An unduly discriminative rate creates an inequality and is incompatible with the ordinary commercial principle of of what we may style the survival of the most efficient. The charging of a higher rate for a short distance was unfair since under similar circumstances it created an undue inequality and since it conflicted with the aims of the State.

Features of a slightly different nature surrounded the oil case. The rate for oil seeds from Allahabad to Calcutta was Rs.0-5-3 per maund; while that for oil cakes from Calcutta to Allahabad was Rs. 0-9-1, or a little less than double. The distance in both the cases was the same; both the consignments were almost equally convenient to handle; their values were, however, different. Oil cakes are merely the refuse when oil seeds are denuded of their oil. The result of this system of charging was that an article was rated lower than one of its less valuable by-products. A particular factor may explain it. The location of important coal mines in Bengal is responsible for a large flow of empty wagons from the north and the north-west towards it; and this circumstance may be pleaded as a justification for the lower rates for the carriage of oil seeds. On the other hand, it is suggested that a cargo of oil seeds carried to Calcutta and pressed there would produce a definite amount of oil cakes which could be back-loaded at a lower charge than that for carrying oil seeds from Allahabad to Calcutta. Oil cakes again, are sorely needed in the country as fodder for cattle, it being pronounced that the export of oil seeds and oil cakes from the country is nothing less than the export of the soil's fertility. The low rates upon oil seeds to the ports, it is thus argued, are detrimental to the interests of the country.[2]

[1] *Report of the Indian Industrial Commission*, chap. xix.

[2] The wheat milling industry affords a parallel. The low rates for wheat to the ports prevents the establishment of flour mills near the locality where it is grown, and leads to a congestion of mills at the ports with considerable running back of empty cars. For other alleged irregularities of the railways, see *Minutes of Evidence, Indian Industrial Commission*, Vol. IV, No. 321.

The alleged malpractices of the railways in India may then be abbreviated into preference to import and export traffic to the prejudice of local traffic and industries.[1] While the railways have fulfilled the primary purpose of transportation satisfactorily, their effect upon the trade, industry and the internal development of the country, has fallen short of expectations. In analysing the situation, it were best to separate two distinct issues which are involved. In the first place are these practices complained of such as to involve undue discrimination against a party or parties, and secondly do these practices contravene the spirit underlying the public policy ? It is clear that the first issue is a limited one, being concerned with the ordinary railway practice as it is defined and regulated by the Indian Railways Act ; while the second is a much wider and complex issue, touching upon the controversial subject of the national fiscal policy. The modern neo-mercantilistic policy of fostering industries by the manipulation of railway rates, is not the best of all commendable methods. In the matter of both these issues a guarded approach is necessary because no judicial pronouncement upon them has ever been made in the country. After we have examined the relevant considerations surrounding these issues, we must turn to an examination of the powers of the Government to supervise and control the railways, and if they prove to be inadequate or ineffectively exercised, to suggest steps to remedy them.

We have already investigated some of the complaints of the traders and the public in regard to railway rates discrimination, and we have found that there is much justification for them. Some of the practices were unduly discriminative, and the law as well as the control of the Government was defective. We do not know what defence the railways had, if any, underlying some of their practices. An investigation might prove that justification for the special export rates does not exist to-day ; and that they could be abolished

[1] Mr. Ghose explains that a very large number of special export and import rates which constituted undue preference were removed after the publication of his *Monograph on Indian Railway Rates*, in which he had examined those anomalous rates. *Indian Railway Problems*, 1924, p. 293.

without entailing any loss of revenue upon the State. That these rates against which criticism was levelled were kept merely in competition with other railways, and not because the trade demanded them, was acknowledged by the railways themselves. The rates especially to and from the ports were lower than what the economy incidental to long lead and heavy load warranted. Sir James Wilson, Financial Secretary to the Punjab Government, commenting upon the rates to the ports, observed that the wheat from the Punjab to Karachi, for instance, could be very well placed in the British market at the rate of Rs.0-10-6 per maund, and that there was no justification for the existing rate being so low as Rs.0-9-0 per maund. He concluded: "Seeing therefore, that the one-tenth pie rates at competitive points are not needed, they might be enhanced as suggested, whereby complaints of anomalous rates would be removed and a great deal of controversy ended . . . it is a waste of money to maintain these rates, which not only mean sacrifice of Government revenue, but invite applications for further unnecessary reductions in rates at stations nearer the ports."[1]

Another point which emerges out of this discussion is that there is intense dissatisfaction on the part of the traders and the Government at the methods of charging employed by the railways. To say, then, that cases of discrimination are few and that these are disposed of satisfactorily, were to assume a false complacence not unlike that of the ostrich in the desert. This contention is not tenable. On the one hand ample testimony was tendered before the Acworth Committee to prove the existence of a wide-spread grievance among the users of the railways and that the alleged absence of complaints before the railways or the Railway Board was due to their conviction, engendered by long experience, that their complaints would remain unheeded or would not receive a fair consideration.[2] On the other hand, even a

[1] Cited in Ghose, *Monograph*, pp. 202, 203. *Vide* also his *Lectures on Indian Railway Economics*, Part III, 1923, p. 36. *Report of the Indian Industrial Commission*, 1919, chap. xix.

[2] *Report of the Acworth Committee*, Vol. III, para. 4121.

The testimony before the Parliamentary Committee of 1881–82 is sufficient to prove that it is no easy thing to fight a railway company. "A complainant is a marked man and the Commission cannot protect him against the vengeance of the railroads."

superficial familiarity with the proceedings of the Imperial Legislative Council, the Legislative Assembly, and of the public conferences and congresses is sufficient to dispose of that belief.[1]

It is a matter of common acceptance now that charges which encourage local industries are bound to act favourably

[1] On 3 January, 1911, the Hon. Mr. Sachchidananda Sinha asked:—

" (*a*) Will the Government be pleased to say if their attention has been drawn to the Resolutions passed by the Government Industrial Conference at Ootacamund in 1908, the third, the fourth and the fifth Indian Industrial Conferences, the third South Indian Industrial Conference and the third and fourth United Provinces Industrial Conferences to the effect that existing railway rates on goods are generally excessive and affect injuriously indigenous industries, in their competition with imported goods, and that Government may make an inquiry into the whole subject and obtain a reduction of the rates wherever these may be proved to be too heavy.

" (*b*) Is it a fact that the Government of the United Provinces and Madras have addressed the Government of India on the subject ? Have any other Provincial Governments done the same ? Will the Government be pleased to lay such report on the table with the replies thereto ?

" (*c*) What action, if any, do the Government intend taking in the direction suggested, if none has already been taken ? "

The Hon. Sir T. R. Wynne replied:—

" The reply to question (*a*) is that Copies of the Resolutions referred to have been received by the Government of India, except those of the third South Indian Railway (? Industrial) Conference, and the fourth United Provinces Industrial Conference.

" In reply to question (*b*) the United Provinces have addressed the Government of India on the subject and the correspondence will be laid on the table, and it will show that the Railway Board have impressed it on the Railways that the subject is one that deserves their very careful consideration.

" The Government of Madras have not addressed the Government of India on this subject, and there are no papers to show that any other Local Government has done so.

" The answer to question (*c*) is that the subject is not one that can be dealt with by an inquiry, because in the first instance Government is not prepared to agree off-hand to the statement that existing railway rates on goods of indigenous origin are generally excessive, and secondly because no general conclusion could be come to which would assist in deciding what rates should be charged for indigenous commodities as compared with the rates on imported goods, as the Railway Act does not admit of any distinction being made between these two classes of goods in the charges that may be made for their carriage.

" The Railway Act lays down that there shall be no undue preference, and this applies as much to indigenous goods desirous of ousting imported, as to imported goods competing with indigenous. Railways under the Act cannot quote preferential rates for indigenous commodities and prohibitive rates for imported goods."

* * *

In light of these remarks the Government of India would not be justified in taking action in the direction desired, as the fixing of rates which should be sufficiently low to develop a trade, is a matter concerning which the trader should, in the first instance, deal direct with the Railway Administrations concerned.

upon the railway revenues. They stimulate both the freight and passenger traffic. The indirect gain to the country would, again, be incalculable. Mr. Robertson had observed it as a failing of the Indian railways that they were apathetic to the development of industries on their route.[1] The Government of India have urged upon them to pursue a far-sighted policy and to help the local industries by according to them legitimate facilities. In 1908, the Railway Conference resolved that railways "will continue to give sympathetic consideration to any question of rates calculated to assist in the development of local industries." Subsequently, on the Government suggesting practical sympathy to a local industry, the railway concerned replied that any reduction favourable to that industry would kill the traffic in the imported commodity which was much against its interests.[2]

This point was emphasized in 1915, when the Railways Board issued a circular to the railways pointing out that "the establishment of industries cannot fail directly or indirectly to increase the business of the railways, and that the administrations of railways have it in their power to do much for the encouragement of new industries by the quotation of favourable rates for the carriage of the raw materials and of the finished products; and the railway companies were asked to co-operate in making a special endeavour to do all that was possible for the encouragement of Indian industries."[3] This circular, however, failed in achieving its object. The railway companies did not take the matter up with any earnestness; while the Railway Board left too much to the voluntary action of the railways and did not follow up the circular with any directions for practical guidance. The situation, as observed by the Industrial Commission, 1919, by the Railway Committee, 1921, and by the Fiscal Commission, 1922, had remained unaltered, showing the futility of issuing instructions purely of an advisory nature. The Industrial Commission

[1] *Report*, para. 208.
[2] *Proceedings of the Imperial Legislative Council*, 1912.
Also *Proceedings of the Imperial Legislative Council*, 1918.
[3] *Report of the Indian Fiscal Commission*, 1921–2, § 73 (Cd. 1746).

had so many complaints about the rates policy of the railways brought to their notice, that they were at some pains to probe into the problem and observed that "The history of rate fixation reveals a desire to divert traffic from one Indian port to another, rather than a careful examination of the effect which the rates imposed would have on the total cost of conveying the goods to their port of foreign destination, and, therefore, on their ability to compete with products from rival sources. Presumably relevant local circumstances are duly taken into account when rates are fixed; the point which we desire to make is that there has been a tendency to think of attracting traffic to a particular railway rather than to consider whether a real necessity exists for reduction in the general interests of the country." As a remedial measure, they laid down two principles for observance by the railways in fixing rates; and these were subsequently endorsed by the Fiscal Commission.

(1) . . . internal traffic should be rated as nearly as possible on an equality with traffic of the same class and over similar distances to and from the ports.

(2) . . . railways should accept the principle which is followed in some other parts of the world, that a consignment travelling over more than one line should be charged a single sum based on the total distance.[1]

That the railways had not altered their angle of vision, and that their orthodox policy had made the situation extremely acute, was witnessed in the evidence before the Acworth Committee. The desire on the part of the community for State management of railways was shown to be universal. "The railways are not worked in the interests of the public," stated the Government of Madras. "Their management is handed over, to a large extent, to the companies whose sole interest lies in making money, and not primarily in considering the public requirements."[2] They added that railways should be worked in the interests of the public as essential communications, and not as commercial undertakings striving mainly at a large surplus over working

[1] *Report*, chap. xix. The first rule may be improved if after the words "similar distances," "and in the same quantities" be added.

[2] *Report of the Acworth Committee*, Vol. III, para. 4697.

expenses and interest charges.[1] The United Provinces Government opined that the railway administrations had not always used their powers in fixing rates for goods in the interests of Indian industries, and that, too much consideration had been given to the reduction of freight on imported goods and to the exports of raw material to the detriment of indigenous industries. These allegations, they added, had never been refuted.[2]

These indictments from local Governments cannot be lightly taken. They show a need for a change in the railway policy. Too long has the belief subsisted among railways in India that they are private enterprises and not public services. A nation with a large leeway to make up and a systematic goal set before it, cannot afford to be thwarted in its achievement by the profit-making considerations of public aided public utility corporations. In the situation which we have attempted to unfold, the State is not justified in pursuing any longer a *laissez-faire* policy towards the railways.

In America, the Constitution provides for protection of private property against confiscation by public authority. Yet even there considerations founded upon public policy are held to be supreme when they conflict with the profit-earning rights of railways—railways which are privately-owned and are not guaranteed by the State. For instance, in the National Hay Association *v.* the Lake Shore and Michigan Southern Railway Company *et. al.* case important issues of State policy *v.* railway policy were involved. It may be recalled that in 1897 the Dingley Tariff Act had aimed at protecting middle-west hay from the Canadian, and for that purpose had increased the tariff on the latter from two to four dollars a ton. On 1 January, 1900, the roads operating under the Official Classification, changed the classification of American hay from sixth to fifth class with a corresponding increase of rates, but left the rates on Canadian hay as they had been, i.e. lower than fifth class

[1] *Ibid.*, paras. 4706, 4682. In their memorandum they declare that "The people of Madras have suffered for years from the effects of company management on commercial lines." Vol. IV, p. 128.

[2] *Ibid.*, para. 5907.

rates. The Canadian hay rapidly increased in imports. There was a complaint, and the railways pleaded in justification need for more revenue and increased cost of service, neither of which was convincing to the Interstate Commerce Commission. On the contrary, they declared that the action of the railways had thwarted the purpose of the Congress and ordered that the middle-western producer be given an equal advantage with the Canadian.[1]

The case proves the existence of a possible conflict between the commercialism of a railway company and the broader public interests. Without probing into the knotty problem of the railway rates and protection, it might be stated that protection given to a particular industry may be nullified by an uncontrolled policy of railway rates, and it may ensue that the tariff protection required by that industry may have to be enhanced with a greater burden upon the community. It is computed in America that the import rates on railways neutralize something between sixteen to twenty-one per cent of the tariff duties.[2] In pursuing their individual aims, railways not only ignore, but contravene social policy. This exposes the pretensions of the adherents of *laissez-faire* or the system of natural liberty. It would then be superfluous to comment upon the urgency of an adequate State control over the rates policy of the railways.

[1] Hammond, *Railway Rate Theories of the I.C.C.*, p. 160.
Vide also 19 Interstate Commerce Commission Report, p. 148. In this case lemons from Sicily were able to compete successfully with those from California in territory east of the Mississippi, in spite of a protective tariff of $1·50. The Commission decided that an increase in railway rate from $1 to $1·25 was exorbitant and ordered its reduction to $1 so as to permit the sale of "home grown" lemons.

[2] J. M. Clark, *Standards of Reasonableness in Local Freight Discriminations*, p. 95. *Supra*, the case of sugar.

CHAPTER VI

CONCLUSION: THE URGENCY OF A RATES ADVISORY COMMISSION.

If the trade of the country is to proceed unhindered and to expand normally, it is manifest that the State ought to have a real control over the railway companies and their power of charging rates to the public. Instances were cited to show that the railway companies in India possess sufficient scope to impose and have actually imposed excessive or unduly discriminative charges. The power and control of the Government have been found to be incommensurate with their responsibilities. The question if the State would be within its rights in interfering with an industry which partakes of the characteristics of a private enterprise need not be laboured to-day. It is now commonly acknowledged that the railway is imbued with features which differentiates it from an ordinary private commerical venture, and that on that basis the State is entitled to restrict its profit-earning aims by legislative or by executive action. In India, the railway is subsidized and helped in other ways by the State, but even in countries where no such encouragement is given to it, the State supervises its activities, because it is monopolistic; it involves a huge outlay of capital, and it exercises a quasi-public function for which it uses some of the sovereign powers of the State.

The subject of State help to the Indian railways was dealt with extensively in a previous chapter. The railways of India are practically the property of the State; some of them are managed by itself, while some are leased to private working agencies on a profit-sharing basis. It was observed that private enterprise has shunned the risk associated with an Indian railway as an independent commercial venture, and that but for the extensive support and encouragement given by the State, no lines originally would have been constructed by it.

Even where railways are not financially helped by the State as in Great Britain, or in the United States of America,[1] they are granted by it the right of eminent domain, in order that they may secure land and structures necessary for conducting their business. Secondly, all railways perform the function of public carriers—a function which is so vital and far-reaching in its effects that it can only be performed by them as agents of the State. Further, by their very nature they are possessed of monopoly powers, the exercise of which must be regulated by public authority. In spite then of their private ownership their public use makes them peculiarly affected by social considerations. If in the performance of their function as public carriers, they exercise their power to suit their own interests and impose unreasonable or unduly discriminatory rates upon the public, they are responsible to the State and liable to be corrected by it. Regulation then presupposes a neglect by them of social interests. On the other hand, their being profit-making corporations and not benevolent institutions equally imposes an obligation upon the State to see that with efficient and economical management they are not prevented from earning reasonable profits as a whole. It cannot be overlooked that while they are public beneficiaries they are equally public benefactors. The problem which confronts us, then, is how to regulate these public utility corporations so as to harmonize their interests with those of the public; or, in other words, how to provide for a combination of adequate service, efficient operation and fair profits.

The need for the construction and extension of railways for the benefit of the country was held to be of such paramount importance in India that for a long period the railways were allowed to have a free hand with their policy of charging rates; and thus full scope was permitted for the

[1] In the earlier days, however, the total land grants made to the American railways are calculated at 242,000 square miles, or one-fifth more than the total area either of France, or Germany, over the above monetary contributions or loans made to them by public authorities.

play of private self-interest. In this, as in other respects, an undiscriminative adherence to the policy pursued in Great Britain, in spite of fundamental differences between the two countries, has adversely affected the progress of railways in India. Maxima rates were then fixed, below which railways were permitted to vary their charges. After the era of competition between railways had begun, an ineffectual remedy against excessive or unreasonable rates was sought by the Government by formulating rules of a general nature. But rules or laws do not suffice *per se* to provide for reasonable rates. Nor did competition, the law of supply and demand, enlightened self-interest, or the force of public opinion prove effective in regulating railway rates. Administrative control there was none. This, as well as the need for uniformity of railway practice resulted in the Railways Act, 1890, the spirit of which was inspired by the British Railway Acts of 1873 and 1888, but which fell far short of them in supplying any real remedy for possible unfair railway practices. It provided for a Railway Commission to be temporarily set up at the discretion of, and by the Governor-General in Council.[1] This provision of the Act was, however, a dead letter from the moment it was drafted. The Commission was too cumbersome of appointment, and too expensive for the trader. The railway companies again, strenuously objected to it as an undue encroachment upon the powers which they possessed under the contracts. The Commission, therefore, has never been appointed even though the trading community has applied for it. The protection which it was aimed to afford against prejudicial charges of the railway companies, has thus been negatived. The actual position to-day then is, that in spite of the enormous interest which the Government have in the railways, they have appointed no tribunal, although it is provided by law, to investigate and decide upon disputes either between a railway and a trader or between two railways themselves. If a trader has any complaint of unfair treatment against a railway, since a Commission has not been appointed and no court of law will

[1] *Vide* Appendix.

entertain his complaint,[1] he is, in effect. placed in the anomalous and indefensible situation of having to appeal to the railway against its own decision. But no person can be trusted to be a judge in his own case. It is no wonder then that the trader prefers to bear his ills rather than attempt to seek redress from the railway concerned.

The need for an impartial Commission was felt as soon as the railways began to compete among themselves and manipulate rates. The Government had, of course, full authority over the lines managed by themselves; [2] but in regard to the company-managed lines the case was different. In their testimony before the Select Committee of 1884, the British traders in India deprecated the absence of the Government control over the rates policy of the companies, and urged the desirability of a railway Commission.[3] Two railway experts, Danvers and Rendel, voiced their views in the same strain.[4] In his Report, Mr. Robertson pointed out the imperative need which then existed for a standing railway Commission to supersede the temporary Commission which had been provided by the Railways Act, 1890.[5] That the Commission provided by law was awkward of appointment and that, therefore, a Committee of inquiry should be instituted to investigate the policy of railway rates was the gravamen of the Resolution of Sir Vithaldas Thackersey in the Imperial Legislative Council in 1912. In the same Chamber in 1917, Mr. Jinnah moved a Resolution requesting the Government to appoint a committee to examine the working of the Indian Railways Act, and to establish a permanent Commission. So recently we have had the Acworth Committee definitely recommending the appointment of a Rates Tribunal; a desideratum which was endorsed by the Fiscal Commission.[6] With the existence of cases in which railways have defied the fundamental

[1] *Report of the Acworth Committee*, para. 4164.

[2] It must be explained that the policy pursued by State-managed railways has not been, in recent times, very dissimilar to that of the company-managed railways.

[3] *Supra*, chap. iv. The first railway Commission in Great Britain was instituted in 1846.

[4] *Ibid.*

[5] *Report*, para. 61.

[6] *Report of the Indian Fiscal Commission*, § 128.

principles of justice in rate fixing, the absence of such a body has been deeply felt in the country and its appointment constantly pressed.

Reference must at this place be made to the relation between the Secretary of State and the Government of India and its effect upon the policy of the company railways of charging rates. The control of the former over the freedom of the latter has always been of a stringent character, with the concomitant result that the policy of the Government has lacked that definiteness and their authority that finality which are essential for good administration. The Acworth Committee deprecated this system of detailed interference. If the usefulness of the Railway Board has to be increased it is a primary necessity that the Secretary of State should allow the Government of India greater discretion so that they may permit the Railway Board to act with greater responsibility and effectiveness. Thereby also will the suspicion among the public be removed, that the Boards of the railway companies are able to have their way with the Secretary of State over the heads of the Government of India.

The power of the Government of India to control railway rates consists in framing classification for different descriptions of goods and in fixing maxima and minima rates. The Railway Board is the actual administrative machinery employed for effecting this control. For a change in classification or for classifying a new commodity, a railway administration must apply to the Railways Board through the channel of the Traffic Committee of the Indian Railway Conference Association. The extent of the control of the Government over rates is thus actually limited to the fixing of the maxima in order to protect the public against exorbitant charges, and in prescribing the minima to safeguard themselves against loss through excessive competition by rate cutting. These rates which are usually in the relation of three to one, are confessedly within very widely-separated limits. On all sides it is conceded that ample scope for the imposition of unreasonable rates does exist. It has been held that within these limits, the power of the

Government to control rates is provided for in the contracts of certain companies only; and that in the case of others where the Government do not possess such a power, the only corrective for unreasonable rates lies in the appointment of a Railway Commission.[1] It is not clear why the

[1] The interpretation of the rates clause in the contracts with the railway companies has ever created much uncertainty and difficulty. The earlier contracts particularly were so loosely worded that the companies, it is argued, subsequently turned them to suit their own interests. In the contract with the East Indian Railway Company, dated 17 August, 1849, Clause 8 stipulated that " the said Railway Company shall and will allow the use of the said Railway to the public, on such terms as shall be approved by the East India Company, and shall not in any case charge any higher or different fares or tolls whatsoever, without such approval being first obtained; but such fares and tolls shall, when such net receipts as are hereinafter mentioned shall in any year have exceeded 10 per cent upon the outlay, be reduced in accordance with any requisition of the East India Company in that behalf, but only with a view of limiting the said fares and tolls, so far that the net receipts shall not exceed 10 per cent as aforesaid." Evidently this vested in the Government an important power of control. But the vague pronouncements of the Secretary of State as well as the inertia of the Government of India, fostered a belief that once the maxima were fixed the right to a later control had exhausted until the profits had exceeded 10 per cent. The point was never seriously raised by the Government. But that the position was not satisfactory is gathered from the fact that in the renewed contract with the East India Railway Company in 1879, certain fresh clauses were inserted by which the State specifically reserved to itself the right to control rates and fares for the lowest class of goods and passengers within defined limits, and it was stipulated that " the Company shall charge rates and fares as may from time to time be fixed by the Company with the approval of the Secretary of State." The situation, however, did not improve in practice, surprising though it may seem. For the Company subsequently claimed that according to a strict legal interpretation, the State had no right to interfere with its power to vary charges within the maxima until its profits had exceeded 10 per cent. The added words were held to be devoid of any meaning. According to Major Conway-Gordon, the Director-General of Indian Railways, the Government even then did not refer this point to a legal officer and allowed the Company to interpret it to its own advantage. *Vide* the Report of the Select Committee on East Indian Railways, 1884, para. 4410. Also R. S. Chandrika Prasada Tiwari, *op. cit.* p. 465.

In spite of this, in 1887, the Government of India enunciated the principle that when once the maxima and minima rates and fares had been fixed, there would be no further interference on their part. The Indian Railways Act, 1890, is curiously silent on this point. Yet in the contracts dated 1890 and subsequent years, which include almost all the guaranteed Companies, the limits of the Government's control are thus defined:— " The Secretary of State shall from time to time authorize maximum and minimum rates within which the Company shall be entitled to charge the public for services rendered by way of, or in connection with the conveyance of passengers and goods on the undertaking, and shall prescribe the several classes and descriptions of passengers and goods to which such rates shall be respectively applicable." In the case of the most important companies the following additional words appear: " as well as the extent

Government have not resorted to the remedy of drawing closer together the maxima and minima and thus restrict the scope for unfair practices. Anyway, the elaborate and expensive procedure involved in the appointment of a Commission has deprived the trader of any remedy against a railway which charged him unreasonable rates. The Government again, due to a misinterpretation of the contracts with the companies, have not used certain of their powers. But even then it is generally recognized that their power is inadequate; in fact, that is hardly a country, the Government of which with such heavy commitments in their railways, have so little effective control over them, and where these subsidiary corporations have assumed a power comparable to their own. The Railway Board testified before the Acworth Committee that " this position was unsatisfactory and that it may reasonably be held that the Government of India should in all cases be able, where necessary, to exercise the fullest control in a matter in which the general public interests are involved. We consider, therefore, that the present powers which the Government of India exercise under the contracts should be enlarged, and that it should be definitely provided that in any case where legitimate ground of complaint in respect of railway rates fixed by the companies is shown to exist, the Railway Board shall have power to compel the company to make such revision as appears to be reasonable and in the public interest."[1] The Acworth Committee were fully convinced

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to which, within the maxima and minima so authorized, the Company may vary the said rates in respect of the distance or weight or special conditions under which such conveyance takes places or services are rendered."

These newly added lines could not surely have been inserted without having a definite aim in view. The whole cause was, however, so interpreted, both by the companies and the Government, that once the maxima and minima were fixed the power of the Government to interfere was non-existent. But as the Acworth Committee remark, although the clause is badly drawn, it was meant to invest the Government with a power not merely to fix the maximum and minimum of each class, but to decide what consideration should be given to length of haul or size or weight of consignment or other special circumstances in varying the rates within the limits. If the charge was unreasonable, they could rectify it. *Report*, paras. 147, 6412, 6418.

[1] *Report of the Acworth Committee*, Vol. IV, Statement No. 79.

of this and reported that they had "no doubt whatever that further power to control rates ought to exist and be exercised by some appropriate public authority." [1]

The need, then, for a simpler mechanism in the shape of an impartial and expert body to which the trader could appeal against what he thought excessive or unequal charges imposed by a railway management, requires no further demonstration. The more urgent the need for it becomes in a country like India, where railway management is still impervious to public opinion. The public, through such a body, would be able to meet the carriers on a status of equality. Again, the experience of other countries informs us that legislation *per se* is not sufficient to guarantee just and reasonable rates, and that, therefore, a special supervisory and advisory or executive body is necessary. The transportation needs of a community are apt to change, by the efflux of time, in a number of details of a minute character. A broad legislative enactment with its rigidity and finality cannot cope with these. It cannot be made automatic, and unless administered by a special body of experts, it tends to be ineffectual. Only a standing Commission keenly alert to the changing situation and watchful of the best interests of the community and of the railways can grapple with the newly-arising factors and take immediate appropriate action or advise the Government to do s.o Informed by experience, permanent in tenure, not financially interested in any railway, and free from the trammels and influences of the political atmosphere, should be the attributes of its personnel. In the case of India, a small body of three members, consisting of a lawyer, chairman and a representative each of the commerical and railway interests, would seem to meet the situation. To augment its usefulness, local assessors or co-opted members may be appointed upon it.

The problem of its character and powers now arises. Should it be a decisive and mandatory tribunal like the Rates Tribunal in Great Britain or the Interstate Commerce Commission in the United States, or should it, on the other

[1] *Ibid.*, Vol. I, para. 148.

hand, be invested merely with investigating and advisory powers? The Acworth Committee have recommended a Rates Tribunal for India based on that existing in Great Britain. But on a closer consideration, it seems as if they have raised their superstructure on doubtful analogy. The railway situation in the two countries is dissimilar, and it is likely to be more so with the passage of time. A tribunal with important judicial and executive powers may work without friction and with a measure of success in a country, the railways of which were the property of private corporations and in which the State had no financial interest. But in India the majority of the railways is the property of the State, a considerable portion of which is leased on guarantee and profit-sharing terms to private companies. The State, however, operates a mileage of 13,000,[1] and this will further be swelled as the contracts with the railway companies expire, unless in the interval there is a reversal of policy. Since the early years of this century, the State has been dependent upon railway revenues; and although now the railway budget is separated from the general budget' it is provided that the State, under normal circumstances, shall receive a certain percentage of the rail revenues over and above the sum necessary to pay interest on the capital invested by itself in the railways. With such a financial interest, the State cannot view with equanimity, the possible decision of a mandatory Rates Tribunal to pursue a course of action which may thwart its purpose or may not inconceivably endanger its financial equilibrium. At the present juncture the possibility of conflict between the State and a mandatory Tribunal is not entirely remote; and this was not visualized by the Acworth Committee.

A few alternatives suggest themselves to obviate this difficulty. These powers should be delegated to the Railway Board. The objection to such a proposal, however, would be that as representative of a predominant partner in the railway business it cannot be trusted to act as a fair and an impartial judge in disputes with the public. Again, the

[1] Inclusive of the mileage of the G.I.P. Railway, the contract with which company expired on 1 July, 1925.

desideratum of having a facile, mobile and technically-equipped body free from the trouble of looking after daily railway operation, would remain unfulfilled. Or, the Central Advisory Council might be vested with powers more extensive than those it has to-day, so that it could investigate complaints of excessive or discriminatory rates, and make its recommendation to the Member in Charge of Railways. An institution on similar lines exists in France and Germany. But the Central Advisory Council is comparatively a large body and is composed of members of the Legislature and who are, therefore, not necessarily railway experts. The need of a mobile body of whole-time officers ever vigilant over railway management and policy would not be met. Finally, there is the alternative of a small advisory Commission, devoid of any statutory, judicial or executive powers, but which would only inquire into cases brought before it, report upon them and advise the Government to take action. It seems as if under the peculiar Indian conditions such a weak Commission with its motive of publicity, would meet the case better than a strong Commission; although its utility would be minimized by having no power to pronounce finally on matters before it. But it must be kept in mind that if it is to function successfully it should be vested with adequate powers, its recommendations should normally be endorsed by the Government, and that it should win over the confidence of the public as well as of the railways.[1]

To pronounce that it would not have sufficient work to do would be to misread the situation entirely. Its functions would be varied and important. It would entertain and inquire into cases of provincial rates conflicts, railway

[1] The following is pertinent: "It has been a favourite belief of this Board (Board of Railroad Commissioners of the State of Iowa), as it has been of every commission, that the simple power to investigate and recommend was quite sufficient to secure prompt compliance with the law. It has often been asked of its members, if more power—power to enforce its recommendations—would not increase the efficiency of the Board and the Commission system. The invariable answer has been that the best results had come from the exercise of mere advisory or recommendatory powers; that compliance without employing the usual power of judicial execution was practically voluntary, and hence far more satisfactory to the public." Cited in F. H. Dixon's *State Railroad Control*, p.. 123.

facilities, spheres of influence and the extension of lines. In regard to excessive or discriminatory rates, it would investigate them and advise the Government not only on matters of fact, but on matters of policy. It would listen to all cases of rates, even within the maxima and minima ; for instance, in a situation where a trader was charged the same mileage rates for 1,000 as for 50 miles ; and would advise the Government to make modifications therein cheaply and expeditiously. All exceptional rates would come under its purview. In addition, it would have plenty of work to do in reference to alterations in classification, the conditions attaching to risk notes and the matter of settlement of claims. To protect it from being flooded with unreasonable and vexatious applications, the procedure under section 31 of the Railway and Canal Traffic Act, 1888, might with advantage be adopted, and a deposit with it of a sum of Rs.100 be required. It would further prove invaluable as a means of preparing and disseminating useful information as to rates, financial operations, and the methods of management of the railways.[1] This would foster a greater understanding of the railway situation among the public, and in time develop co-operation between the two, at present, almost hostile parties. Finally, in view of the need of bringing the Railways Act up-to-date, such a body or its chairman alone, might be employed in examining it in the light of recent developments in the more advanced countries, and prepare the draft of a new Act.[2]

[1] Vide *Report on General Revision of Railway Rates and Charges*, 1920 (Cd. 1098).

[2] *Report of the Acworth Committee*, para. 157, Vol. I.

APPENDIX

THE INDIAN RAILWAYS ACT, 1890

CHAPTER V

Railway Commissions and Traffic Facilities
Railway Commissions

26. (1) For the purposes of this Chapter, the Governor-General in Council shall, as occasion may in his opinion require, appoint a Commission, styled a Railway Commission (in this Act referred to as the Commissioners), and consisting of one Law Commissioner and two lay Commissioners.

(2) The Commissioners shall sit at such times and in such places as the Governor-General in Council appoints.

(3) The Law Commissioner shall be such judge of the High Court, having jurisdiction in reference to European British subjects under the Code of Criminal Procedure, 1882, in the place where the Commissioners are to sit as, in the case of a High Court established under the Statute 24 and 25 Victoria, Chapter 104, the Chief Justice or, in the case of the Chief Court of the Punjab, the Senior Judge, or, in the case of the Court of the Recorder of Rangoon, the Chief Commissioner of Burma, may, on the request of the Governor-General in Council, assign by writing under his hand.

(4) The Lay Commissioners shall be appointed by the Governor-General in Council, and one at least of them shall be of experience in railway business.

27. The Commissioners shall take cognizance of such cases only as are referred to them by the Governor-General in Council.

28. In any of the following circumstances, namely:—

(*a*) Where complaint is made to the Governor-General in Council of anything done or any omission made by a railway administration in violation or contravention of any provision of this chapter;

(*b*) where any difference which is under the provisions of any agreement required or authorised to be referred to arbitration arises between railway administrations, and the railway administrations apply to the Governor-General in Council to have it referred to the Commissioners;

(*c*) where any other difference, being a difference between railway administrations, or one to which a railway administration is a party, arises and the parties thereto apply to the Governor-General in Council to have it referred to the Commissioners, the Governor-General in Council, may, if he thinks fit, refer the case to the Commissioners for decision.

29. The three Commissioners shall attend at the hearing of any case referred to them for decision under this Chapter, and the Law Commissioner shall preside at the hearing.

30. (1) In hearing any such case, the Commissioners shall have all the powers which may be exercised in the hearing of an original civil suit by a High Court.

(2) The decision shall, if the Commissioners differ in opinion, be in accordance with the opinion of the majority, and the final order in the case shall be by way of injunction and not otherwise.

(3) At the hearing, the Commissioners may permit any party to appear before them either by himself or by any legal practitioner entitled to practise in any High Court.

31. (1) An appeal shall not lie from any of the Commissioners upon any question of fact on which two of the Commissioners are agreed.

(2) Subject to the provisions of sub-section (1), an appeal shall lie from an order of the Commissioners—

(*a*) Where the Law Commissioner was the Recorder or Additional Recorder of Rangoon, to the High Court of Judicature at Fort William in Bengal, and

(*b*) in any other case, to the High Court of which the Law Commissioner was a member.

(3) Such an appeal must be presented within six months from the date of the order appealed from, and shall be heard by a bench of as many judges, not being fewer than three, as the High Court may by rule prescribe.

(4) In the hearing of the appeal, the High Court shall, subject to the other provisions of this chapter, have all the powers which it has as an appellate Court under the Code of Civil Procedure, and may make any order which the Commissioners could have made.

32. Notwithstanding any appeal to the High Court from an order of the Commissioners, the order shall, unless the Commissioners or the majority of them see fit to suspend it, continue in operation until it is reversed or varied by that Court.

33. (1) The Commissioners, in the exercise of their jurisdiction under this Chapter, may from time to time, with the general or special sanction of the Governor-General in Council, call in one or more persons of engineering or other technical knowledge to act as assessors.

(2) There shall be paid to such persons such remuneration as

the Governor-General in Council upon the recommendation of the Commissioners may direct.

34. The Governor-General in Council may make rules regulating proceedings before the Commissioners, and enabling the Commissioners to carry into effect the provisions of this Chapter, and prescribing fees to be taken in relation to proceedings before the Commissioners.

35. The costs of and incidental to any proceedings before the Commissioners or the High Court under this Chapter shall be in the discretion of the Commissioners or the High Court, as the case may be, and the payment of costs awarded by the Commissioners may be enforced by the Court of which the Law Commissioner was a judge, as if the payment had been ordered by a decree of a High Court.

36. (1) The Court of which the Law Commissioner was a judge may, if it appears on the application of any person who was a party to the proceedings before the Commissioners, or on appeal before the High Court, or of the representative of any such person, that an injunction made under this Chapter by the Commissioners or by a High Court has not been obeyed by the party enjoined, order such party to pay a sum not exceeding one thousand rupees for every day during which the injunction is disobeyed after the date of the order directing such payment.

(2) The payment of such sum may be enforced by the Court which made the order as if that Court had given a decree for the same, and the Court may direct that the whole or any part of the sum shall be paid to the person making application under sub-section (1) or to the Government.

37. A document purporting to be signed by the Commissioners or any of them, shall be received in evidence without proof of the signature, and shall, until the contrary is proved, be deemed to have been so signed, and to have been duly executed or issued by the Commissioners.

38. The Commissioners shall, as soon as may be after the disposal of each case referred to them, submit to the Governor-General in Council a special report on the case, and the Governor-General in Council shall cause the report to be published in such manner as he thinks fit for the information of persons interested in the subject-matter thereof.

39. Except for the purpose of the last foregoing section, a Railway Commission shall be deemed to be dissolved at the close of the last of the sittings of the Commissioners for the decision of the cases referred to them :—

Provided that, on the application of any person who was a party to the proceedings before the Commissioners, or of the representative of any such person, the Governor-General in

Council may, if he thinks fit, in any case in which the order passed by the Commissioners is not open to appeal, re-appoint the Commissioners for the purpose of hearing an application for a review of their decision, and of granting the same and re-hearing the case if they think that the case should be reheard.

40. Subject to the foregoing provisions of this Chapter, and to any direction of Her Majesty in Council, an order of the Commissioners shall be final, and shall not be questioned in or restrained by any court.

41. Except as provided in this Act, no suit shall be instituted or proceedings taken for anything done or any omission made by a railway administration in violation or contravention of any provision of this Chapter, or of any order made thereunder by the Commissioners or by a High Court.

Traffic Facilities

42. (1) Every railway administration shall, according to its powers, afford all reasonable facilities for the receiving, forwarding and delivering of traffic upon and from the several railways belonging to or worked by it, and for the return of rolling-stock.

(2) A railway administration shall not make or give any undue or unreasonable preference or advantage to or in favour of any particular person or railway administration, or any particular description of traffic, to any undue or unreasonable prejudice or disadvantage in any respect whatsoever.

(3) A railway administration having or working railways which form part of a continuous line of railway communication, or having its terminus or station within one mile of the terminus or station of another railway administration, shall afford all due and reasonable facilities for receiving and forwarding by one of such railways all the traffic arriving by the other at such terminus or station without any unreasonable delay, and without any such preference or disadvantage as aforesaid, and so that no obstruction may be offered to the public desirous of using such railways as a continuous line of communication, and so that all reasonable accommodation may, by means of such railways, be at all times afforded to the public in that behalf.

(4) The facilities to be afforded under this section shall include the due and reasonable receiving, forwarding, and delivering by every railway administration, of through traffic to and from the railway of any other railway administration at through rates. Provided as follows:—

(*a*) The railway administration requiring the traffic to be forwarded shall give written notice of the proposed through rate to each forwarding railway administration, stating both its amount and its apportionment, and the route by which the traffic is proposed to be forwarded. The proposed through rate for animals or goods may be per truck or per maund:

(*b*) each forwarding railway administration shall, within the prescribed period after the receipt of such notice, by written notice inform the railway administration requiring the traffic to be forwarded whether it agrees to the rate, apportionment, and route, and if it has any objection, what the grounds of the objection are;

(*c*) if at the expiration of the prescribed period no such objection has been sent by any forwarding railway administration, the rate shall come into operation at the expiration of that period.

(*d*) if an objection to the rate, apportionment or route has been sent within the prescribed period, the Governor-General in Council may, if he thinks fit, on the request of any of the railway administrations, refer the case to the Commissioners for decision;

(*e*) if the objection is to the granting of the rate or to the route, the Commissioners shall consider whether the granting of a rate is a due and reasonable facility in the interests of the public, and whether, regard being had to the circumstances, the route proposed is a reasonable route, and shall allow or refuse the rate accordingly, or fix such other rate as may seem to the Commissioners to be just and reasonable;

(*f*) if the objection is only to the apportionment of the rate and the case has been referred to the Commissioners, the rate shall come into operation at the expiration of the prescribed period, but the decision of the Commissioners as to its apportionment shall be retrospective: in the case of any other objection the operation of the rate shall be suspended until the Commissioners make their order in the case;

(*g*) the Commissioners in apportioning the through rate shall take into consideration all the circumstances of the case, including any special expense incurred in respect of the construction, maintenance, or working of the route, or any part of the route, as well as any special charges which any railway administration is entitled to make in respect thereof;

(*h*) the Commissioners shall not in any case compel any railway administration to accept lower mileage rates than the mileage rates which the administration may for the time being legally be charging for like traffic carried by a like mode of transit on any other line of communication between the same points, being the points of departure and arrival of the through route;

(*i*) subject to the foregoing provisions of this sub-section, the Commissioners shall have full power to decide that any proposed through rate is due and reasonable, notwithstanding that a less amount may be allotted to any forwarding railway administration out of the through rate, than the maximum rate which the railway administration is entitled to charge, and to allow and apportion the through rate accordingly;

(j) the prescribed period mentioned in this sub-section shall be one month, or such longer period as the Governor-General in Council may by general or special order prescribe.

43. Whenever it is shown that a railway administration charges one trader or class of traders, or the traders of any local area, lower rates for the same or similar animals or goods, or lower rates for the same or similar services, than it charges to other traders, or classes of traders, or to the traders in another local area, the burden of proving that such lower charge does not amount to an undue preference shall lie on the railway administration.

(2) In deciding whether a lower charge does or does not amount to an undue preference, the Commissioners may, so far as they think reasonable, in addition to any other considerations affecting the case, take into consideration whether such lower charge is necessary for the purpose of securing, in the interests of the public, the traffic in respect of which it is made.

44. Where a railway administration is a party to an agreement for procuring the traffic of the railway to be carried on any inland water by any ferry, ship, boat, or raft which does not belong to or is not hired or worked by the railway administration, the provisions of the last two foregoing sections applicable to a railway shall extend to the ferry, ship, boat or raft in so far as it is used for the purposes of the traffic of the railway.

45. A railway administration may charge reasonable terminals.

46. (1) The Governor-General in Council may, if he thinks fit, refer to the Commissioners for decision any question or dispute which may arise with respect to the terminals charged by the railway administration, and the Commissioners may thereupon decide what is a reasonable sum to be paid to the railway administration in respect of terminals.

(2) In deciding the question or dispute the Commissioners shall have regard only to the expenditure reasonably necessary to provide the accommodation in respect of which the terminals are charged, irrespective of the outlay which may have been actually incurred by the railway administration in providing that accommodation.

BIBLIOGRAPHY

A. Works on Indian Railways

Administration Reports of the Railways in India.

ANDREW, W. P.; *Indian Railways*, 1884.

AN EX-RAILWAY OFFICIAL: *State versus Company Railway Management of Indian Railways*, 1916.

ARGYLL, DUKE OF: *Financial Statement of India*, 1869.

BELL, H.: *Railway Policy in India*, 1894.

„ „ *Recent Railway Policy in India*, 1900.

BOURNE, J.: *Railways in India*, 1848.

CHAPMAN, J.: *The Cotton and Commerce of India*, 1851.

CONNELL, A. K.: *The Economic Revolution of India*, 1883.

„ „ *Indian Pauperism, Free Trade and Railways*, 1884.

COTTON, ARTHUR: *Paper on Railway Expenditure in India*, 1869.

DANVERS, J.: *Indian Railways*, 1877.

DAVIDSON, E.: *The Railways of India*, 1868.

FINNEY, S.: *Railway Management in Bengal*, 1896.

GEORGE, E. M.: *Railways in India*, 1874.

GHOSE, S. C.: *Indian Railways and Indian Trade*, 1911.

„ „ *A Monograph on Indian Railway Rates*, 1918.

„ „ *Indian Railway Economics.* Part I, 1922; Parts II and III, 1923.

„ „ *Indian Railway Problems*, 1924.

„ „ *A Paper on Railway Economics*, 1924.

HANUMANTA RAU: *Railway Traffic Guide*, 1914.

HAUGHTON, B.: *Indian Railway Network*, 1885.

HECTOR, J.: *Land and Railways in India*, 1875.

HUDDLESTON, G.: *History of the East Indian Railway*, 1906.

Imperial Gazeteer of India, Vol. III, 1907.

Indian Railway Conference Association; Conference Regulations, 1924-5.

Indian Railways: An Argument for a Government Monopoly in Preference to Private Enterprise, 1884.

Indian Wheat versus American Protection, 1883.

IYER, K. V.: *Indian Railways*, 1924.
JAGTIANI, H. M.: *The Role of the State in the Provision of Railways*, 1924.
McGEORGE, G. W.: *Ways and Works in India*, 1894.
MEDLEY, J. G.: *Railways in Upper India*, 1884.
MEHTA, D. I., and SHAH, P. A.: *Indian Railways Act*, 1917.
MOLESWORTH, G. L.: *Report on State Railways*, 1872.
PEARS, T. T.: *Our Indian Railways*, 1860.
Proceedings of the Indian Legislative Council.
Proceedings of the Indian Legislative Assembly.
Report of the Select Committee on East India (Railways) 1858.
Report from the Select Committee on East India Public Works, Cd. 137, 1879.
Report of the Indian Famine Commission, Cd. 2735, 1880.
Report of the Select Committee on East India Railway Communications, Cd. 225, 1884.
Report on the Administration and Working of Indian Railways, by T. ROBERTSON, Cd. 1713, 1903.
Report on the Organization and Working of Railways in America, by N. PRIESTLEY, 1904.
Report of the Committee on Indian Railway Finance and Administration, Cd. 4111, 1908.
Report of the Committee appointed by the Secretary of State to inquire into the Administration and Working of Indian Railways, Cd. 1512, 1921.
RUSSELL, L. P., and BAYLEY, V. B. F.: *The Indian Railways Act*, 1903.
SCHULZ, E.: *Die Ostindischen eisenbahnen; ihre geschichte und entwicklung*, 1909.
STRACHEY, J. and R.: *The Public Works of India*, 1882.
THORNTON, W. T.: *Indian Public Works*, 1875.
TIWARI, CHANDRIKA PRASADA: *The Indian Railways*, 1921.
Various Papers printed by Order of the House of Commons.
VILLEROI, B. DE: *History of the North Western Railway*, 1896.
WELD, W. E.: *India's Demand for Transportation*, 1921.
WHITEHEAD, J.: *Indian Railways described*, 1862.

B. WORKS ON RAILWAY RATES.

ACWORTH, W. M.: *The Railways and the Traders*, 1891.
ACWORTH, W. M. and STEPHENSON, W. T.: *Elements of Railway Economics*, 1924.

Brown, H. G.: *Transportation Rates and their Regulation*, 1916.

Clark, J. M.: *Standards of Reasonableness in Local Freight Discriminations*, 1910.

Colson, L. C.: *Transports et Tarifs*, 1907.

Ely, O.: *Railway Rates and Cost of Service*, 1924.

Hadley, A. T.: *Railroad Transportation*, 1886.

Haines, H. S.: *Problems in Railway Regulation*, 1911.

Hammond, M. B.: *Railway Rate Theories of the Interstate Commerce Commission*, 1911.

Johnson, E. R. and Heubner, G. G.: *Railroad Traffic and Rates*, 1910.

Johnson, E. R. and Van Metre, T. W.: *Principles of Railroad Transportation*, 1921.

Jones, E.: *Principles of Railway Transportation*, 1924.

Kirkman, M. M.: *The Basis of Railway Rates*, 1907.

Knoop, D.: *Outlines of Railway Economics*, 1923.

Launhardt, W.: *Theorie der Tarifbildung der Eisenbahnen*, 1890.

McFall, R. J.: *Railway Monopoly and Rate Regulation*, 1916.

McPherson, L. G.: *Railroad Freight Rates*, 1909.

Marriott, H.: *Fixing of Rates and Fares*, 1908.

Ripley, W. Z.: *Railroads, Rates and Regulation*, 1913.

" " *Railroad Problems*, 1913.

Sax, E.: *Die Verkehrsmittel in Volks—und Staatswirtschaft*, 1918.

Ulrich, F.: *Das Eisenbahntarifwesen*, 1886.

Vanderblue, H. B. and Burgess, K. F.: *Railroads: Rates Service Management*, 1923.

Williams, S. C.: *The Economics of Railway Transport*, 1909.

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