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ORGANIZATION OF RAILWAYS

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AND "FREIGHT YARDS TERMINALS AND TRAINS AND FREIGHT TRAFFIC OPERATION."



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PREFACE

To understand Indian Railway Problems it is essential that the organisation of Railways, which, though owned by the State, in most cases, are treated and operated as commercial undertakings of vast magnitude, should be studied particularly as the efficiency of railways, their increased revenue-earning and traffic-carrying capacity depend on a good organisation. The pages that follow will give the reader an idea of the Railway organisation in India and in other countries. The amalgamation of a large number of railways into a few big systems and the increased work which the Railway officials and the Railway staff have to perform with the growth of Railway business require that there should be more decentralization and proper division of responsibility, and co-operation between all branches of the railway operating departments ; all this has led to Railways in Great Britain and in India adopting American systems of organisation, with such modifications as were deemed necessary in each case to suit local conditions.

S. C. GHOSE

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Organization

OF

Railways

Railway organization is something like Army organization. When an Army is in active service, it is essential that more or less complete authority should be given to every officer in his own work, but at the same time the Army as a whole should be placed under a supreme command. It is like a "large staff, consisting of many departments each specialized on a distinct function but under a supreme control." "Traditional business arrangements, it is argued, follow the lines of organization of an Army, in which each one receives his instructions from the same organisation." The Divisions and Brigades of an Army are complete units by themselves, and the Commanding Officer of a Division or a Brigade controls all departments although each department in its function is wholly different from the other. For instance, the functions of the Sappers and Miners are quite different from those of the Supply and Transport although the latter requires a great deal of work to be done by the former before the latter can operate.

American Railway Organization.

The American Railways have followed the principle of Army organization, and each Division is a complete unit in itself; all the departments of a Division are under one head. As in the Army the Commanding officer is not a technical man so in Railway organization it is not essential that the Divisional Superintendent should be a technical man. The essential qualification for such a man is the power of organization and control and capacity to maintain order and discipline and to get the best out of each man. He must have intimate knowledge of transportation work and just a general idea of Railway working in other branches will suffice.

On American Railways the organization is generally as follows:—The Railways are company-owned. Therefore,

there is a Board of Directorate and a number of Directors. Then there is a President, under whom there are Vice-Presidents; the President and the Vice-Presidents are usually working members, and while the President is responsible for the entire Railway system in all its branches, the various Vice-Presidents have separate portfolios. One may be in charge of traffic or the commercial department; another in charge of the treasury and accounts; and a third responsible for construction of railways; and a fourth in charge of the operation of the railway and so on.

First and foremost we shall deal with the operation of the railway. In America, the General Manager of a Railway is in charge of the Operative Department only. He has nothing to do with the procuring of traffic or with fixing of rates and fares.

This General Manager has the following staff officers at his Head-quarters:—

- (a) Chief Civil Engineer for the open line permanent way (or the track or road bed) and all office, station, and other buildings (including the buildings in which workshops are located) and bridges.
- (b) Chief Mechanical Engineer for all machinery and plant, locomotives, carriages and wagons, cranes, etc. (their building, erection and overhauling are done in the Railway Workshops under this Engineer).
- (c) General Superintendent of Transportation or Operation who controls everything essential to transportation. He is in charge of "Station and Yard service;" the cleaning and handling of engines and petty repairs in Running Sheds, *i.e.*, the sheds where engines are stabled at the end of each run and are looked after; and of carriages and wagons, their movement and repairs, the movement of trains, the receiving, loading, hauling, unloading and delivering of traffic.

The Chief Civil Engineer and the Chief Mechanical Engineer are responsible for all standards, plans, etc., and not the General Superintendent.

The General Superintendent of Transportation is, however, the next man to the General Manager and acts on his behalf and takes the front rank amongst all the staff officers of the General Manager.

Under the General Superintendent of Transportation there are the Divisional Superintendents of various sections; a big system is divided into several Sections, and under the General Superintendent are the Divisional Superintendents. The Divisional Superintendent is practically the General Manager of his Division and all the departments of operation are placed under him so far as his division is concerned.

The Divisional Superintendents on their respective sections are not only the representatives of the General Manager, but are also necessarily the representatives of the staff officers of the General Manager such as the Chief Civil Engineer, the Chief Mechanical Engineer, etc. The maintenance and repairs of tracks, buildings and bridges, and the maintenance and repairs of locomotives, carriages and wagons, when in traffic use, are under the charge of the Divisional Superintendents, who have under them technical officers for different kinds of work on the Divisions. The responsibility for the maintenance of tracks and rolling-stock lies with the Divisional Superintendents. But this responsibility has not at all made it necessary or essential that the Divisional Superintendents should be technical men. On the other hand, most of these officers are pure and simple transportation men, although there are some Civil and Mechanical Engineers who are Superintendents of Divisions. It is the suitability of the man for the appointment that decides the selection, and the field of selection of such officers being wide it is not difficult to find the best men. In Great Britain and in India some seem to hold the view that the maintenance of track should not come under the Transportation Department, but that of the locomotive running and the running sheds, and carriage and wagon repairs, when wagons and carriages are out of the shops, should be under the Divisional Superintendent of Transportation and Operation.

In U. S. A. under the Divisional Superintendents, there are: (1) District Road Masters, responsible for the maintenance and upkeep of the track and buildings, (2) District Mechanical Engineers, who direct and control the repairs of locomotives, carriages, and wagons, (3) Passenger train masters, who control passenger station working, passenger train movements, time-tables of such trains and movement and distribution of coaching or passenger rolling-stock, and (4) Goods train masters, who are responsible for working in goods sheds, distribute goods rolling-stock, control movements of goods trains, and working of goods yards.

In America, the Commercial Department is called the Traffic Department and its Chief is the Traffic Manager. This department is concerned in the procuring of traffic, development of the business of the Railway, and fixing of rates and fares, publication of tariffs and time-tables and advertisements.

Organization of English Railways.

The old English Railway organization was departmental and the Indian Railways followed the same. The English Railways had, under the General Manager, the following officers:

Chief Engineer, Locomotive Superintendent, Carriage and Wagon Superintendent, Superintendent of the Line and Chief Goods Manager. These officers also had their representatives on the districts, such as District Engineers, District Locomotive Superintendents, District Carriage and Wagon Superintendents, District Traffic Superintendents and District Goods Managers.

The Indian Railway organization was practically the same as above, with this difference only that the departments of the Superintendent of the Line and of the Chief Goods Manager were under one officer, *viz.*, the General Traffic Manager.

Under the English Railway system for the work which one department, namely, the Traffic Department of Indian Railways did in the olden days and now do on some railways of importance, there were two departments, under two separate heads, *viz.*, Superintendent of the Line and Chief Goods Manager. The Superintendent of the Line was responsible for coaching traffic, its booking (and coaching rates and fares), working time-tables, train movements and passenger yard working. The Chief Goods Manager was responsible for all goods traffic work, management of goods sheds and of goods yards, and for the formation of goods trains and their marshalling in goods terminal yards, as well as for goods rates and distribution of goods rolling-stock.

The Superintendent of the Line on English Railways had District Traffic Superintendents under him who did the Superintendent's work on the districts. The Chief Goods Manager had his District Goods Managers, who did his work on the Districts. The Station Master (or Station Agent as he was called in England) did both coaching and

goods work, where there were no separate goods sheds, for the D. T. S. and the D. G. M. respectively, although for purposes of discipline and control he was under the D. T. S.

First Change in the Organization of Railways in Great Britain.

The first change in the English Railway system of working was introduced on the North-Eastern Railway. This change took place in 1902, and the reasons for the change as given by the General Manager were as follows :—

“ The goods department inheriting a system which originated when railway goods working problems were less technical, and perhaps less important than they have since become, has combined with its commercial work the supervision of the working and of the staff at goods stations and terminal yards, including the loading and unloading and making up of goods trains, and the distribution of goods wagons. The department of the Superintendent of the Line has been responsible for the running of goods trains and the operation connected with the working of these trains when in transit, but the functions and authority of the Superintendent have not extended within the terminal yards where goods traffic is received for carriage and is loaded up, and where really the most vital part of the work affecting the economical handling and working of goods traffic is performed.

“ Under the new organization, the Superintendent of the Line becomes General Superintendent with extended authority. The commercial duties connected with passenger and coaching traffic hitherto performed by the Superintendent of the Line are transferred to a new department under a Chief Passenger Agent. This relieves the General Superintendent of a mass of office duties which tend to withdraw his attention and energies from his main duty of handling and working promptly and economically the traffic which the Company have to carry. Similarly, all the duties connected with the working of traffic hitherto performed by the goods department are transferred to the General Superintendent, while the commercial duties and the office work connected therewith are retained by the goods department.

“ The general organization of the Traffic Department will correspond to the organization at the head offices.

The District Superintendents of whom there will be nine, will have complete and undivided control, each in his own district, of all working operations connected with all kinds of traffic, passenger, goods, minerals, etc., while the District Goods Managers and District Passenger Agents will, in their respective districts, attend to the commercial part of the work. To assist still further the proper performance of the duties assigned to the department of the General Superintendent, upon which the economical working of the Railway so greatly depends three new posts are created, *viz.*, those of Divisional Superintendents, in one of which is merged an existing office of Mineral Manager on one district. These officers will have charge over one section of the entire system, and will, under the General Superintendent exercise supervision by constant inspection over all the work of the District Superintendents."

Writing in 1913, Travis, Lamb and Jenkinson in one of their publications observed as follows in connection with the locomotive running and pointed out the necessity for its merging into the department of Superintendent of Operations :—

" We will now proceed to a consideration of one of the most debatable points in present-day English Railway organization. We refer to the question of locomotive running by the Traffic Operative department ' on those Railways where the running work is still in the hands of locomotive department ;' there is a constant friction with the Traffic department on the question of engine load. From its own departmental standpoint perhaps each is justified, the one for attempting to secure as many engine miles as possible per engine hour in steam and the other for as much load per train as possible. In the first place, the traffic (or operating dept.) is responsible for efficient working and running. Out of the train crew, however, the Guard only is under traffic control. The Guards (through the medium of their journals) and the signalmen, depot Inspectors, etc., can be referred to in the case of working delays, but if these appear to be due to time lost by locomotives, another and separate department must be communicated with, whose word generally has to be accept-d. Again, owing to distribution of supervision, drivers can at times afford to disobey the instructions of yard masters and to differ from the opinion of the guard even if the two functionaries may be actuated by

reasonable and appreciative motives. Further, the constitution of train service and the timing of the trains are vested in the duties of the traffic officer. From these considerations it seems but natural and logical that the traffic as the responsible department, should have a voice in the running and working of locomotives.

“Turning, however, to the other side of the question, one immediately encounters the necessity for the exercise of technical supervision and knowledge as to the capabilities of the machine. Under existing arrangements, this can be well maintained even at the expense of the Traffic Department, for the Locomotive department is principally responsible for efficient locomotive maintenance, but in the strain after perfection in this direction the requirements of the traffic department may partially be overlooked.”

Since the above was written, and during the last 20 years, in order principally to relieve the Locomotive Superintendent (now called the Chief Mechanical Engineer) of a portion of his duties, which had become very responsible and heavy, it was found necessary in Great Britain to relieve him of a certain portion of his work. For this reason, and for the difficulties pointed out in the preceding paragraphs the Chief Mechanical Engineer of English Railways was relieved of the locomotive running work and of repairs to engines in running sheds, or in other words, he was relieved of the responsibility of the locomotives except when they were in his shops. The locomotive running, together with the running sheds and the staff (*viz.*, running shed Foreman, Fitters, Boiler Washers, Drivers, Firemen, Cleaners and Coalmen) and arrangements for coaling, lubricating and supplying water to the engines were taken away from the department of Chief Mechanical Engineer. On the London Midland Scottish Railway system this work was put under the Operative department, while on the London and North Eastern Railway there was created a new Locomotive Running Department in addition to the departments of the Chief Mechanical Engineer and of the Superintendent of Operation and Transportation.

Railway Re-organization in India.

The object of an invention is to “work up through complexity to simplicity” and so also the aim of any

re-organization is to attain simplicity through complexity, and efficiency can only be attained through simplicity.

“All things are simple in the beginning, but as they grow they become complex and subjects which were most simple originally present difficulties afterwards, the solving of which becomes no easy matter. Technical improvements in transport are ever overcoming old difficulties, but they are also stimulating further developments, which open out new difficulties.” These become greater with the “increase in the distances over which food and other goods travel before arriving at their final resting places;” what is said of increase in distance is equally true of increase in volume.

In introducing any reorganization a man who does it and is continually at it is ordinarily taken as a restless individual. When such a man is a responsible person and high in office he may urge a reorganisation of either the whole or some of the parts. If he is a man of constructive force and is far-seeing he is likely to have his scheme on advanced lines, but when he is for the scrapping of the old system “that is no longer in the front rank” and his method is suggestive of criticism of past management he will have much trouble in getting his scheme through, at least in its entirety, particularly if the ultimate pecuniary advantage of his scheme “cannot be proved with absolute certainty.” The objections and obstacles arise from two causes—tradition and practice, which have the tendency to attract people to adhere to old methods, secondly there are people who are not very energetic or are too cautious. The former adopt the least line of resistance and the latter do not want to introduce or even try anything new until its success is established beyond question by others. A new country like America had great advantages in these respects for it was not hampered by old traditions which accounted for her go-ahead policy. In India, a certain amount of caution is however always necessary where large expenditures are involved on behalf of the State on account of railways.

The present is the age of “scientific management” and it is asserted that “one main drift of scientific management is towards concentration.” The Divisional system of Railway Operative working is the outcome of the application of the scientific management principle. While this system is said to effect decentralisation, it also

effects concentration on divisions and recognises one-man responsibility for the working of a division.

Main Problems for Solution.

The separation of the Locomotive running department from the department that builds, erects and repairs engines, and the placing of the Locomotive running work under the Operative Department, and the separation of goods handling, loading and unloading and of wagon shunting in purely goods yards from the Commercial to the Operative Department are the two problems that recently occupied a great deal of attention in Great Britain and also in India ; and the opinions and practices are yet divergent.

Before we proceed further in this connection it would be useful if an idea of the organization of Indian Railways was given first.

Indian Railway Board.

In India the State-owned and State-worked Railways are under the direct control of the Railway Department of the Government of India, which has at its head the Member for Railways and Commerce (a member of the Executive Council of the Viceroy) and under him there is the Chief Commissioner for Railways who is assisted by a Financial Commissioner and two other Commissioners, and these 4 constitute the Railway Board. There are a number of Directors and Secretaries. The Chief Commissioner is the head of all State Railways, and he has his Agent or General Manager for each Railway. On Company-worked State Railways of India, the Agent is appointed by, and is responsible to, the Board of Directors in London subject to control by the Railway Board in India in certain matters or there is practically dual control. The Agent or General Manager of a Railway in India has his Deputies, Secretaries and a Secretariat office staff who assist the Agent in his administrative work.

Old Departmental System in India.

For many years Railway organization in India was based mainly on the old organization of English Railways. Under this organization the Traffic Department was responsible for procuring, accepting, loading, transporting, unloading and delivering of traffic ; for the control of all

stations, booking offices, parcels offices, goods offices, goods and passenger yards and of all staff employed in them. Guards and brakemen were also under the Traffic Department. All telegraphists and signalmen (including cabin assistants, were also placed under this Department). The District Traffic Superintendent, who controlled the above staff was practically the Superintendent of the District as well as the District Goods Manager.

The Locomotive Department in India erected the engines, kept them in repair and was responsible for their running and supplying fuel, coal and water to locomotives ; and the running sheds and the Locomotive Workshops were all under this department.

Carriages and Wagons while in the Workshops and also while on the line (*i.e.*, when out of the carriage and wagon shops) were kept under repairs by the staff employed by the Carriage and Wagon Department ; the control and distribution of carriages and wagons were naturally in the hands of the Traffic Department. The Carriage Department built, erected and repaired the carriages, wagons, brake-vans, etc.

The head of the Traffic Department was the Traffic Manager, that of the Locomotive Department was the Locomotive Superintendent and the Chief of the Carriage and Wagon Department was the Carriage and Wagon Superintendent. Each department had its separate organization on the line, and there were the District Traffic Superintendents, the District Locomotive Superintendents and District Carriage and Wagon Superintendents. The department that built and maintained the permanent way, bridges and buildings was under the Chief Engineer and he too had his District Engineers on the line.

The organization described above is yet the organization in India on some Railways. The Traffic department indented on the Locomotive Department for supply of Locomotive power and the latter supplied the engines manned by an efficient crew, and supplied coal, fuel, water, etc., and was also responsible for proper maintenance and up-keep of the engines throughout the run.

The Chief officer of the Locomotive department had generally two deputies, one responsible for the running department and the other for the workshops.

Similarly, the Traffic Manager, had two deputies, one was responsible for all station working, train running, yard

work, time-tables and the entire staff of the Traffic Department was under him, *viz.*, station masters, booking clerks, goods clerks, yard staff, signalmen, cabinmen, telegraphists, guards and brakemen, etc., and the other deputy dealt with all matters relating to rates, fares, interchange of rolling stock, claims for compensation of loss and delay or damage to goods. He made enquiries in connection therewith and was also responsible for all the booking office and the goods office accounts, and dealt with all irregularities in goods and coaching working, undercharges and all claims for refunds of overcharges. He was also in charge of traffic statistics, revenue and operative (*e.g.*, goods and passenger traffic statistics as well as statistics of vehicle mileage, train mileage, wagon loads, ton mileage, etc.). He was responsible for the compilation of these statistics and wrote half-yearly and weekly traffic reports. He had however practically nothing to do with staff matters. Both these deputies worked in the name of the General Traffic Manager and all correspondence was addressed to the General Traffic Manager and the deputies and the Assistants of the deputies signed "for General Traffic Manager."

First change in the Organization of working of the Traffic Department of E. I. R.

In 1904, the East Indian Railway introduced the first change in their organization of the traffic department outside the head office, *viz.*, in the districts, and this was done by creating in the head office, the following appointments of chief officers under the General Traffic Manager.

1. Chief Superintendent of Transportation.
2. Traffic Manager, Commercial.
3. Coal Manager.

There were 2 Divisional Superintendents for the transportation side under the Chief Superintendent who made personal and constant inspections.

The Traffic Manager, Commercial, had

<p>One D. T. M. at Cawnpore One A. T. M. at Allahabad One A. T. M. at Delhi One A. T. M. at Dinapur One A. T. M. at Howrah</p>	}	<p>Their Head Quarters were at the Head-Quarters of the District Superintendents. The latter were however under the Chief Superintendent of Transportation.</p>
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The District Traffic Superintendent at Sahebganj and Gya, however remained till 1909 in charge of both the commercial and transportation work; there was appointed an A. T. M. at Dhanbad, who dealt with the commercial work of the mineral districts (Asansol and Dhanbad) and the District Traffic Superintendents at Asansol and Dhanbad looked to the operative work only.

There was in addition, a Goods Superintendent at Howrah who was responsible for both transportation and commercial work of Howrah goods terminus.

The Chief Superintendent of Transportation was made responsible for all operative work whether in the goods sheds or at stations, and the Traffic Manager, Commercial, took over all commercial work both as regards passengers and goods (excluding coal); and the Coal Manager took over all coal work, *viz.*, coal sidings, coal loadings and coal wagon distribution and commercial work for coal traffic, and in a way acted as Divisional Superintendent for transportation work on the coal districts.

The three officers, *viz.*, the Chief Superintendent, Transportation, the Traffic Manager, Commercial, and the Coal Manager were independent of one another and had separate offices of their own, and were treated as deputies to the G. T. M.

While the District Traffic Superintendents held charge of the transportation or operative sides of the districts, the Assistant Traffic Manager took over the commercial side on the five districts, and the D. T. M., Cawnpore, was the canvassing officer of the upper division (Moghalseraï to Kalka) and, in addition, held executive control of commercial and operative work in the goods shed at Cawnpore in the same way as the Goods Superintendent at Howrah was responsible for all goods work at Howrah. Both these officers and the A. T. Ms. belonged to the Commercial Department.

In 1909, the East Indian Railway again reorganised their Commercial Department under the Traffic Manager, Commercial, whereby the commercial work and the commercial staff were placed under Divisional Traffic Managers, of whom there were two, one at Howrah and the other at Cawnpore, and they were responsible for the commercial work (coaching and goods) on their divisions (except rates, traffic statistics and traffic canvassing, which work was transferred to the head office).

The Goods Superintendent, Howrah, was, for a short time made subordinate to the Divisional Traffic Manager at Howrah, but after a few months he was made independent of the D. T. M. Later on, as the work of the Goods Superintendent became heavy, the claims work (including refund of overcharges on goods) in respect of traffic booked to and from Howrah and Calcutta was placed under a Claims Superintendent, and the Goods Superintendent was relieved of this work.

The commercial staff on the line, wherever there were separate goods clerks and booking clerks, were placed under the respective Divisional T. Ms.

Now to come to main features of and reasons for reorganization of railways of India on the lines of the organization of American Railways which has been adopted on most state railways of India.

Demarcation line between the Locomotive-building and Locomotive-running departments and special advantages of India in the matter of Centralised Locomotive works.

In Great Britain, the railways not only erect, repair and maintain locomotives, wagons and carriages but also build locomotives, and wagons, although all the parts may not be manufactured in their shops, but this is not always done even in commercially run private locomotive-manufacturing works. In India, however, so far (excepting at Ajmere) the railway workshops have confined their attention to the erection, repairing and overhauling of locomotives. They are designed and built in Europe.

It has been remarked that the chief reason why the railways of Great Britain have provided building units in their locomotive shops, in spite of a large number of private manufacturing works existing in that country, is that the railways can get money at a cheaper rate of interest than the private Companies. There must be other potent reasons besides this :—The main idea perhaps is that the railways should be made self-supporting as far as possible, and that the railways should save middlemen's profits by building most of their requirements themselves. This practice has been continued up to now in spite of the fact that the Financial Supplement of the London Times of 27th August 1911 remarked as follows against the practice :

“Railway Manufacturing establishments lack the incentive of competition, the output of the works being designed for service on system of the owning Company. The works trade in a closed and fully protected market and therefore are not in any sense commercial enterprises.”

In respect of the Indian railways building their own requirements, they ought to have unique advantages. All the trunk railways of India belong to the State, and this being so, there is no reason why the building works of all such railways cannot be concentrated at one or two places (say Locomotive works at one place and the Carriage and Wagon works at another). India can go further than the English railways in this respect. In India, the Iron and Steel Works are not many, and therefore, the Indian Railways or the State can also start such works to manufacture steel for turning out several parts of Railway Locomotives, wagons, etc. The State may easily build modern types of (i) Iron and Steel Works, (ii) Locomotive works, and (iii) Carriage and Wagon works, and the experience of America, Belgium, Germany and of England may all be brought into use in making such works most useful. One can, however, reasonably say that the Iron and Steel works do not come under the scope of Railway Workshops. This is true, but if there is a guarantee that Iron and Steel Works of extensive nature to manufacture locomotive and carriage and wagon parts would be able to sell all such products to Indian Railways such works would be forthcoming in India out of private enterprise.

Seeing that the privately owned railways of Great Britain have their own building works in spite of their having the facility to buy in the open market in their own country, it naturally follows that there must be some very distinct advantages for the railways doing their own work ; and India should do the same especially as she has State management and State ownership of most of her railways.

India has vast resources in the way of raw materials. What India wants is skilled labour, and this must be imported first and then Indians when they receive the necessary training and are capable to do the work will replace the same. Even if 50 crores are utilised for such work, it would be a great gain in the long run. India will train her indigenous labour under the imported experts. In India a great deal of wastage can be saved which

has gone on in other countries in railway works, where each railway has its own models, by having close standardization which ought to be much more easily attained in India than elsewhere because of State ownership of Indian Railways. The Committee on Engineering Trade in England remarked a few years ago as follows :—

“ The unification of Railway control whether under Government or otherwise would stay the wastes that are caused at present by lack of standardisation.”

It is also recognised that unification of Government control of Railways tends towards the recognition of the need for “independent and concentrated locomotive works” as distinct from separate Railway Workshops for each railway, for it is held that independent locomotive works would provide against some of the wastes of a multifarious organization of railway workshops the heads of which cannot pay undivided and special attention to any particular work. Since this was written the Government of India had the whole question of Railway Workshops investigated by a Special Committee, the Chairman of which was Sir Vincent Raven. Sir Vincent has pointed out that on the whole the Locomotive Workshops of the Indian state Railways do not compare unfavourably with the Railway workshops of Great Britain, but except in the case of the carriage and wagon shops of the East Indian Railway at Lillooah the same could not be said of the carriage and wagon shops of India. Sir Vincent Raven’s Committee has made definite recommendations regarding improvements, and one of the most important of these recommendations is that the manufacturing and supplying of parts for locomotives, carriages and wagons should be done from one or two central sources for all state Railways, for this would enable special methods and machines being introduced and effect economy and improvements. But the question of building of locomotives in India was not dealt with and attention was mostly given to repairs, erecting and overhauling of locomotives and considerable improvements can be effected in these directions. Nevertheless the question of building locomotives on a large scale, either in private works or in centralized Railway shops, deserves to be looked into even though for some years to come some of the essential parts have to be imported.

Locomotives and Carriage and Wagon Running and their repairs on Indian Railways.

Under the American or Divisional System of organization the above work comes under the Operative or Transportation Department.

For satisfactory supervision of locomotive running and the repairs in India it would be well to have an officer in the rank of Deputy Locomotive Superintendent as one of the staff officers of the Chief Superintendent of Transportation. Similarly, the Divisional Superintendent of Transportation should have an officer in the rank of Senior Assistant Locomotive Superintendent as one of his Chief Assistants and the Locomotive running repairs in the Running sheds should be under the operative and transportation department, *i.e.*, under the Divisional Superintendent. There should be, in the opinion of the Sir Vincent Raven Committee, a strict limit put on the work that these sheds are allowed to undertake and this is only fair. There should be one or more master mechanics on each division who should supervise the repairing work in the Running sheds by constant inspections and see that the staff in the sheds is efficient and sufficient and that the materials are proper.

The Assistant Locomotive Superintendent of the Division should be allowed to communicate direct with the Deputy Locomotive Superintendent, attached to the Chief Transport office in charge of Locomotive Running Section, and the latter with the Chief Mechanical Engineer's department in all urgent matters relating to mechanical portion of their duties in order to save delay. But in all matters relating to the engagement of staff in the running sheds and on the engines, discipline in the sheds, the increase or decrease of the staff or changes in the rates of wages of the staff on the engine or in the running sheds or in matters relating to economy in running expenses or to improvements in engine and train working, the Divisional Superintendent should be the officer to be referred to, and he, in his turn, would refer to the Chief Superintendent of Transportation, if necessary, and if the latter in any particular case wants to consult the Chief Mechanical Engineer he would do so. In matters relating to defects in machinery, replacements of the parts, standard drawings, or use of machinery or where instructions are required in these respects the Chief

Mechanical Engineer's Department should be consulted in urgent cases by the Assistant Locomotive Superintendent attached to the office of the Divisional Superintendent direct and at once. Similarly, an Assistant Carriage and Wagon Superintendent may be attached to the staff of the Divisional Superintendent and he should act in matters regarding Carriage and Wagon repairs as the Assistant Locomotive Superintendent would act in regard to Locomotives.—This will obviate the necessity for creating a third department of Locomotive Running between the departments of Chief Mechanical Engineer and of Chief Superintendent of Transportation. The Chief Mechanical Engineer's department should also carry out independent inspections of the Running shed repair work so as to exercise a proper check on the Mechanical Section of the work of the Assistant Locomotive Superintendent attached to the Division. In any case when engines and rolling stock go to central workshops, the Chief Mechanical Engineer (when he finds that the condition of the engine is bad and is due to negligence) would bring such cases to the notice of the Chief Superintendent of Transportation, because it is essential that the machinery should be kept efficient and in a thorough state of repair, but repairs should not take such a time as would keep the machinery out of traffic use any longer than is necessary for purposes of safety and efficiency.

Dual Responsibility of Chief Goods Clerks and Station Masters and organization in goods sheds and at stations.

Large goods sheds or goods Stations should be under Chief Goods clerks or Chief Goods Agents where such goods sheds or stations are separate and independent of and disentangled from the passenger station. Their number in India is not many. For the present it would be useful to eliminate the very big goods depots such as those at Howrah, Shalimar, Karachi and Bombay from consideration. They will be dealt with subsequently and separately in this paper. In the event of the Commercial Department taking over commercial work at stations, as is the case on the G. I. P. Railway in India, and if the Commercial Staff comes under the Commercial department, as is the case on some English Railways, and on the G. I. P. Railway in India, the following suggestions might be worth while considering.

The Chief Goods Clerk or Goods Agent, whatever the designation may be, should be under the Commercial

Department for purposes of discipline, but his responsibility should be dual, *viz.*, to both the Commercial and to the Transportation departments. He should have a Chief Assistant Goods Clerk who will be responsible for all work relating to weighing, marking, acceptance, booking, waybillings of goods and preparation of accounts in connection therewith, for collection of charges as well as for receipt and delivery of goods, and for preparation of accounts in connection therewith. All such work and the staff employed in connection therewith should belong to the Commercial department, including the Chief Assistant Goods Clerk and the Chief Goods Clerk himself. Under the same Chief Goods Clerk, there should be a Loading, Unloading and Outdoor Inspector who should be responsible for loading, unloading and tallying of goods, for quick turning round of wagons, for indenting for wagons and shunting in goods lines (where there is no yard master in charge of all Yard operations in a goods yard). This Inspector and the staff under him should belong to the Operative Department although directly responsible to, and working under, the Chief Goods Clerk. The Chief Goods Clerk or the Chief Goods Agent will be the head of all and responsible for the commercial portion of the work to the Commercial department and for the operative portion of the work to the Operative department.

Similarly at stations, where there are no separate goods and booking clerks the Station Masters and Assistant Masters do goods and coaching work in addition to train duties; they have all along been responsible for commercial work to the Commercial Traffic Manager and for transportation work to the Chief Superintendent of Transportation and Operation, although for purposes of discipline they are under the Transportation department. A practice has grown up in India, during recent years, on one or two railways under which goods clerks and booking clerks at many stations have been made independent of Station Masters, although the stations may not be big enough for such a separation. The idea originally was that at big stations like Howrah or Delhi, where there were responsible head booking clerks they should be able to control all their staff and to carry on all the correspondence without disturbing the Station Master too much, but this practice appears to have been carried too far, and at many stations the booking clerks and goods clerks are independent of

Station Masters. The Station Master is the person looked upon by the public as the one man at the station who is in authority over all, and practically the booking, parcels and luggage offices and the Information Bureau are parts of a station unit.

The Station Master may not be held responsible for cash or for details of the work, but certainly in cases of disputes with or references or complaints from the public the person in authority to investigate and put matters right at once should be the Station Master, and therefore, he should certainly know something of what is going on at his station, in all departments, but he cannot do this unless the staff are under him or if the booking clerks and goods clerks carry on important correspondence without the knowledge of the station master. Unless the goods stations are entirely separate under a responsible goods clerk equal in rank to the station master of that station or the booking offices are outside stations (*viz.*, in the town), the goods clerks and booking clerks should be under the Station Master.

And at big stations in Station Master's office, there should be :

1 Chief Clerk, 1 Yard correspondence clerk, 1 Claims correspondence clerk, 1 Assistant Claims or Accounts correspondence clerk, 1 Train movement correspondence clerk, 1 General and staff clerk, 1 Typist, 1 Relieving correspondence clerk. Seeing that on one of the Railways the idea is that Station Masters should be allowed to settle claims, etc., such office staff at busy stations would seem to be imperative.

This office staff at stations will save a lot of work in the offices of Divisional Superintendents and of Divisional Traffic Managers, and such clerks will be most useful when transferred on promotion to the Division offices, and the station offices will be very good training grounds for such men. At less important stations the number of clerks may be less. Similarly, there should also be correspondence clerks in the big goods shed offices under the chief goods clerk. At present a great deal of time of the operative clerks and of booking office and goods office clerks is spent in correspondence much to the detriment of their legitimate duties which require their constant attention. The idea of having station clerks is not at all new. Ivatts suggested this in his book on "Railway Management" many years ago. It is true that at present

the Station Masters at large stations have one, two or more clerks, but they do not relieve the goods and booking clerks and other station staff of correspondence work to any appreciable extent and the Station Master has to write out all important letters. A Station Master ought not to be tied to his office or else outdoor supervision will suffer and, therefore at important stations he should have a responsible chief clerk and office staff,

What work should be allotted to the Operative Department and the position of the Divisional Superintendents.

In India, the newly created Operative Department has been already or will be eventually given the duties in connection with (i) Station passenger traffic and Yard work; (ii) Work in the Signal cabins and in telegraph offices; (iii) Locomotive running and running shed repairs; (iv) Control of Carriages and wagons and repairs to them while out of the Carriage and Wagon shops and distribution of all rolling stock; (v) Formation, marshalling and movements of trains; (vi) Loading, unloading and delivery of goods; (vii) Supply of coal, fuel and oil to engines; (viii) Indenting for all stores and materials required for each division on the Stores Department; and their distribution; (ix) Operative statistics; (x) maintenance of way and works and buildings; (xi) Arrangements regarding interchange of rolling stock, and questions relating to hire and demurrage on wagons, and carriages. And all staff employed in connection with all this work has been or will be placed under the Operative Department. The head of this department is called Chief Superintendent of Transportation and Operation and his Divisional Officers are designated Divisional Superintendent of Transportation and Operation.

The Transportation Department, and consequently; the Chief Superintendent of Transportation and Operation and the Divisional Superintendent of Transportation and Operation, should be, truly speaking, responsible for the safe, efficient, and quick transit of goods and passengers, and in this respect the responsibility of the Transportation Department ought not to be of a divided nature. The Americans say that this responsibility should be complete and this is why the maintenance of the road and of the buildings is also entrusted to the charge of this department but only to that extent where efficiency would not be affected, big

works and big bridges being looked after by the Chief Engineer's department. And attached to the offices of the Superintendents of Divisions of Railways in U.S.A. there are Road Masters. To no small extent the efficiency of train service depends on the efficiency of the tracks, and defects in tracks and their neglected condition not only restrict the speed but mean delay to goods and delay to trains (which further means more expenditure in coal, fuel and wages). Therefore, the District Engineers of Maintenance of Way and Works should be properly speaking placed under the Transportation and Operative Departments, provided that this does not mean sacrifice of efficiency; and all questions relating to designs, standards, new constructions on open lines, inspections of all important and big works requiring technical knowledge should be dealt with by the Chief Civil Engineer.

Allotment of work to Commercial Department.

The main duties of the Commercial Department in India are confined to rates and claims work, the head of of which is either called Commercial Manager or Traffic Manager. For the Rates work on big Railways there is now-a-days a Rates and Development Superintendent and for Claims work there is a Claims Superintendent.

There is an idea (based on past experience) that centralization of claims work gives best results, and on almost all Railways in India the Claims work is centralized at head quarters in the office of the Traffic Manager (Commercial).

Now this is quite opposed to the American or English Railway idea which is that there should be a responsible officer on the spot. Americans hold that "reference to distant superior authority leads to delay and dissatisfaction with the railroad Company." If a Divisional Traffic Manager's Office, located at Cawnpore which is 633 miles from Howrah and 120 miles from Allahabad and 86 miles from Etawah, cannot dispose of a claims case promptly in respect of damage, loss, delay or pilferage to a consignment booked from Allahabad to Etawah it would indeed be a matter for surprise.

The Commercial department should deal with :—

- (a) Rates and fares.
- (b) Development and procuring of traffic.
- (c) Examination of applications regarding sidings, new stations and extended accommodation from Revenue-

earning point of view, and the moment this stage is over the work should go to the General Manager's office who would call upon the Chief Engineer for estimate and plan, and the Chief Superintendent, Transportation, would then be consulted by the General Manager in relation to working facilities, etc., or the Chief Engineer and the Chief Superintendent, Transportation, can look into the matter at the same time after the Commercial Department has submitted its report to the General Manager (Agent as he is called in India).

(d) All claims for compensation for goods or parcels lost, damaged, delayed or pilfered.

(e) All claims for refunds of overcharges.

(f) Revenue statistics.

(g) Publication of all tariffs (goods and coaching) and of time tables for issue to the public.

(h) Advertisements.

The Head of the Commercial Department should be called Traffic Manager or Chief Commercial Manager.

There should be Divisional Traffic Managers in the same way as there are Divisional Superintendents of Transportation and Operation. And in the same way as the Divisional Superintendents of Operation do all work connected with the transportation and operative department, the Divisional Traffic or Commercial Managers, whatever they be called, should do the same for the Commercial department on their lengths within the powers that may be delegated to them by the Chief Commercial Manager.

Commercial department (or the Goods and Coaching Departments) should receive as much attention as the Operative Department.

Rates or fares will of course be fixed by the Commercial Traffic Manager and there should be a Deputy Traffic Manager or Superintendent for rates and development in the Head Office of the Commercial Department, but the traffic canvassers, whose work will be to procure traffic, should be attached to D. T. M.'s Offices. In respect of claims for compensation the D. T. M. should have powers to settle them up to a limit of Rs. 500 in each case. The D. T. Manager should deal with claims preferred in respect of consignments terminating on his district or that should have terminated on his district.

During later years, proper attention has not been paid to Rates work and to the procuring of traffic. In the olden days this was the work of the General Traffic Manager himself. It is true the days of competition are over and things are settling down so far as the rates disturbances are concerned. But the main reason why the commercial work did not receive much attention of late was because for some time past the problem of the Railways was not so much the procuring of traffic as to overcome difficulties in conveying what traffic was offering by itself. History is only repeating itself here. Similar things happened in a small way in India in 1866. The writer of this pamphlet wrote in this connection in his book on Indian Railway Rates (published by the Government of India in 1918) as follows:—"It is interesting to note that even in the sixties the demand for conveyance of goods on Indian Railways had become so great that the resources of some of the railways were found inadequate to meet the same. Owing to more traffic offering than what the Railways could carry, there was at the time a tendency on part of the Railways to enhance the rates and fares." The Government Director of Indian Railways attached to the India Office wrote in his report to the Parliament at the time: "If the traffic goes on increasing in the ratio as in the last two years the rates will have, in some cases, to be raised higher than they are now, in order to realise the profits which the Railways could command, etc., etc." Rates and fares did go up for a short time, but they came down again as traffic-carrying facilities were improved. The traffic expanded again and the General Traffic Managers of Railways were zealous and alert about procuring traffic. In the present days similar again is the position to what it was in 1866. The facilities are going to expand and there will be more traffic coming, and above all, the industrial development of India has just commenced and as most Railways are State Railways the work of development of resources of the country must be assisted by the Railways. No other country in the world in the near future will require this assistance to so great an extent as India and again there will be need for (at least there should be need for) trained and alert traffic officers. When the writer was Chief Rates clerk on the G. I. P. Railway, and one of the great Railway rates experts of his time, Mr. Muirhead, was the General Traffic Manager, under whose direct orders the present writer worked, a most comprehensive and all-embracing form of report (to

be filled in by the Traffic canvassers) was introduced. This form forms Appendix A to this pamphlet. If it is properly filled in, after careful investigation, it would be difficult for the Railway to lose any traffic. In July 1903, when the writer met the then Acting General Traffic Manager of the E. I. Ry. at Jubbulpur at a meeting, the writer handed over a copy of the form to him (Mr. George Huddleston) and he at once introduced this form on the E. I. Railway.

In the near future with the Railway facilities improving (for which large sums have been sanctioned to be spent) and industrial development of India in sight, it is most essential that the staff of commercial officers should be kept in training and in touch with the trade, industries and commerce of the country. The Divisional Traffic Managers of the Commercial department should do the spade work and supply all the information required about recent and future developments, trade movements, possibilities of starting new industries and what the Railways could do in these connections. But this can never be effectively done if all the commercial officers are at the Head Quarters of the Railway. The Divisional Traffic Managers would be most useful in this respect and all Traffic canvassers should be under Divisional Traffic Managers instead of working under orders of the Head office.

Coal Traffic Operation and Commercial work for Coal.

The East Indian Railway and the Bengal Nagpur Railway deal with a vast amount of Coal traffic which originates on their systems.

On both these Railways coal constitutes the greatest bulk of the freight handled. The peculiarity of the coal traffic so far its origin is concerned, is that it is confined to a comparatively small area, which is intersected by Colliery sidings made by Railways. The work of placing empty wagons into these sidings and of drawing out the loaded is done by the Railways; there are no privately owned wagons in India and there are but a few private sidings, and as even collieries despatching two or three wagons a day have been given sidings, the work is of a very complicated nature requiring special working rules, special staff, a large number of shunting engines, depot stations and sub-depot stations for

collecting and distributing empty wagons and for concentration and despatch of loaded vehicles and formation of trains. And matters are rendered further complicated owing to this small area, where the great bulk of the coal traffic of India originates, being the main source of supply of coal to the whole of India from East to West and North to South, and this area being at one end of India a very large amount of rolling stock is worked from great distances to this area, where it is concentrated, distributed for loading, loaded and despatched every day. The work in the coal districts requires special experience and training.

The Coal Manager and the officers (Commercial and Transportation) on the Coal districts are the productions of special training and experience.

The Coal Manager is both the Operative and Commercial officer for Coal traffic and the coal area. It is true, however, that coal rates are fixed by the Rates and Development Superintendent (under the Commercial Manager) and it is also true that the movement of coal wagons and trains outside the colliery sidings and the coal district yards is done by the Transportation Department, but all the same the work in connection with the colliery sidings, the supplying of empties to individual collieries, and collection of loaded coal wagons is both complicated and special in its nature.

The Coal Manager should be treated as one of the staff officers of the Chief Superintendent of Transportation and Operation and his work should remain intact. He does a certain amount of commercial work but even if he remains attached to the Transportation and Operative Department he can do such commercial work as he does now in connection with the recovery of freight, settlement of claims, refunds of over charges, etc., but at the same time some of the work in connection with claims for compensation and for refund of overcharges on coal traffic might be conveniently delegated to the Divisional Traffic Manager in respect of traffic terminating on his Division so that the D. T. M. would be the representative of the Commercial Manager and of the Coal Manager. The Coal Manager would be Deputy Chief Superintendent (Coal) attached to the Transportation Department. This Deputy Chief Superintendent (Coal) although attached to the office of the Chief Superintendent of

Transportation and Operative should refer all coal commercial work requiring reference to the Head of the Department to the Commercial Traffic Manager. There is no harm in the Deputy Chief Superintendent (Coal) having dual responsibility to the Commercial Traffic Manager and to Chief Superintendent of Transportation and Operative although he will be attached to the office of the latter.

Position of Terminal Railway Goods Depot

Officers at Ports.

There is a very large movement of traffic to the Calcutta, Bombay and Karachi Ports which require special treatment. As a contrast to the Coal Manager, who, while doing both Commercial and Transportation work, is recommended to be treated as a Transportation and Operative Department officer, the officers in charge of the big goods depots at Howrah (Calcutta), Bombay, and Karachi though doing both Commercial and Transportation work should belong to the Commercial Department, for they will be in charge of the biggest goods depots of India and their dealings will largely be with the public particularly traders, merchants, shippers, etc. In goods depots like these, it is not advisable that the operative work should be under one chief officer and transportation work under another such officer. The receiving, weighing, waybilling of outward goods and the tallying, sorting, arranging, warehousing and delivering of inwards goods are important branches of the work of such goods depots and a great deal of efficiency depends on how these operations are carried on. At the same time, the largest amount of rolling stock comes to such depots and their reception, distribution to several sheds, etc., unloading, reloading and redespach are also amongst most important items of work and, as already stated, in depots like those under consideration, the operative and commercial work affect one another a great deal. The export traffic of Calcutta for direct shipment is dealt with at Kidderpur Docks and the import traffic at the jetties, but in respect of both all claims work is done by the Railway authorities, as the Port Commissioners are practically the Agents of Railways in receiving and forwarding such traffic.

To the public, the Goods Superintendent of such depots should be the one boss of the whole show. He may have two separate deputies under him, one for Commercial and another for Transportation and Operative work. These

deputies would work for the Goods Superintendent in their respective branches and be responsible to the Goods Superintendent, who in his turn will have dual responsibility to the Commercial Traffic Manager and to the Chief Superintendent of Transportation and Operative, although the Goods Superintendent will be an officer of the Commercial Department.

Stores Department.

The American Railway men hold that while purchasing of materials belongs to the corporate management, the caring for and distribution of supplies to the railroad management belongs to the operative department. In India, the Stores Department receives all indents from the various departments, purchases the articles, stores them and distributes them. The present system on Indian Railways has worked well and there is no great need to disturb it. This department is directly under the Agent (*i.e.*, the General Manager) of an Indian Railway. But with the introduction of the Divisional System while the Stores Department will yet remain under the Agent (*i.e.*, General Manager) direct, there will be created under the Operative Department or the Divisional Superintendents, an organization of a branch of the Stores Department to indent for articles on the Stores Department and to receive, distribute and account for Stores and materials wanted, consumed and kept in Stock on each Division.

Accounts and Audit.

With the separation of the Railway Finance in India there is now an Audit Department, which is responsible for post and test audit of accounts, and for advising the accounts department in connection with checking and keeping the accounts of the railway. While the audit department is under the chief auditor, responsible to the Auditor General of the Government, the accounts are under the Chief Accountant, who is responsible to the Agent of the railway, and on the Divisions there are Divisional accountants who keep the accounts of all expenses and disbursements on Divisions. He is also the cost accountant, and while he is under the chief accountant he counts as one of the staff officers of and Financial Adviser to the Divisional Superintendent.

Conclusion.

The Divisional System of working, more or less on the lines indicated in this pamphlet was introduced on North-Western Railway and the East Indian Railway including the Oudh and Rohilkhund Railway, during the years 1924 and 1925. To use the words of the Railway Board "the Divisional Superintendent has been invested with extensive powers of control and is entirely responsible for all the executive work of the railway on his Division, the Divisional Superintendents are in each case assisted in matters of accounts by an Accounts officer and for the purpose Divisional Accounts offices have been formed. A corresponding change has been made at headquarters where the distribution of duties has been altered. A new post of Chief Operating Superintendent has been created and this officer has taken over all the responsibilities associated with operating which were formerly divided between the Traffic Manager (Commercial) and the Loco Carriage and Wagon Superintendent. The Commercial side of the work is entrusted to a chief commercial manager and mechanical Engineering subjects, including the administration of workshops, to a chief mechanical Engineer." The work of maintenance of tracks, buildings, offices and bridges have also come under the operative Superintendents, but all designs, standards, new works, and heavy renewals and repairs to the property are under the Chief (Civil) Engineer. The only thing that has not yet been done on these Railways is that there are yet no Divisional Commercial (Traffic) Managers, the entire work of the Commercial Department being done from Head Quarters so far. The G. I. Ry., however, have Divisional Traffic (Commercial) Managers but on this Railway maintenance of and repairs to permanent way (or the road), buildings and bridges are yet under the Engineering Department, and not under the Operative Department. Charts showing both the departmental and the divisional organisations are appended to this pamphlet.

Appendix A

—RAILWAY.

Report on the traffic at.....Station.

Goods Traffic.

1. What are the principal items of traffic of the station ? ...
 - (a) Inward ...
 - (b) Outward ...
 2. What are the principal products ?
 - (a) Condition of the crops ...
 3. Give the increase or decrease in goods traffic in each principal item separately, compared with the corresponding period of last year ...
 - (a) Inward ...
 - (b) Outward ...
 - (c) From or to what stations ? ...
 - (d) State the reasons for fluctuations under each item ...
 - (e) Have you any remedies to recover former position in case of decrease ? ...
 4. What are the effects of special rates granted for the station ?
 5. What effects on traffic have resulted from the cancellation of any special rates ? ...
 6. If any special rates are necessary, quote reasons briefly and give reference to any special report on the subject ...
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7. Are there any special rates in force that you would suggest should be cancelled or amended, if so, what are they and why ?
 8. Has the Station attracted any new traffic, if so, where was it going before ? ...
 - (a) What measures are necessary to continue or maintain it ? ...
 9. Has the Station's traffic been diverted by other routes, if so, how ? ...
 10. What traffic can be developed at the Station ? and how ? For instance is there any prospect of introducing coal from the Bengal coal-fields or of increasing the present traffic or is there any possibility of traffic in any commodity being developed or of any new industry, factory or mill being opened ?
 11. What Foreign Railway is in close connection with the station ? ...
 - (a) Give the names of its stations which compete with our station and the distance from the Foreign Ry. station to the villages, towns, and marts, which can be served by the station of this Railway and distances from the latter also, and if possible, quote the carting charges as well ...
 - (b) What are the principal items of traffic of such stations, also state the source, direction, etc. ...
 - (c) State reasons for such traffic not being despatched over this line ...
 - (d) What are the principal special rates in existence at the Foreign stations referred to ?
 - (e) Effects of such special rates on the traffic from or to our station ? ...
 - (f) Measures necessary to attract the traffic to this line ? ...
-

12. Is there any traffic finding its way to competitive ports? If so, state the proportion of such traffic to our port and to the rival port or ports ...

What particular kind of grain or seeds generally finds its way to such rival port or ports? ...

What are the prices offered for such traffic at our port and at the rival ports? ...

What are the reasons for such traffic not being booked to our port? ...

13. What is the tendency of dealers and what route do they prefer (where there is another Railway to compete with us)? ...

14. Is every facility given to dealers to foster and develop traffic?

15. Are all the merchants kept informed of the special and ordinary rates? Have you interviewed the merchants and informed them of the latest rates for the articles they deal with? ...

16. Is there any surplus stock lying in markets near the station for want of adequate rates on our part? If so, state also where the goods are likely to find purchasers ...

17. Have dealers sufficient stock for local consumption and for what period? ...

(a) State if likely to import and wherefrom ...

18. Are any measures necessary to draw over to, or give this line a long lead? ...

19. What articles are imported at this station from rival ports ...

State the price of such goods at all the ports ...

State the proportion of such traffic from the several ports,

20. Is there any competition with the steamer service or with boats or country carts? If so, state the name of the destination or the despatching station, the description and quantity of traffic, the time occupied in transit, the rate charged including the loading and unloading charge if any, and the quantity that is carried at one time ...
21. (a) Is the steamer, or boat service regular? If not, at what intervals do steamers or boats arrive at and depart from this station? ...
- (b) How far is the mart from the Railway Station and from the River Ghat? Is there any difference in carting rates to the silver side and to the Railway Station from the mart? ...
22. Are there any obstacles in the way of traffic flowing freely from the source or sources of traffic to the station, such as unreasonable taxes, prohibition of use of the road, etc.? ...
23. What Courts are there in the town? ...
24. What fairs are held and when? State also the principal sales, if any. ...
25. What periodical bazars are held?
- (a) How are they supplied? ...
- (b) Would you suggest any specially reduced rates for such articles as are sold at any of these bazars? If so, why?

Coaching Traffic.

26. Is there an Increase or Decrease in passenger traffic compared with the corresponding period of last year? ...
- (a) State the reasons for fluctuations ...

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- (b) Would a reduction in fares attract passengers to the rail who now travel on foot ? ...
27. Are the timings of passenger trains suitable to local requirements ? ...
28. Do the Foreign Railway (if close by) trains affect our interests ?
29. Give the name and date of the next local fair ...
- (a) Number of Passengers likely to attend and from what Districts ? ...
- (b) How many attended last fair ?
- (c) Measures necessary to attract pilgrims ...
- (d) Is there any religious or other fair to be held anywhere which is likely to be attended by inhabitants of this place and from places served by this station ? If so, give particulars and the number of passengers that are likely to go from this station ...
30. Do any Parcels find their way to other Railway Stations close by in order to avoid the charges of the through mileage ? ...
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