

~~those which seemed to me to be of greatest interest, and to throw most light on the important and interesting questions now under discussion. I have tried to give the effect of these figures as fairly as I can, though I cannot conceal my own conviction that the whole body of evidence here collected by the officials of the Board of Trade, is strongly in favour of our present system, which leaves the manufacturer and the trader free to find his own markets, and to buy and sell in that which he finds most profitable. The onus of proof certainly lies on those who contend that the State is a better judge than the individual trader of the conditions of profitable trade, and that by taxation and regulation it can find for him a better market than he can find for himself. Those who undertake this burden of proof, and would convince us that trade and manufacture flourish better under protection and regulation than they do in a state of freedom, may look for their materials elsewhere; they will not find much to help them in the Blue Book of the Board of Trade.~~

3.—*The Government Management of Indian Railways,*

BY C. A. STANUELL, ESQ., M.A.

[Read Friday, 10th June, 1904.]*

I do not propose to-night to deal with the whole question of Indian Railways; it would be too wide a subject. I wish to refer to the recently published Report of Mr. Thomas Robertson, who was formerly Manager of the Great Northern line in this country, and later on Chairman of the Irish Board of Works.

He was appointed in consequence of general complaints, and also in connection with financial difficulties experienced in the development of the Railway system of India, and a perusal of his report has fully confirmed what I had learned elsewhere as to the failings of Indian Railways.

I acknowledge that there are extenuating circumstances. In the first place, there has been great difficulty in raising capital: India is a poor country. Second: An enormous mileage has been required, and is still required. Third: An extraordinary gauge of five feet six inches was adopted, which has proved unsuitable to a poor country, with the result that there are now about 14,000 miles of broad-gauge, and 11,000 of narrow, and the confusion is growing daily. The great bulk of the mileage is single, and has been constructed in the last twenty-five years. The total mileage in 1878 was 6,671, and it had increased to 25,936 in 1902.

* Postponed from 29th January 1904.

Still, even allowing for the three difficulties, and the last is due to a governmental mistake, the system, which is largely controlled by the State, furnishes a strong proof of what Sir George Findlay and other great authorities have urged, that it would be very foolish to adopt State management with a view to obtaining improvements of facilities, or better, or cheaper, working. It is true that the Indian fares and rates are much lower than the English, but they are too high as compared with the money standard of the country, which is so low that a man and his family can live on six rupees (eight shillings) for a month, and a cavalry soldier keep himself, providing his uniform and horse, for a rupee per day.

However, I must enter on my lengthy subject without delay. I have in the first instance prepared three maps which will show :

1. The divisions of the lines as worked : that is to say, the Government, Native State, and Public Companies ;
2. The Broad and Narrow-Gauge lines ;
3. Lines constructed, authorised, and required for development.

My object in preparing them was, of course, to avoid the necessity for entering into long explanations, and to allow me to deal at once with the figures and arguments of Mr. Robertson's Report.

The first chapter of this most exhaustive document is devoted to the question of "Administration" of the various systems of railways. I imitate him in saying "systems," as the word "company" is not applicable, there being Indian and Native State railways, as well as those of companies. The following is a greatly condensed account of the Administrative System.

In 1902 there were in India 25,936 miles of railway open for traffic ; 14,312 of standard five feet six inches gauge, against 10,896 of metre and 728 of narrower gauge. These were divided into 33 separate Administrations, divided as follows :—

24 worked by Companies of various kinds, operating 17,754 miles ;

5 worked by Native States of various kinds, operating 2,184 miles ;

4 worked by Government, operating 5,998 miles

These lines may be divided another way :—

A. Those for which the Government has no financial responsibility, 5,462 miles ;

B. Those for which it has full financial responsibility, 20,474 miles.

As regards the first class, they may be again sub-divided in various ways, but they are not any more controlled than

ordinary British Companies. As to class B, the arrangements vary: the Government either work the line, or employ a Company to work it, and if so the Government guarantees a certain minimum dividend. There are various varieties of this arrangement, but, substantially, most of the guarantees are given by the Indian Government.

If the railway be worked by the State, then the State takes the place of the directors, and appoints a manager. If worked by a company, there is a complicated system of control both in England and India.—

First, in England. The Secretary of State in Council has full power; second, there is a Government Director on the Board with an absolute veto, and, finally, a Consulting-Engineer.

Second, in India. There is, first, the Governor-General in Council, through the Railway Branch of the Public Works Department; second, a Consulting Engineer and his deputies; third, a Government Examiner of accounts.

This is a very complicated chain, but even so it is not effective in important respects, while cumbrous in others.

First: If the line do not earn up to its guarantee, there is no motive on the part of the Company for economy;

Second. There is no inducement to keep down capital expenditure. Indeed, as the engineers are paid by a percentage on the capital expended, they are interested in the high cost of the line. I by no means wish to say that this affects their work; I am merely pointing out defects in a system noticed by Mr. Robertson. Personally, I feel another grave defect: I see no provision made for initiating or starting, but an elaborate apparatus for obstruction—six brakes and no driving power make a bad locomotive.

As to the actual procedure, apart from these omissions, the result of the Governmental liability is, that general complaints are made that the Government official is careful to an extreme as to form, in fact inquisitorial as to accounts and records, but oblivious of actual facts. There is accuracy of inquiry, rigidity of procedure, severe precision regardless of cost, carried down to the most trivial matters; everything requiring prior sanction. The Government Examiner of Accounts has developed a system of close examination of petty details. The supervision cost the Companies in 1901 no less than 1,115,706 rupees. Naturally this kills improvement and progress, the officers under such a system look to their own safety, they can take no risk, however promising it may be for the Company.

It is further complained that much excessive interference is due to the Consulting Engineers, who must "justify their existence," that these officers are perpetually being changed and their staffs varied, and that they are somewhat despotic.

Mr. Robertson uses very cautious language, but he thinks that there are grounds for believing that the companies' officers are, as a consequence of the excessive control now exercised over them, prevented from performing their duties in the manner which should conduce most to the benefit of the public, the shareholders and the Government. I may add, from another source, that this opinion is expressed far more strongly by others.

Mr. Robertson's final judgment on this part of his Inquiry [paragraph 45] is, that while it is essential that the Government should retain full powers of control, the form it now takes is wasteful and harmful, and that the system of control adopted in the State Railways should be adopted in all cases, and he recommends.—

1. That the office of Consulting Engineer with its establishment should be discontinued ;

2. That the Government Examiners of Accounts should be withdrawn ;

3. That the Boards of Directors, or their representatives in India, should administer and work the railways under a modified Railway Board, which he deals with later on in his Report [see paragraph 53].

Leaving this branch of the administration question, he next condemns the influence of the "Code" regulations, under which the great Railways are reduced to the dead level of Government Departments instead of commercial undertakings, and shows [paragraph 51.] that the multiplicity of departments, with reports going backwards and forwards, sometimes between six, eight, or ten officials, "impairs responsibility, crushes initiative, checks progress, and delays business." It is the old saying, that in the multitude of councillors there is wisdom, but very little despatch ; and unfortunately time is an important matter in many cases. Just imagine a station master unable to order a special train for a sudden emergency, such as may occur on any line ! Under the "code" it would take a fortnight : at York, where I saw one occur, the station master took it as a matter of course, and the train was put together inside ten minutes.

So far as relates to the State control of Railways in India, Mr. Robertson's suggestion for meeting these administrative difficulties is to constitute a Railway Board of three properly qualified members with Secretary, Chief Inspector and ordinary Inspectors, and he assigns to this Board :—

1. The administration of Railways ;

2. The construction of additional lines ;

3. All financial arrangements connected with railways.

Speaking as one of the public, with some little knowledge of railways, I thoroughly agree. It is somewhat curious that Mr. Robertson's conclusion as to management by a Board coincides with Lord Esher's recommendation for the War Office.

Next comes the organization of departments of railways. This section, though interesting to the student of railway business, or to the practical railway man, is so purely technical that the general public would hardly follow it. Substantially, the conclusion is, to recommend a redistribution of the work of management, following the English division, of :—

1. The General Manager ;
2. A Goods Manager ;
3. A Superintendent of the Line ;
4. A Civil Engineer ;
5. A Locomotive Superintendent.

In one place in this section he makes the very valuable suggestion that the chief officials should visit the British Isles at intervals to get suggestions for improvement, and also that the British directors should visit India.

This is the closing suggestion of the Section, except that Mr. Robertson gives here his general views as to State against Company management. While writing with much care and with an evident wish to be impartial, it is easy to see that he is in favour of Company management. He brings forward nine defects of State Management, all deserving of the utmost consideration, and four alleged merits, which hardly impress the reader. In fact he follows the late Sir George Findlay in his well-known book.

CHAPTER II.

The Financial Arrangements.

In order to deal in any satisfactory way with the question of the financial arrangements of the Indian Railways, it is, I fear, necessary to give a brief account of their origin :—

1. The first or oldest class of railways were guaranteed their interest by the East India Railway Company ;
2. After the Mutiny the State began to construct railways ;
3. The State System having collapsed, companies again came in, the interest on the capital invested being guaranteed by the State ;

4. Finally, State construction was again resumed ;
5. Gradually the existing companies were called in to assist.

Even with all these methods, India has not yet got the railways she needs. Under the existing system, which Mr. Robertson criticizes severely, she cannot get them, and the next question is, How are they to be provided?

The plain fact is, that at present the terms offered to companies for construction are not good enough. They are practically a guarantee of three per cent. in silver on the capital invested, but this is below the price of India three and a-half per cent. stock, and further the State may take over the line in twenty-one years. In other words, when the Government of India is paying three and a-half, the companies are to invest their money at three in a very temporary investment.

Mr. Robertson expresses no opinion on this singular arrangement, but as I have no connection with the subject, I am not bound to refrain from calling it absurd. It would perhaps be more conspicuous, but for the next specimen, and this, which is called the "Programme," is such a masterpiece of official management as to eclipse the other as the sun does the stars.

Under the Programme a sum of money is annually allotted for railways, the amount depending on the state of the Treasury, and money market, and the condition of the country. It is apportioned at the commencement of the year, and the railways do not know in advance what money will be allotted during a series of years, or even two successive years; further, any unspent balance lapses at the close of the year, it is not carried forward to next year for railways.

To avoid lapse under this provision there is often redistribution of the surplus, and business is "rushed through." On the other hand, owing to the fund being curtailed, work which has been commenced is sometimes stopped for want of funds.

Is it any wonder that sane contractors do not see the merits of a three per cent. guarantee, under such an absurd arrangement? Just imagine a man building his house, or large works on this principle: paying £100 the first month, £200 the second, £50 the third, and not telling the contractor what funds would be available. It may seem too wild for consideration, but it is the fact. Joined with the three per cent. guarantee it is, to quote Dominie Sampson, "prodigious." No wonder that even Mr. Robertson writes:--

"The uncertainty which always prevails as to the amount which will be allotted in any years--strikes at the very root of commercial success."

Certainly I am not surprised to find [paragraph 104] that he recommends the removal of Railways from the "Programme," and a reconstruction of the Financial System.

One cannot help thinking that if the Government took over the Irish Railways the result would be much the same.

Expenditure upon New Lines.

Mr Robertson commences this section of his Report with a table, showing that India has one mile of Railway for every 82.36 square miles, and every 12,231 inhabitants, and comes next after eight European countries and the United States, though Japan is practically superior with a mile to every 33.58 square miles and 12,713 inhabitants.

He gives the annual average extension in India as 902 miles, or deducting the work of companies, a "Programme" of 522, and then, proceeds to consider what has been the cause of failure so far.

The successive steps by which he arrives at the conclusion that public companies, or existing companies should make the branch lines, and that the existing companies, should work them on terms which he lays down are interesting, as they follow to a considerable extent the system adopted in Ireland with the Light Railways in the West, that is to say he proposes that the existing companies should work them with a guarantee of a minimum dividend, which he fixes at four per cent. in gold, and a division of the profits between the companies and the State, when they exceed five per cent. He prints the Railways (Ireland) Act, 1899 (59 & 60 Vict. c. 34), as an appendix (M) to his report. His plan is elaborate and careful, but at the same time it hardly satisfies me. He is, I think, too hard on promoters, and too oblivious of the risks they run in their contracts, particularly in contracting with a Government; a company can be taken into court, a State department is contemptuously indifferent to mandamus or injunction. When I consider that the three per cent. interest and the Programme were the outcome of Government "ability," I confess I would need a stronger inducement than four per cent. to tempt me into investing in the security, the more so as the four per cent. does not seem to be certain, and it seems assumed that the branch line must pay one per cent., and the Government is to make it up to four.

Mr. Robertson seems conscious that his plan is not one which will be accepted, for he goes on to make another suggestion to some extent contradictory to his last argument, for he recommends the creation of a Railway Fund, to be applied in providing improvements on State Railways, and

towards the construction of new lines. This would have to be kept apart from the general finances of India, and he places the amount at £10,000,000, or fifteen crores of rupees.

The Working of Railways.

We are now coming to the practical side, the management and development of traffic, as distinct from "Administration," and Financial Arrangements, and we have again to commence with a brief sketch of the present system.

The first thing that strikes the visitor is that the speed is extremely slow, and the table given in the Report confirms this view. The average speed of the quickest train, in India, the Postal Special between Bombay and Calcutta, only one per week, is 34·64 miles an hour. There is apparently one other train on the same line over thirty miles an hour, and a train from Calcutta to Kalki (for Simla) at thirty-one. After these three we are in the "twenties" and below them. The fastest train on the 1,031 miles between Madras and Calcutta reaches the magnificent speed of twenty-three miles an hour on a main line, while as to the branch lines, the best of them does not reach twenty, and only one gets up to 17. The average is 13·99 on main line, 7·55 on a branch. It might be thought that this was due to the natives avoiding the railway, and there being thus few travellers; but, on the contrary, the number of passengers per train is the largest in the world. An English railway, except certain local trains, such as the workmen's trains on the Great Eastern, will be well filled with 200 or 250, Mr. Ackworth says "uncommonly well filled," with 300 on the London and North Western Line. On the branches the number will be more like 100. In India the average on eight leading lines is 212 on all the trains, and of this 91 per cent. is third class, while the intermediate absorbs about 4·6, the second only 2·5, and first class the small residue of ·46 per cent. We have thus crowded and consequently heavy trains, resulting in speed being fourteen miles an hour on a main line, and eight on a branch, with traffic congested in consequence. Mr. Robertson says that the United States under similar conditions run their speed up to 50 and 55 miles an hour, ordinary trains from 30 to 35. He traces the slow speed to various causes, partly to deficient engine power, but some to long stoppages for meals, and for watering and shunting. Reserving the question of meals, he thinks the chief causes are in delays, and in watering and shunting, due to the "dilatory and almost casual way" in which these operations are carried on. He expressly states that the passengers are not the cause, it is due to general slackness. The question of speed is important, because it is much too low for the

volume of traffic, the line is blocked for too long a time, particularly when the line is single, which most of them are.

Elaborating this subject a little he recommends more through trains, and finds the third class accommodation is defective, lacking in lavatory cars and destitute of through carriages, although there were in 1901, 170,500,000 third class passengers against 9,500,000 of all others put together; and, finally, he states that it is alleged that the booking clerks keep part of the fares and give a ticket short of the destination, while porters frighten travellers into bribes, and station masters levy fees prior to supplying traffic wagons. Many of us have read Kipling's "Kim," and it is curious, and strong evidence of truth, to find that Kim's railway journeys all contain incidents involving these complaints, the horse-boxes left all night unemptied, the dishonest booking clerk, the awful crowding, the helpless passengers, the slow uncertain speed. They form picturesque reading in a novel; but, like the tumble-down cottages which artists love to depict, they are a failure in real life.

It is only fair to say that Mr. Robertson gives these complaints as made to him, and adds that he was unable to verify them by his comparative ignorance of the language, and the difficulty of obtaining evidence; but he thinks they are true, and he proceeds to lay down certain precautions. It is this chapter, perhaps, which gives us the best idea of Indian Railway Traffic, and our worst impressions of the manner in which it is carried on.

Goods Traffic.

Turning to the goods traffic he quotes the average speed on the main lines, and it must be admitted that it is very slow, about five or six miles an hour. Instances are given of two miles an hour. He finds [p. 184] that the low average is not due to the slow running speed, but to the delays permitted at stations, and the defective arrangements for sorting and marshalling the traffic. I should perhaps explain that these terms refer to the sorting of the wagons in such a way as to have all these for one station together, and marshalling the train with the wagons in station order, so that they can be dealt with without delay.

The effect of all these defects of bad speed and long halts is to keep the line blocked. By doubling the average speed the work done would be increased by one hundred per cent., less the time taken to load and unload the second consignment, and this would save rolling stock, and render such extensive sidings unnecessary.

Fares.

Curiously enough, though Indian fares are much below

the British, they are, according to Mr. Robertson, too high, having regard to the cost of living. He thinks they should be reduced by amounts varying from 18 to 40 and even 50 per cent., and then they would be about equal to those in the United States.

In rapid paragraphs he now deals with villa tickets, week-end, excursion and tourist tickets, coolie traffic, season and workmen's tickets, and traders' tickets; and turning to goods rates, he deals with classification and through rates, invoicing and way-bills, collection and delivery, the erection of stations, and goods yards, on which he is particularly severe, and afterwards to the development of local industries, equalisation of traffic, risk-notes, and claims. All of these come in for brief but searching criticism, and once more he points to the necessity for more powerful engines and larger wagons as valuable in reducing the cost of haulage. On this point, anyone who has noticed railway matters will have observed how the English and Scottish lines are dealing with the subject. We are even beginning to make changes here dealing with this subject. A "Guinness" wagon is now often marked up to twenty tons, which would formerly take four trucks, an enormous reduction, both in the dead weight and in the cost of the wagons. I think it would do no harm if Mr. Robertson were to report on some of the Irish lines.

Rolling Stock.

The Rolling Stock, is according to this candid critic, not well adapted to the traffic, and is seriously short of what is necessary for economical and efficient working. The Indian engine draws 1,000 tons, the United States 3,000. There is manifestly considerable variety, as he recommends having "only" five classes. As to passenger cars, he recommends bogies, the abolition of four-wheel coaches, and the introduction of third class lavatory cars. For goods traffic, eighty per cent. of which in India is "heavy," he recommends the American bogie truck, on account of the high carrying capacity it has in proportion to its dead weight. At the risk of being a little tedious, as the matter is of some importance, and is very little understood, I will give his calculations:—

	tons.	cwt.	lbs.
The East Indian Railway four-wheeled wagon (the best form existing in India.)			
Weight empty, or tare	7	17	2
Carrying	16	0	0
Proportion of load to tare about two to one.			
United States open bogie, tare	17	10	0
Load	50	0	0
Proportion of load to tare three to one.			

It follows from this that an Indian train of 1,000 tons requires 45 wagons with a tare or dead weight of 354 tons, and carrying 720 ; a total of 1,074.

An American bogie train would carry 1,000 tons in 16 wagons, the dead weight would be 280 tons and the load 800, 74 tons less dead weight, and 80 tons more of load.

This is ten per cent. better load, and 20 per cent. less dead weight, but it is also found that the higher the gross load, the lower is the ton resistance, because a long train has more friction, one end may be round a curve or on a gradient. "The nearer the horses the lighter the load." Finally, an American truck costs less than three four-wheelers. As the train of 45 wagons I have mentioned would be 1,020 feet long, while the American of rather great capacity, would be only 584, there would be a substantial difference as regards sidings required for all purposes.

Increasing the power of the engines would relieve the congestion by reducing the number of trains, thus reducing the staffs and locomotives.

As Mr. Robertson says, these are all solid advantages, and it is worth while to introduce any type of engine and vehicle which will shorten the trains and make them easier to handle and haul. Judging by some of the rolling stock I have seen in this country, there are a good many railways which have not yet learnt this lesson, and instead of building new and efficient rolling stock, are actually spending large sums in repairing the old expensive rolling stock. They rely more upon parsimony than economy.

It may surprise people to learn that the well-known absolute block system is only used on seven routes, and we are not surprised that Mr. Robertson condemns this. He thinks that the main routes and busy lines require it, and he pronounces in favour of automatic brakes for passenger and goods vehicles. His final call is for thoroughly qualified, energetic inspectors. How these are to be found on a State railway is rather beyond my comprehension. In fact here is the greatest example of State Railways in the empire, perhaps in the world, and it is clear that the system is not a success, and goes very far to confirm the theories of the great English Managers, such as the late Sir George Findlay, that a State-managed railway is not so successful as one managed on commercial principles. It is an object lesson for those who advocate State management for Ireland.

I have summarised this portion of the Report very much, but it is intensely valuable, full of criticism, but also abounding in suggestions for improvements. They would take too long to explain, and I have confined myself practically to mentioning the headings of the subjects he refers to.

General.

Mr. Robertson was finally requested to make suggestions for improvements, including the extension of branches and light railways, or feeders for the main lines, and he grapples with this as with every other difficulty.

He starts with three suggestions:—

1. Connecting isolated railways ;
- 2 Forming cross connections between existing parallel lines ;
3. Extending railways into fertile districts.

He then proceeds to consider what these three ideas require.

I have endeavoured to show these on my third map. Omitting those which are intended to connect the Assam and Burmah Railways with those of India proper, the others are five in number. The first is to connect the West Coast Route, the Bombay and Baroda, with the railways running up the banks of the Indus, which are at present isolated. This requires a connection between Ahmedabad (Kathiawa), near Baroda, through Cutch and Scindh to Hyderabad and Kurrachee. The second is a link between the Bombay and Baroda line and the northern broad-gauge system in the direction of Delhi. This would be obtained by a line from Rutlam on the Bombay and Baroda line to Muttra not far from Agra. The third is of quite a different character, a linking-up of the two wide-spread arms of the Great Indian Peninsula Railway and the State lines of the Nizam of Hyderabad by a connection from Itarsi on the northern branch south-east through Nagpur to Warangal far to the south. The fourth is a line from Raipur on the Bengal Nagpur Line east of Nagpur, running south-east to the sea at Vizianagram and Vizagapatam.

The last line he specially mentions is intended to link the metre-gauge lines of the north and south, which are at present isolated, and this he proposes to do by a line from Khandwa, on the narrow-gauge Rajputana-Malwa branch of the Bombay and Baroda, to Kurnool on the South Mahratta, *via* Nander, or from Khandwa to Hotgi *via* Nander. I have shown both routes.

Summarizing the lines they are as follows, the distances are rough, taken from Appendix H.

Kathiawar and Scindh	..	..	360 miles.
Rutlam to Muttra	..	..	355 "
Itarsi to Warangal	..	..	340 "
Raipur to Vizianagram	..	..	359 "
Khandwa to Kurnool	..	..	372 "
Khandwa to Hotgi	..	..	372 "

The last two are alternative ; omitting one of them, we get a total of 1,786 miles. This may seem large ; but, as a matter of fact, Mr. Robertson gives a list of 212 railways projected in India, with 13,187 miles of line, many of which are very desirable, so that he only recommends one-tenth of those stated to be required.

We now come to another of Mr. Robertson's three great suggestions, the establishment of a Railway Clearing House for India. It is probably unnecessary to enter upon any elaborate account of the English or Irish Clearing House. Most persons are aware that at this office the accounts in respect of through booking are arranged among the various Companies. For instance, a traveller books through from Cork to London by the Mail. The fare from Cork to Dublin belongs to the Great Southern and Western, there is then a section of Loop Line, in which three Companies are concerned, the Dublin and Wicklow takes a share from Westland Row to Kingstown, the City of Dublin steamer the further portion from thence to Holyhead, and the L. & N. W. the remainder. The Clearing House settles the account, and there cannot be the slightest doubt that its absence would be a terrible drawback to the prosperity of railways. The need is all the greater in the case of goods. The case is so obvious, that nothing but the apathy so common in Government Departments seems possible to be assigned as a reason for its non-existence in India, and Mr. Robertson considers it an essential.

Passing over two or three further heads of discussion, some of which, such as "Traffic Conferences" and "Locomotive and Carriage and Wagon Conferences," are known to few except railway men, we reach the last and most difficult question touched by Mr. Robertson, the question of gauge.

Briefly speaking, the difficulty is, that there are in India two gauges ; one of five feet six inches, which is nine and a-half inches wider than the English, and another of the "metre" or thirty-nine inches. I pass by a few smaller lines such as the Darjeeling which are even narrower, they are only 728 miles in all. The confusion arose as follows : The broad-gauge proved expensive in construction, and the result was the adoption of the metre on various routes, and as this proved satisfactory, it has been greatly developed, there being now some 14,312 miles of standard gauge, and 10,876 of narrow.

The result is, of course, immense trouble at junctions where the gauges vary. It is bad for passengers, but it is ten times worse for goods, for every single particle must be shifted from wagon to wagon.

The problem is not altogether simple. The broad-gauge

gives a more commodious vehicle, but its own works are much more expensive and bringing up all the narrow gauge to 5 feet 6 inches would be a great expense. Mr. Robertson's solution is really based upon his own very acute observation that foreign four feet eight inch gauge carriages are ten feet six inches wide, while Indian on a five feet six inches gauge are only nine feet six inches, a foot narrower, a fact which leads him to the decision that all the Indian lines should be reformed on the basis of the four feet eight inches gauge with overhanging carriages. Whether the Government will undertake such a work is foreign to my present purpose. Personally, I think it is the best solution. It would be possible to convert the narrow-gauge railways to the four feet eight inches gauge in cases where it would be very expensive to change to five feet six inches, and the broad-gauge rolling stock could be easily adapted to the narrower base, just as was done in 1892 on the Great Western. There is the course of doing nothing, that usual resource of feeble characters, and, I regret to say, I fully anticipate this; but there can be no question that this will cause endless trouble and possibly the time may come when it will involve disaster.

It now only remains to summarize Mr. Robertson's chief suggestions :—

1. A Railway Board of three competent men, with a Railway Fund of £10,000,000, to control the Railway system generally ;
2. A Railway Clearing House for India—he suggests at Allahabad, as a central position. I fancy this would be very hot in summer;
3. A reformation of the rolling stock, increasing the power of the engines and the capacity of the vehicles ;
4. A linking-up of isolated lines ;
5. A reconstruction on a four feet eight inch gauge.

Nos. 1, 2 and 3 are easily feasible ; certainly 1 and 2. No. 3 would be gradual ; 4 is a question of time and money ; 5 is in the future, but will become more pressing every day.

I am not overlooking the other enormous changes he recommends ; the Report literally bristles with suggestions, but all are so clear that they speak for themselves.

I fear I have selected a comparatively uninteresting subject, but, quite apart from its importance as regards India, there has been agitation for State Management in Ireland. Personally, I am absolutely convinced that this would be disastrous to the interests of the country, and I think it only right to call attention to the result which has followed the attempt to introduce the system of State Management into our Indian Empire.