

GOVERNMENT OF INDIA

REPORT

BY

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ON THE

SYSTEM OF ACCOUNTING,
AUDIT AND STATISTICS
OF THE RAILWAYS
OWNED AND MANAGED
BY THE GOVERNMENT OF INDIA

1926-27.

Part II.

PART II.

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APPENDIX I.

SYSTEM OF CASH RECEIPTS AND DISBURSEMENTS.

1. Pending the complete separation of the Railway finances from those of the Government of India, it has been recommended in Chapter V of the Main Report that the Controller of Currency be constituted the bankers of the Railways, and that the various branches of the Imperial Bank and the sub-treasuries of the Government of India be treated for Railway purposes as branches of the Controller of Currency. The treasurer of each Railway will maintain Cash Books in which will be recorded all transactions affecting these accounts, and weekly will advise the Controller of Currency of these operations in the manner specified hereafter.

2. The Railways will receive monies from Budget Votes allocated to the separate Railways by the Railway Board and expended out of the traffic and other Receipts paid into the Controller of Currency.

3. *Budget Votes.*—As soon as the Railway Budget has been passed by the Assembly, the Railway Board will divide the aggregate vote between the Railway Board proper and each separate Railway, and will send this allocation to the Controller of Currency with a request that he opens credits accordingly and a copy of the allocation will also be sent, through the Agent, to the treasurer of each Railway. On his books, the Controller of Currency will open one account with each Railway, and will only require to satisfy himself that the aggregate of the Railway Credits so opened, including those in favour of the Railway Board, equals the total votes of the Railway Budget.

4. When these credits have been established, each agent will be free to draw cheques thereon as required and these cheques will all be entered by the treasurer in his Payments Cash Book, form 1, in their serial number order. This cash book will be maintained in triplicate, one copy being for the Chief Accountant, and the other for the Controller of Currency as explained in paragraph 9.

5. *Traffic Receipts.*—In Appendix IV, paragraphs 127 to 131, there has been described fully the system to be adopted by the treasurer for the accounting of the cash and vouchers received and remitted by stations, and it is not considered necessary here to repeat the detail.

6. *Miscellaneous Receipts.*—It will happen in practice that the treasurer will receive cash from miscellaneous sources, and this can conveniently be recorded in a Miscellaneous Receipts Cash Book, form 2, which will be kept in duplicate, the copy being for the Chief Accountant.

7. *General Cash Book.*—At the end of each day the daily totals of all subsidiary cash books will be transferred to the Treasurer's General Cash Book, form 3 for receipts, and form 4 for payments, and the balance of this cash book must at any time agree with the "Controller of Currency" Account in the General Ledger. It will be observed that separate columns have been provided on the receipts side for each branch of the Imperial Bank or sub-treasury of the Government of India into which receipts have been paid for the credit of the Railway, and care must be taken to ensure that the receipts are entered in the appropriate of these columns under the date advised to the treasurer as the one on which they were banked, i.e., if on the 10th of the month the treasurer of the East Indian Railway received an advice from Allahabad showing that Rs. 10,000 had been banked with the Allahabad Branch of the Imperial Bank of India on the 9th, he will enter this item in the Allahabad column of the General Cash Book under the date of the 9th. This procedure is necessary in order that the dates and amounts shown in the Treasurer's Cash Book will synchronise with those appearing in the books of the Controller of Currency. When all entries for each day are completed, the columns will be cross cast to get the "total banked".

8. On the payments side provision has also been made for the entering of the daily totals of cheques drawn on branches of the Imperial Bank, as it will probably be found in practice that more than one account will be operated upon by the treasurer. When all entries affecting each day have been made, the columns will be cross cast to get the "total withdrawals".

9. *Copy Cash Books for the Controller of Currency.*—The treasurer will send weekly to the Controller of Currency :—

- (1) a copy of the receipts side of his General Cash Book,
- (2) a copy of his Payments Cash Book (or books if there be more than one in use).

To each copy the treasurer will attach an Advice slip, in duplicate, *viz.* :—

For Receipts, form 5.

For Payments, form 6.

The Controller of Currency will check the totals of the receipts and payments advised by the treasurer with the entries in his books, and weekly will complete, sign and return one copy of the advice slips to the treasurer. When these completed slips are received by the treasurer, he will file them in his Cash Book immediately opposite the page 2 to which they refer. This being done, it will only be necessary to scrutinise the Cash Book in order to ascertain the items still outstanding. If it should happen that cheques are unrepresented at the end of three months, the treasurer will stop payment, notify the payee at his last known address, and issue a fresh cheque if payment then be demanded. If it should happen that lodgments have not been received by the Controller of Currency within one week of the stated date of remittance, the treasurer must make urgent investigation to ascertain the cause of the delay.

10. *Imprests.*—In addition to the treasurer there will be other disbursing officers located at various centres, whose operations will be controlled by the treasurer, and will not affect the Controller of Currency. Funds will be provided in these cases by establishing an imprest which the treasurer will replenish from time to time as required. When the original imprest is granted an account will be opened in the General Ledger in the name of the imprest cashier and will be debited with the amount thereof. Weekly, the cashier will send to the treasurer :—

- (a) a copy of his cash book, forms 7 and 8,
- (b) all vouchers in support thereof,
- (c) a summary of these vouchers showing the account heads debitale.

The Treasurer will vouch the expenditure and will pass the summary to the expenditure section for the necessary debits to be posted to the accounts affected. At the same time he will reimburse the cashier, but no entries will be made in the imprest account in the General Ledger unless the amount of the imprest is altered, nor will the copy of the imprest cashier's Cash Book be entered in the General Cash Book.

12. *General.*—The treasurer will obtain certificates direct from the sub-treasuries or branches of the Imperial Bank at which these imprests are maintained and will reconcile the balances shown thereon with that shown by the cashiers concerned in their copy cash books. Travelling inspectors will, from time to time verify the balances of a cash on hand which it is necessary for these cashiers to carry to meet urgent demands.

APPENDIX II.

GOVERNMENT AUDIT OF RAILWAY ACCOUNTS.

13. In Chapter II of the General Report, the duties and responsibilities which should be laid down for the Auditor General Railways are broadly outlined. It remains in this Appendix to set his duties out in more detail.

I.

CAPITAL EXPENDITURE.

14. The Audit of Capital Expenditures on Construction and New Works and Improvements is an important one, and the following programme is recommended:—

- (a) Call for and examine original authority for each work and see that it is within the powers of the sanctioning official.
- (b) See that a proper allocation between capital and revenue expenditure and depreciation fund has been made.
- (c) Test the charges for labour and material made to each work.
- (d) For important works it may be desirable to visit the site and examine the accounts there kept, testing their accuracy by examination of pay rolls and supply issues and by enquiries from the officials and accountant in charge.
- (e) Make a summary of expenditure on all works, showing original estimate and expenditure incurred, and obtain a certificate from the agent, chief engineer or other responsible official that the expenditure shown therein is charged in proper proportions to capital, revenue, and depreciation fund.
- (f) Examine the methods of dealing with returned materials, contractors' plant, etc., on the conclusion of the work, and test that they have been properly brought to account.
- (g) When work is being carried out by contract examine the contracts to see that the terms thereof are being properly carried out.

II.

EXPENDITURES.

15. The test audit of expenditures will comprise a complete examination for two months in each year of all expenditures with their supporting documents back to the original authority, including verification that the order was within the powers of the authorising official.

III.

REVENUE ACCOUNT AND BALANCE SHEET.

16. The audit of the revenue account and balance sheet is the most important part of the auditor's work, to which all the preceding work leads. All journal entries must be verified, the General Ledger must be vouched in detail and the accounts therein agreed with the supporting summaries of the subsidiary books.

The General Ledger Balances, together with the necessary balances of detail ledgers controlled by accounts in the General Ledger, must be checked into the final revenue account and balance sheet. The various items of assets and liabilities must be examined individually as follows:—

- (a) Capital expenditures agreed with the audited summaries already prepared.
- (b) Stores on hand agreed with detailed balances of stores ledgers, verified as detailed in Appendix V.
- (c) Workshop Account agreed with the balances shown in Workshops Ledgers as representing the audited balances of work in progress either for stores or for outside parties.
- (d) Accounts due to the Railway scrutinised to see that they are due by responsible parties, are not overdue, and that any necessary adjustments thereon have been made.
- (e) Sundry Stations Control Account agreed with the sum of the balances appearing in the summaries of Station Balance Sheet Credits as prepared and checked in the Central Station Accounting Office.

- (f) Cash with Controller of Currency verified with a certificate received from him.
- (g) Working imprest balances scrutinised and the last verifications, which should be of recent date and supported by bank certificates, carefully examined.
- (h) Cash on hand verified by actual count or by certificates of verification obtained from responsible officials in the Treasurer's Department.
- (i) Liabilities for accounts due by the Railway examined, particularly to see that all known liabilities have been provided for and in particular that no assets have been taken up for which any corresponding liability has been omitted.
- (j) Amounts due to or by other Government Departments scrutinised to see that either the amount has been taken up by the other Departments or that the charge appears to be a reasonable one and is not unduly in arrear.
- (k) All other accounts carefully scrutinised to see that if assets they represent amounts either due and recoverable or properly carried forward to a subsequent year, and if liabilities that they represent either agreed amounts or specific reserves and are fully supported by detailed evidence.

The revenue account and abstracts must be compared with the General Ledger and subsidiary accounts, any abnormal charges or credits scrutinised and investigated, and careful comparison made with the accounts of the preceding year.

Amounts charged to revenue for proportions, or other sums due to worked lines must be investigated, compared with the agreements and verified.

Provisions for depreciation must be scrutinised to see that they are made in accordance with the rules of the Railway Board.

The charges for interest must be verified in detail.

IV.

T R A F F I C.

17. The work to be done by the Government Auditor falls naturally into two parts :—

- (a) The audit at the central and branch offices of the prime documents and the returns prepared therefrom.
- (b) The audit of the traffic accounts in the financial books.

Central Station Accounting Office and Branch Offices.

18. *Goods Traffic—Station Debits—*

Test Check rates of invoices.

- " " \ calculations of invoices.
- " " continuity of consecutive numbers between pairs of stations.
- " " local traffic invoices to abstracts.
- " " cards punched from abstracts by taking selected abstracts, the cards punched therefrom, tabulating the cards and agreeing the machine totals with the totals of the abstracts.
- " " cards punched from foreign invoices by selecting bundles of invoices, the cards punched therefrom, tabulating the cards and agreeing the machine totals with the totals of the invoices.
- " " abstracts summaries.
- " " summaries to balance sheets.
- " " other items in balance sheets with supporting documents.
- " " station errors to error sheets and trace the subsequent clearance by the station.
- " " summaries of goods balance sheets.
- " " statements of differences of Central Office figures as compared with figures in station balance sheets.
- " " the clearances of items shown in these statements of differences.

Goods Traffic—Station Debits (contd.)—

Test check division sheets prepared from cards punched from foreign invoices with the totals of the tabulated cards and agree the totals of these division sheets with the totals of the forwarded paid traffic of the home railway plus the received to pay traffic of the destination foreign railway.

„ „ the division of traffic to worked lines and see that this division is in accordance with the agreements.

Test casts of documents examined.

19. *Goods Traffic—Station Credits.*

Test check the miscellaneous credits in the Station Balance Sheets with the supporting documents.

„ „ the summaries of miscellaneous credits.

Examine closing lists of outstandings furnished by stations, see that all are current, and agree with figures in balance sheets.

Test casts of documents examined.

20. *Coaching Traffic—Station Debits.**Passenger Tickets.*

Test check opening ticket numbers on classifications with closing numbers of previous month.

„ „ highest numbers of collected tickets against highest numbers of tickets sold.

„ „ unissued tickets, children's tickets, concession tickets, etc., with station lists of these tickets, and thence to classifications.

„ „ station to station rates.

„ „ calculations on classifications.

„ „ classification totals to balance sheet.

„ „ excess fare statements with duplicates of ticket collectors' receipts.

„ „ excess fare statements into balance sheet.

„ „ receipts from special trains with separate returns and then into balance sheet.

„ „ monthly, season, traders, zone, mileage or other special types of tickets with separate classifications and the classification totals to the balance sheet.

„ „ any other passenger traffic debits in the balance sheet with supporting documents received from stations.

„ „ station errors to error sheets, and trace the subsequent clearance by the station.

„ „ statements of differences of Central Office figures as compared with figures in balance sheets.

„ „ division sheets prepared from cards punched for station to station on foreign classifications, and agree the totals of division sheets with the totals of the foreign passenger traffic of the home railway.

„ „ division of traffic to worked lines, and see that this division is in accordance with the agreements.

Test casts of all documents examined.

21. *Parcels Traffic—Horse, Carriage, Dogs, etc., Traffic.*

Procedure would be similar to that for goods traffic, except that as cards would not be punched for every foreign way bill, but only for the totals of the foreign abstracts, the check of the totals of the punched cards would be against the totals of the foreign abstracts.

When audit of debit side of Coaching Balance Sheet has been completed, test check the summaries of these balance sheets.

22. *Passenger Traffic—Station Credits.*

Procedure would be similar to that outlined for the credit side of the Goods Balance Sheet.

*Financial Books.*23. *Ledger Accounts.*

Check all postings to the ledger accounts with the prime documents, *i.e.* :—

(a) From returns and summaries received from the Central Station Accounting Office into the Journal.

(b) From the Journal to the ledger.

(c) From the cash book to the ledger.

Examine all agreements affecting traffic earnings (*e.g.*, agreements for transportation of Post Office mails) and see that the correct amount has been brought to account as earnings.

Test check the entries in the Analysis of Earnings Register with the classifications of earnings received from the Central Station Accounting Office and also with the monthly analysis of the Miscellaneous Earnings Journal.

Agree the balances of the accounts in the Analysis of Earnings Register with the totals of the Goods, Coaching and Miscellaneous Earnings Accounts in the General Ledger.

Agree the balance of the Sundry Stations Control Account with the sum of the balances of the Outstandings of Stations as returned by the Central Station Accounting Office.

Agree the balance of the Sundry Stations in Suspense Account with the total of the outstanding credit items in the statement of differences furnished by the Central Office.

Cast all ledger accounts.

24. *Treasurer's Station Cash Books.*

Check in detail all station cash remittance notes into the Treasurer's Station Cash Books.

Check casts of cash books.

Check daily totals into the General Cash Book.

Check postings of monthly totals to Sundry Stations Control Account in the General Ledger.

V.

S T O R E S.

25. The audit programme which is outlined below is not intended to cover all the work which will be done in connection with the Government Audit, as entries affecting receipts and issues will be made from documents additional to those specified hereunder. It is intended to serve as a guide, however, and will be amplified or reduced as the occasion warrants.

26. In practice, the Government Audit will consist of a series of test checks of the entries in the priced (and unpriced) stores ledgers against the documents from which those entries were made. It is essential, however, that certain items be selected on each occasion and vouched in detail :—

The general procedure will be :—

*Priced Stored Records.*27. *Receipts.*

Test check postings in respect of both quantities and values, *i.e.* :—

By purchases With Part 8 of delivery notes.

„ receipts from other depots With standard material requisitions.

„ manufactured products With either the tabulating machine or Burroughs List received from the Workshop Accountant.

- By materials returned .. (a) With either the tabulating machine or Burroughs List received from the Workshop Accountant.
- (b) With the material returned to stores notes themselves if the returns were made to a depot to which no Workshop Accountant was attached.
- „ adjusting entries .. Vouch in detail all adjusting entries made and see the requisite authorities, *i.e.*, approval to take on charge surpluses disclosed by a progressive stocktaking, etc.

28. *Issues.*

Test check postings in respect of both quantities and values, *i.e.* :—

- To other depots With standard material requisitions.
- „ workshops With either the tabulating machine or Burroughs List received from the Workshop Accountant.
- „ miscellaneous issues .. With the adapted standard material requisitions.
- „ travelling stores trains .. With the train stores issued notes.
- „ adjusting entries .. Vouch in detail all adjusting entries made and see the requisite authorities, *i.e.*, approval to write-off deficiencies disclosed by a progressive stocktaking, etc.

29. *Priced Stores Control Accounts of Depots for which Detailed Priced Stores Ledgers are Maintained.*

Vouch in detail all postings to all control accounts.

Extract all balances from each set of priced stores ledgers, or check the balances to a previously prepared list, and agree the total thereof with the balance of the appropriate control account.

30. *Other Priced Stores Control Accounts, i.e., Permanent Way Inspectors, etc., for whose Stocks Detailed Priced Stores Records are not maintained.*

Vouch in detail all postings to all control accounts.

Check the reconciliation of receipts supporting the monthly statement of receipts.

Check the prices and value calculations of the monthly issue statements.

Agree the balance of each control account with the value of the balances of the closing stocks held by each inspector, etc., *i.e.*, the quantities as shown by the inspector on his monthly statement of issues and priced thereon by the Chief Accountant.

31. *General Ledger Main Stores Control Account.*

Vouch all postings.

Extract all balances of subsidiary control accounts, and agree the total with the balance of this main control account.

32. *Price Lists.*

Compare values *vide* price lists with average values in detailed priced stores ledgers to ensure that the price list is being kept up to date.

Compare prices on documents of receipt and issues with prices in price list.

33. *General.*

Check all casts of all control accounts.

Test check casts of detailed priced stores ledgers.

See the reports of progressive stock checkers and trace adjustments arising therefrom.

See that every item has been verified by a progressive stock checker at least twice during the last twelve months.

See that the authorised maximum and minimum quantities are not exceeded.

Unpriced Stores Records.

34. The audit of these will be conducted at the depots and will follow generally on the lines already indicated for the priced stores records, except that the question of prices does not arise.

35. *Receipts.*

Test check postings in respect of quantities, *i.e.* :—

By purchases	With Part 9 of delivery notes.
„ receipts from other depots	With standard material requisitions.
„ manufactured products	With manufactured products to stores notes.
„ materials returned	With materials returned to stores notes.
„ adjustments	Vouch in detail all adjusting entries and see the requisite authorities, <i>i.e.</i> , approval to take on charge surpluses disclosed by a progressive stocktaking, etc.

36. *Issues.*

Test check entries in respect of quantities, *i.e.* :—

To other depots	With standard material requisitions.
„ workshops	With material delivery sheets.
„ miscellaneous issues ..	With the adapted standard material requisitions.
„ travelling stores trains	With the train stores issued notes.
„ jobs by permanent way inspectors, etc.	With the monthly statement of issues.
„ adjustments	Vouch in detail all adjusting entries made and see the requisite authorities, <i>i.e.</i> , approval to write-off deficiencies disclosed by a progressive stocktaking, etc.

37. *General.*

At every depot to which an assistant workshop accountant is attached, check in detail with the prime documents selected copies of the tabulating or other machine lists submitted to the Chief Accountant.

VI.

WORKSHOPS.

38. *Pay Sheets.*

Check two months in the year completely with time clock records.

Check all calculations.

See that proper certificates have been given as to preparation and check of pay rolls and as to payment of wages.

See that all unpaid amounts have been properly accounted for.

Examine pay roll system and see that it has been properly carried out.

Check totals into the accounts in the workshop ledger relating thereto.

Examine critically and verify 30 per cent. of all bonus and piece-work vouchers.

39. *Allocation of Wages.*

Take out all machine cards for one month in the year and run them through the sorting and tabulating machines.

Check summary results so obtained into Cost Ledger.

Check totals into Workshop Ledger control accounts.

40. *Materials.*

Take out all machine cards for one month in the year and run them through the sorting and tabulating machines.

Check summary results so obtained into Cost Ledger.

Check totals into Workshop Ledger control accounts.

See that the suggestion for dealing with spoilt material and scrap is properly carried out and that loopholes for theft of valuable material are closed as far as possible.

The Auditor should walk through the shops two or three times a year to obtain a general idea of how work is being conducted and in particular should enquire into any undue accumulation of finished work lying in the shops instead of being sent to stores.

41. *Workshop Ledger.*

Verify all-Journal entries.

Check all postings in Workshop Ledger.

Investigate critically and verify completely all entries writing off unadjusted balances on job shops, labour, process shops and shop overhead expense Accounts to see that the fixed rates adopted for charges to job accounts are correct.

Examine every two months the bonus and piece work losses account. Obtain list of items making up the balance therein and see that all items are correct and investigate any amounts written off.

Examine every six months all balances on job shops, labour, process shops and shop overhead expense accounts, and see that they are kept within reasonable amounts and that no undue accumulation is allowed.

At the end of each year check trial balance of this ledger and see that all control accounts agree with subsidiary books and that the account with the general ledger control account agrees with the workshop ledger control account in the General Ledger.

42. *Cost Ledger.*

Examine 10 per cent. of completed cost accounts for parts, and compare with similar costs in previous year.

Examine all costs for construction work and compare with amounts sanctioned and with previous estimated costs of similar units.

Examine 10 per cent. of locomotive repair costs and compare with previous and estimated costs.

Take out average cost of vehicle repairs of different classes and compare from year to year.

Check completely with original orders and estimates 50 per cent. of all jobs carried through on standing and sundry orders and see that on completion they are charged out to the proper accounts.

At the end of year check all work in progress accounts and agree total with control account in Workshop Ledger.

Examine these balances and see that all represent recent and live jobs, and for this purpose examine orders and estimates and see by serial numbers that there are no old orders still open. In the case of standing order balances call for complete list of orders and works manager's estimate of costs.

VII.

ESTABLISHMENT.

43. The audit of establishment should be confined to (1) a detailed examination of the pay and allowances, leave, etc., of the gazetted officers of each railway, with a view to determining that all rules and regulations of the Railway Board and of the Government of India have been duly observed and (2) a test check (say 10 per cent.) of the same facts in the case of the non-gazetted staff.

VIII.

PROVIDENT FUND.

44. Test check the accuracy of the Provident Fund Deduction Lists prepared at Workshops, Divisions, etc.

Trace these, test checked items into the Register of Deduction Lists.

Test check postings from Register of Deduction Lists to member's cards.

„ „ withdrawals postings to member's cards and verify the authorisations.

„ „ the half-yearly bonuses credited to member's accounts.

„ „ the annual interest calculations and the credits therefrom to member's accounts.

„ „ the casts of all member's accounts to which postings have been checked.

Vouch all postings to the Control Account.

Annually, extract all balances from member's accounts, or check these balances to a previously prepared list, and agree the total thereof with the balance of the control account.

IX.

STATE RAILWAYS COLLIERIES.

45. In many respects the accounting system of the collieries will be similar to that of the railways and to such extent as the two are common to each other, the audit of the colliery accounts will be similar to that already given for railways earlier in this appendix. In certain matters, however, the colliery system will differ and in respect of these, the audit procedure will be as follows :—

At the Collieries.

46. *Wages.* (See also paragraphs 38-39.)

Check the calculations shown on contractor's bills for two complete months of each year, and then check these bills to the pay sheets.

See the Superintendent's approval to payments of special rates for driving hard headings, turning faults, etc.

Check the allocations of wages to the analysis of wages sheets for two complete months each year.

47. *Stores.* (See also paragraph 40).

Check the allocations of material issues to the analysis of material issues for two complete months each year.

48. *Cash at Collieries.*

Vouch all receipts.

49. *Mine Ledger.*

Check all postings.

Agree the Head Office Ledger control account with the Mine Ledger control account in the Head Office Ledger.

Agree the Workshop Ledger control account with the Mine Ledger control account in the Workshop Ledger.

Extract a trial balance as at the end of the preceding month and compare this with the trial balance sent by the mine accountant to the Chief Accountant.

50. *Workshops.* (See also paragraphs 38-42.)

Check all postings to the Workshop Ledger.

Check 50 per cent. of the postings to the Order Ledger.

Check 50 per cent. of the completed work sheets with the Order Ledger accounts and see the accepted debit notes therefor.

51. *Power Stations.*

Check all entries in the Power Stations Ledger.

52. *Sales of Coal.*

Check 50 per cent. of the pit head or railways siding weights with the colliery invoices.

Check 25 per cent. of colliery invoices with the monthly statements of despatches.

Check all statements of despatches to the summaries of despatches.

Agree the total weights on the summaries of despatches with the total weights of coal raised.

At Head Office.

53. Vouch all summaries of colliery imprest expenditure with the vouchers received from the colliery cashiers and verify balances held by imprest cashiers.

Vouch all payments in Head Office Cash Books.

Vouch 10 per cent. of cash receipts including miscellaneous receipts for inspections, etc.

Reconcile the cash book balance with the certificate from the Controller of Currency.

Check all postings to the Head Office Ledger.

Check 25 per cent. of the entries in the bill register and the allocations thereof.

Check all cash postings to the bill register.

Agree the total of the outstanding items on the bill register with the balance of the sundry creditors control account in the Head Office Ledger.

Scrutinise the coal invoice guard books to see that all invoices are paired and investigate any that are long outstanding.

Test check prices on coal bills.

Test check entries in Coal Sales Day Book.

Check agreement of values of priced summaries of despatches with total of all coal bills.

Check all postings to Debtors Ledger.

Agree the total of the outstandings on the Debtors Ledger with the balance of the sundry debtors control account in the Head Office Ledger.

Extract a trial balance.

Verify the entries in the revenue and profit and loss accounts.

Examine the various items of assets and liabilities in the balance sheet. (See also paragraph 16.)

Verify the statements of costs of coal and coke produced.

APPENDIX III.

REMODELLING OF ABSTRACTS.

54. The present expenditure abstracts, A to G, will be remodelled and re-lettered A to F, and two new ones added for Stores and Electric Power lettered G and H respectively, as explained in Chapter VII of the Main Report.

The references made in this appendix are to the abstracts published in the Annual Report of the Great Indian Peninsula Railway for 1925-26, and show the effect of this remodelling and relettering.

55. In Abstract A the item of "Track (Running Line, Sidings and Yards)" shown at II-1a will be divided into the following five headings :—

- Rails.
- Sleepers.
- Other Track Material.
- Ballast.
- Track Laying and Surfacing.

and each sub-heading will again be divided in the general books, but not necessarily in the abstract, into :—

- Running Lines.
- Sidings.
- Yards.

This amplification is required for the purpose of dividing the expenses between passenger and goods traffic as recommended in Chapter XV of the Main Report.

56. The items of "Bridges and Tunnels," shown at II-1b will be divided into :—

- Bridges.
- Tunnels.
- Culverts.

57. The item of "Station Machinery (Signals, Turntables, Water Columns, etc.)," shown at II-1e will be divided into :—

- Signals.
- Water Stations.
- Other Station Machinery.

58. In Abstract B, repairs and maintenance and the relative management and depreciation charges will be entirely separated from transportation expenses and the latter transferred to the new Abstract D. The following items, which at present appear under heading II, will be divided between Abstract B and Abstract D, respectively, *viz.* :—

- Service Motor Cars and Trolleys, shown at II-3b.
- Furniture and Sundries, shown at II-3c.

as part of each seems to appertain to transportation, and part to repairs, etc.

59. Running repairs in sheds will remain in Abstract B, even if the actual supervision of these sheds is under the Divisional Superintendent and not under the Mechanical Engineer, as it is better to have the whole of the expense of maintenance and equipment in one abstract.

60. The present Abstract C will be merged into Abstract B, and group II of the amended Abstract B will be divided into the following six sub-headings, *viz.* :—

- Locomotives, Steam.
- Locomotives, Electric.
- Rail Motors, Steam.
- Rail Motors, Electric.
- Coaching Vehicles.
- Goods Vehicles.

61. From Abstract E (which will become Abstract C and be entitled "Commercial Expenses") will be eliminated the following items, which will go into the new Abstract D, "Transportation Expenses," viz. :—

(a) the whole of Division II, "Ordinary Repairs and Maintenance Equipment, except such part as applies to road cars used by or for commercial activities ;

(b) the following parts of Division III, "Operating Expenses" :—

(1) The whole of salaries and wages (except canvassers and commercial department staff).

(2) Fires, lights and general stores for stations and sheds.

(3) Lighting, water and general stores in trains.

(4) Clothing.

(5) Stationery, forms (except commercial forms) and tickets.

62. Item 8, "Payments to Other Railways," appears to be shown in the present Abstract E so far as it is a debit, and in "Miscellaneous Earnings," Abstract III, so far as it is a credit. For the reasons given in paragraph 148 of the Main Report, those items reading :—

Payment for Running Powers.

Haulage of Trains,

Hire of Locomotives,

Hire of Vehicles,

will be eliminated from Abstract E and shown in the Railway Income Account as an addition to or deduction from the gross income remaining after the deduction of working expenses. The manner in which this will be done is illustrated in the *pro forma* income account attached to this appendix as Exhibit I.

63. The items (a) Traffic Expenses at Joint Stations ;

(b) Rent of Stations jointly occupied,

will be included in the new Abstract D, "Transportation Expenses," whether debit or credit, as, if a credit, the expenses of operating the joint facilities will have been entered in this abstract as an expense.

64. From the present Abstract F, remodelled as Abstract E, representing the General Departments of the Railroad, the whole of the expenses of the Stores Department shown at 1-5c will be transferred to the new Abstract G, "Stores."

65. The Telegraph Department charges shown at 1-5f will be transferred from Abstract F to the new Abstract D, "Transportation Expenses" so far as they relate to operation, and to Abstract A, "Maintenance of Structural Works" so far as maintenance shown at II-1 is concerned.

66. The present Abstract G, "Miscellaneous Expenses," contains the two items of bonus contributions to the Provident Institution, and gratuities for good service. These items, which account for over half the expenditure in this abstract, are really in the nature of salaries and wages, and should fall into the abstracts to which the latter are charged. The present method of accounting seriously understates the real cost of the grades to which these payments are made.

67. Publicity expenses shown at 1-9 will be transferred to the new Abstract C, "Commercial Expenses." Fire protection of Railway property shown at 1-10 will be transferred to the new Abstract A, "Maintenance of Structural Works." The remaining items in the present Abstract G will be transferred to the new Abstract E, "General Departments."

68. The new stores Abstract G will contain the stores administration expenses and the following items of carriage on stores and loss of stores at present included in other abstracts, viz. :—

I. General administration.

Stores Department salaries shown at 1-5c in the present Abstract F.

Carriage of revenue stores shown at 1-6a and loss of stores, part of 1-6b in the present Abstract F.

II. Ordinary repairs and maintenance.

Carriage and revenue stores shown at II-6a and loss of stores, part of II-6b in the present Abstract A.

III. Operating expenses.

Carriage of revenue stores and loss of stores included at present as :—

- (a) item III-7a and part of III-7b in Abstract B.
- (b) item IV-3a and part of IV-3b in Abstract C.
- (c) item III-11a and part of III-11b in Abstract E.
- (d) item III-3d in Abstract G.

69. In order to provide an easy reference to all expenses accounts, it is desirable that each item be given a code number, and the following set of expense code numbers is recommended for adoption :—

Abstract A will commence with 200 and run up to 299 if necessary.

“	B	“	“	300	“	“	399	“
“	C	“	“	400	“	“	449	“
“	D	“	“	500	“	“	599	“
“	E	“	“	600	“	“	699	“
“	F	“	“	450	“	“	499	“
“	G	“	“	700	“	“	749	“
“	H	“	“	750	“	“	799	“

70. The three revenue abstracts will be covered by numbers 800 to 829, and the remaining numbers from 830 to 999 will be allocated to other items in the revenue account, and to the various accounts which go to make up the assets and liabilities of the Railway.

CAPITAL ACCOUNTS.

71. *Structural Engineering Works*.—The numbers will run from 000 to 099, will cover the detailed classification at present in use and be so arranged that under each sub-heading additional accounts may be added without disturbing the code.

Other code numbers will be :—

General Equipment	..	..	..	..100 to 109
Rolling Stock	..	..	..	..110 to 149
General Charges	..	..	..	..150 to 199

72. In all divisions blank numbers have been left to provide for additional main headings if required. Sub-headings will be provided by using the main account number followed by a sub-number thus :—108-1, 108-2, etc.

73. The foregoing code numbers should be adopted throughout all the Railways, and this uniformity will help to ensure the correct allocation of all expenditures and receipts in the books of account. Further reference to this system will be found in Appendix VII.

74. At Exhibit I to this appendix will be found a *pro forma* income account for an individual Railway, together with a complete set of accompanying abstracts, the figures for which have been taken from the published accounts of the Great Indian Peninsula Railway for the year ended March 31st, 1926. In certain cases, items marked * have been arbitrarily apportioned, as I have before me no exact information to enable a correct apportionment to be made. These should, therefore, be considered merely as *pro forma* accounts, the figures being inserted (in Rs. 1,000) merely to afford a better illustration of the manner of preparation.

75. At Exhibit II will be found a complete consolidated income account of the Railway administration for the year 1925-26, together with supporting schedules. From this account it appears that the division between the Railway Board and the Government of India of the surplus earnings exceeded the actual revenue by the sum of Rs. 10,08,885, being the amount by which the working capital, i.e., net current assets, was reduced during the year. The reason for this difference is that

the exhibit is prepared on a true revenue basis, whereas the Government Accounts, from which these figures are extracted, are prepared on a cash basis.

76. At Exhibit III there is given the *pro forma* balance sheet and supporting schedules for an individual Railway. This form will also be that for the consolidated balance sheet of the Railway administration. It has not been considered necessary to append specimens of Schedules V and VI, as the former will be a list of ledger balances and the latter a list of station balances.

77. At Exhibit IV will be found a *pro forma* balance sheet for the Railway Board.

78. In paragraph 294 of the Main Report, it has been recommended that the General Railway Budget, as submitted to the Legislature, should be supported by a consolidated income account and a consolidated balance sheet; that annexed to this balance sheet there should be statements showing:—

- (a) the increase or decrease in working capital for the year;
- (b) a summary of stores accounts;
- (c) a summary of workshop accounts.

The following form is suitable to illustrate (a) above, and will be prepared in respect of each Railway, and consolidated to get the position in respect of all Railways:—

Statement showing the increase or Decrease in Working Capital for the Year

	Year Preceding.	Revised Estimate Current Year.	Estimate. Next Year.
Stores on hand			
Work in progress in Shops			
Accounts due to Railway			
Cash and Imprest Balances			
Total			
Less Accounts due by Railway			
Rs.			
Increase or Decrease during year			
Budget Estimate			

79. Specimens of the summaries of stores and workshop accounts, (b) and (c) above, are annexed to Exhibit III as Schedules II and IV respectively. These statements will also be prepared in respect of the individual Railways and consolidated for all Railways.

80. All the statements listed in paragraphs 74 to 79 will be drawn up to show comparative results, *i.e.*, in the case of monthly returns the figures for the month and the total months to date and the corresponding figures for the previous periods should be shown in parallel columns. In the case of the annual returns, the figures for the previous year and the Budget Estimates for the current year will be shown against each item. In the balance sheet it will be sufficient to show the corresponding figures at the close of the same month of the preceding year in each case.

EXHIBIT I.

Pro Forma.

INCOME ACCOUNT.

(Based on the Great Indian Peninsula Railway Accounts for 1925-26.)

Year ended March 31, 1925.		Budget Estimate.	Year ended March 31, 1926. Thousands of Rupees.
	GROSS EARNINGS.		
	Coaching (Abstract I) . . . . .	.. ..	5.49.93
	Goods (Abstract II) .. .. .	.. ..	9.26.29
	Miscellaneous (Abstract III) .. .. .	.. ..	18.59
			14.94.81
	<i>Deduct</i> —Working Expenses (Abstract IV) .. .. .	.. ..	10.76.25
			4.18.56
	<i>Add</i> —Miscellaneous earnings from other Railways (Abstract V) .. .. .	.. ..	3.27
			4.21.83
	<i>Deduct</i> —Payments to Worked Lines, Earnings less Expenses (Abstract VI) .. .. .	.. ..	34.08
	Net Income .. .. .	.. ..	3.87.75
	<i>Deduct</i> —		
	Surveys written off (Abstract VII) .. .. .	.. ..	Nil.
	Appropriated for Betterments .. .. .	.. ..	Nil.
	Interest Charges :		
	On Provident Fund Deposits .. .. .	.. ..	Nil.
	On Capital Outlay (Abstract VIII) .. .. .	.. ..	3.24.54
	Surplus for the Year .. .. .	.. ..	Rs. 63.21
	Proportion accruing to Operating Company (Abstract IX) .. .. .	.. ..	Nil.
	Balance carried to the credit of the Railway Board .. .. .	.. ..	63.21

COACHING EARNINGS.

ABSTRACT I

Year ended 31 March, 1925.	A/c No.		Year ending March 31, 1926. Thousands of Rupees.
	800	I. Passengers	4.48.32
	801	II. Special Trains and Reserved Carriages	2.19
	802	III. Passenger's Luggage	13.27
	803	IV. Parcels Traffic	68.92
	804	V. Other Coaching Traffic	4.95
	805	VI. Transport of Post Office Mails	9.20
	806	VII. Miscellaneous Coaching Receipts	3.08
			5.49.93

ABSTRACT II.

GOODS EARNINGS.

Year ended March 31, 1925.	A/c No.		Year ended 31 March, 1926. Thousands of Rupees.
	810	I. Fuel—	
		(a) Coal and Coke—	
		(i) for the public	47·10
		(ii) for foreign railways and home line construction	5·51
		(b) Oil Fuel	1·36
		Total ..	53·97
	811	II. General Merchandise	7·95·74
	812	III. Military Traffic	7·78
	813	IV. Live Stock	4·07
	814	V. Railway Materials (other than Coal and Coke)—	
		(a) for foreign railways	48
		(b) for home line construction	1·76
	815	VI. Service Maintenance Materials and Stores—	
		(a) Coal and Coke—	
		(i) for locomotive department	42·89
		(ii) for other departments	1·40
		(b) Oil Fuel	24
		(c) General Stores and Materials	11·00
			9·19·33
	816	VII. Miscellaneous Goods earnings—	
		(a) Demurrage	46
		(b) Wharfage and Storage	1·96
		(c) Sundries	4·54
			9·26·29

ABSTRACT III.

MISCELLANEOUS EARNINGS.

Year ended 31 March, 1925.	A/c No.		Year ended 31 March, 1926. Thousands of Rupees.
	820	I. Electric Telegraph Earnings ..	1.42
	821	II. Rents and Tolls—	
		(a) Residential Buildings .. 4.81	
		(b) Other Buildings or Rooms 63	
		(c) Land 24	
		(d) Tolls on Bridges	
		Total Rents	5.68
	822	III. Receipts from Catering Department—	
		(a) Meals and Refreshments in rooms and cars	
		(b) Sale of stores and wines ..	
		(c) Sundry Receipts	
		Total Catering Department Receipts	
	823	IV. Overhead Charges and Profits recover- ed on Sales of Stores and Work done in Workshops	3.68
	824	V. Unclaimed or Unpaid Wages and Sala- ries	32
	825	VI. Sundry Receipts—	
		(a) Advertisement fees .. 65	
		(b) Fees on share transfers, etc. 6	
		(c) Excess Cash 3	
		(d) Other unclassified Receipts 2.47	
		Total Sundry Receipts	3.21
	826	VII. Commission on Town Dues, etc. ..	97
	827	VIII. G.I.P. Railway share of surplus profit earned on C. P. and D. B. Railways	3.31
		Total Miscellaneous Earnings	18.59

ABSTRACT IV.

WORKING EXPENSES FOR THE YEAR ENDED 31st MARCH, 1926.

	General Administration.	Ordinary Repairs and Maintenance.	Operating Expenses.	Depreciation.	Total.
		Thousands of Rupees.			
Abstract A	32.00	98.63	..	82.76	2.13.39
" B	(a) 15.46	2.16.44	..	61.63	2.93.53
" C	93	..	9.87	..	10.80
" D	29.79	2.67	4.89.60	..	5.22.06
" E	48.90	3.02	1	..	51.93
" F .. .. .	..	..	..	..	..
" G	(a) 1.43	(a) 1.00	(a) 27.53	(a) 1.00	30.96
" H	(a) 1.00	(a) 58	(a) 4.01	(a) 56	6.15
	1.29.51	3.22.34	5.31.02	1.45.95	11.28.82
<i>Deduct—Items marked (a) absorbed in Workshop Accounts and distributed to Capital and Revenue Expenditure Heads</i> ..	17.89	1.58	31.54	1.56	52.57
Rs. ..	1.11.62	3.20.76	4.99.48	1.44.39	10.76.25

ABSTRACT V.

MISCELLANEOUS EARNINGS.

Year ended 31 March, 1925.	Year ended 31 March, 1926. Thousands of Rupees.
Hire of Vehicles	2.42
Running Powers	2.46
Conference Hire and Penalties	2.90
Haulage of Trains	Cr. 1
Hire of Locomotives	Cr. 4.50
	3.27

ABSTRACT VI.

SHARE OF WORKED LINES FOR THE YEAR ENDED 31st MARCH, 1926.

EARNINGS.	Passenger.	Goods.	Miscellaneous.	Total.	Expenses.	Net.
Agra Delhi Chord Railway	26·16	19·84	29	46·29	33·51	12·78
Baran Kotah Railway ..	1·30	1·15	3	2·48	1·24	1·24
Bhopal State Railway ..	7·53	16·91	45	24·89	18·04	6·85
Bina Baran Railway ..	2·53	4·24	8	6·85	3·61	3·24
Bhopal Ujjain Railway ..	6·21	12·20	12	18·53	10·36	8·17
Cawnpore Banda Railway	3·37	3·08	5	6·50	4·70	1·80
	47·10	57·42	1·02	105·54	71·46	34·08

ABSTRACT VIII.

INTEREST ON OUTLAY FOR THE YEAR ENDED 31st MARCH, 1926.

	Thousands of Rupees.
Revenue sterling payments in England for the financial year ending 31 March, 1926—	
(1) Interest on debt (G.I.P. Railway) £965,182 6s. 8d. at Rs. 10 to the £	96·52
(2) Interest on debt (I.M. Railway) £18,364 18s. at Rs. 10 to the £ ..	1·84
(3) Interest chargeable against Companies on advances (G.I.P. Railway) £40,625 at Rs. 10 to the £	4·06
(4) Interest on Capital deposited by Companies (G.I.P. Railway) £38,625 at Rs. 10 to the £	3·86
Interest on Capital Outlay—	
(a) G.I.P. Railway, including overdrawn Capital of the old G.I.P. and I.M. Railways	1·83·72
To Adjustments of the exchange charges in connection with the Revenue transactions in England for 1925-26—	
(1) Interest on debt G.I.P. Railway, viz., £965,182 6s. 8d.	31·33
(2) Interest on debt I.M. Railway, viz., £18,364 18s.	60
(3) Interest chargeable against Companies on advances G.I.P. Railway, £40,625	1·33
(4) Interest on Capital contributed by Companies G.I.P. Railway, £38,625	1·28
Total Rs. ..	3·24·54

ABSTRACT A.

MAINTENANCE OF STRUCTURAL WORKS (OTHER THAN WORKSHOPS AND WORKSHOPS PLANT).

Year ended 31st March, 1925.	I A/c No.	ADMINISTRATION.	Year ended 31st March, 1926.
			Thousands of Rupees.
	200	(a) Salaries— (i) Administrative and Executive Officers.	11.47
	201	(ii) Subordinate Supervising Staff	7.70
	202	(iii) Office Staff	6.72
	205	(b) Travelling and other Allowances	2.25
	206	(c) Provident Fund Bonus	1.50*
	207	(d) Gratuities for Good Service	1.10*
	208	(e) Office Expenses	1.26
		Total Administration	32.00
	II	REPAIRS AND MAINTENANCE.	
		1. <i>Structural Works—</i>	
	220	(a) Rails	} 34.97
	221	(b) Sleepers	
	222	(c) Other Track Material	
	223	(d) Ballast	
	224	(e) Track Laying and Surfacing	
	225	(f) Electric Overhead Track	11
	226	(g) Bridges	} 3.53
	227	(h) Tunnels	
	228	(i) Culverts	
	229	(j) Service Buildings	
	230	(k) Residential Staff Quarters	8.11
	231	(l) Signals	} 9.73
	232	(m) Water Stations	
	233	(n) Other Station Machinery	
	234	(o) Shore connections at Ferries	
	235	(p) Miscellaneous		6.54
		2. <i>Equipment—</i>	
	240	(a) Engineers' Tools and Plant	3.53
	241	(b) Service Motor Cars and Trolleys	14
		(c) Telegraphs—	
	242	(i) Rent, Maintenance, etc.	4.63
	243	(ii) Direct Maintenance	3.98
	244	(iii) New Main Works	1
	245	(d) Furniture and Sundries	20
	248	3. <i>Conservancy of Rivers</i>	2
	249	4. <i>Plantations, Nurseries and Gardens</i>	62
	250	5. <i>Fire Protection of Railway Property, other than Workshops</i>	63
	251	6. <i>New Minor Works</i>	67
		7. <i>Miscellaneous Expenses—</i>	
	252	(a) Losses of Cash	..
	253	(b) Other items	3.83
	254	8. <i>Provident Fund Bonus</i>	2.30*
		Forward	89.88

*These items are arbitrary apportionments, as exact information is not available.

ABSTRACT A.—*continued.*

MAINTENANCE OF STRUCTURAL WORKS (OTHER THAN WORKSHOPS AND WORKSHOPS PLANT).—*continued.*

Year ended 31st March, 1925.				Year ended 31st March, 1926.
	REPAIRS AND MAINTENANCE— contd.			Thousands of Rupees.
		Forward		89·88
255		9. <i>Gratuities</i>		1·50*
		<i>Add</i> Proportion Abstract "G" which will in practice be included in charges for Stores		7·25
		Total Repairs and Maintenance ..		98·63
			Extra Cost of Renewals.	Depreciation Fund.
				Total.
	IV	DEPRECIATION AND RENEWALS:		
		1. <i>Bridge Works—</i>		
280		(a) Steel		4·27
281		(b) Masonry		5·81
		2. <i>Permanent Way—</i>		
282		(a) Rails and Fastenings ..		9·32
283		(b) Sleepers		38·73
284		(c) Electric Overhead Track ..		67
		3. <i>Buildings—</i>		
285		(a) Masonry		3·23*
286		(b) Others		1·88
287		4. <i>Station Machinery</i>		7·52
288		5. <i>Plant</i>		9·62
289		6. <i>Electric Instruments, Telephone and Telegraph</i>		1·71
		Total Depreciation		82·76
		Total Abstract "A"		213·39

ABSTRACT B.

MAINTENANCE OF ROLLING STOCK.

Year ended 31st March, 1925.				Year ended 31st March, 1926.
	I ADMINISTRATION.			Thousands of Rupees.
	I A/c No.			
	300	(a) Salaries—		
	301	(i) Administrative and Execu- tive Officers		
	302	(ii) Subordinate supervising staff ..		14·00*
	305	(iii) Office staff		
	306	(b) Travelling and other allowances ..		
	307	(c) Provident Fund Bonus		90*
	308	(d) Gratuities for good service ..		56*
		(e) Office expenses .. ..		..
		Total Administration		15·46

*These items are arbitrary apportionments, as exact information is not available.

ABSTRACT B.—continued.

MAINTENANCE OF ROLLING STOCK.—continued.

Year ended 31st March, 1925.				Year ended 31st March, 1926.
				Thousands of Rupees.
II	REPAIRS AND MAINTENANCE.			
	1. Locomotives, Steam—			
310	(a)	Running Repairs		35·13
311	(b)	Workshop Repairs		55·72
	2. Locomotives, Electric—			
312	(a)	Running Repairs .. ..		..
313	(b)	Workshop Repairs .. ..		..
	3. Rail Motors, Steam—			
314	(a)	Running Repairs .. ..		..
315	(b)	Workshop Repairs .. ..		..
	4. Rail Motors, Electric—			
316	(a)	Running Repairs		4
317	(b)	Workshop Repairs		5
	5. Coaching Vehicles—			
318	(a)	Running Repairs		8·13
319	(b)	Workshop Repairs		40·82
	6. Goods Vehicles—			
320	(a)	Running Repairs		23·22
321	(b)	Workshop Repairs		17·05
	7. Repairs to Foreign Railway Vehicles			Cr. 7·08
322	(a)	Running Repairs		
323	(b)	Other Charges		
	8. Equipment—			
330	(a)	Machinery and Tools		10·58
331	(b)	Service Motor Cars and Trolleys		17
332	(c)	Furniture and Sundries		10
340	9. New Minor Works			5
341	10. Provident Fund Bonus	These accounts will in practice form part of Works Overhead Expenses and will be distributed over Accounts 310-340.		6·00*
342	11. Gratuities for Good Service			3·75*
343	12. Fire Protection of Workshops .. ..			..
344	13. Miscellaneous .. ..			..
	Add Proportion of Abstract "G" which will in practice be included in Stores charges			7·25*
	Total Repairs and Maintenance			2·00·98
	Add for General Overhead Expenses which in practice will come through the Workshop Accounts into all the above costs			15·46
				2·16·44

*These items are arbitrary apportionment, as exact information is not available.

MAINTENANCE OF ROLLING STOCK—concluded.

Year ended 31st March, 1925.			Extra Cost of Renewals.	Depreciation Fund.	Year ended 31st March, 1926. Thousands of Rupees.
	IV	DEPRECIATION AND RENEWALS.			
		1. Rolling Stock—			
	350	(a) Locomotives, Steam ..			26·91
	351	(b) Locomotives, Electric ..			..
	352	(c) Motor Vehicles, Steam ..			4
	353	(d) Motor Vehicles, Electric ..			..
	354	(e) Motor Vehicles, Road ..			15
	355	(f) Coaching Vehicles			15·97
	356	(g) Goods Vehicles			18·56
		2. Buildings (Workshops only)			
	357	(a) Masonry .. ..			..
	358	(b) Others .. ..			..
	359	3. Plant (Workshops only) ..			..
		Total Depreciation			61·63
		Total Abstract "B"			2·93·53

COMMERCIAL EXPENSES.

ABSTRACT C.

Year ended 31st March, 1925.			Year ended 31st March, 1926. Thousands of Rupees.
	ADMINISTRATION.		
	1. Management and Control—		
	(a) Salaries—		
	400	(i) Commercial Manager, Deputies and Assistants	85*
	401	(ii) Subordinate Supervising Staff	
	402	(iii) Office Staff	
	403	(b) Travelling and other Allowances	
	404	(c) Provident Fund Bonus ..	5*
	405	(d) Gratuities for Good Service ..	3*
	406	(e) Office Expenses .. ..	..
		Total Administration	93
	II	REPAIRS AND MAINTENANCE.	
		1. Equipment—	
	410	(a) Service Motor Cars (Road) ..	..
		Total Repairs and Maintenance	..

*These items are arbitrary apportionments, as exact information is not available.

ABSTRACT C.—*continued.*

COMMERCIAL EXPENSES—*continued.*

Year ended 31st March, 1925.				Year ended 31st March, 1926.
	III	<i>OPERATING EXPENSES.</i>		Thousands of Rupees.
		1. Outside Agencies—		
	420	(a) Agents' Salaries ..	}	56
	421	(b) Agents' Expenses ..		
	422	(c) Rent of Offices ..		
	423	(d) Office Expenses ..		
		2. Advertising—		
	424	(a) Salaries	}	1.45
	425	(b) Travelling and other Allowances		
	426	(c) Donations for purpose of increasing traffic		
	427	(d) Advertising in Newspapers, Periodicals, etc.		
	428	(e) Advertising on hoardings, etc.		
	429	3. Canvassers		3.00
	430	4. Stationery and Forms .. .. .		..
	431	5. Expenses on collection and delivery of goods		12
		6. Compensation—		
	432	(a) For Goods lost or damaged ..	}	3.41
	433	(b) For Injuries to Passengers ..		12
	434	(c) Workmen's Compensation ..		65
	435	7. Law Charges in connection with Com- pensation Claims .. .. .		..
	436	8. Provident Fund Bonus		4*
	437	9. Gratuities for Good Service ..		2*
	438	10. Miscellaneous .. .. .		..
		<i>Add</i> Proportion of Abstract "G" which will in practice be included in Stores Charges		50*
		Total Operating Expenses ..		9.87
		Total Abstract "C" ..		10.80

TRANSPORTATION EXPENSES.

ABSTRACT D.

Year ended 31st March, 1925.				Year ended 31st March, 1926.
	I	<i>ADMINISTRATION.</i>		Thousands of Rupees.
		(a) Salaries—		
	500	(i) Administrative and Executive Officers	}	27.00*
	501	(ii) Subordinate Supervising Staff		
	502	(iii) Office Staff		
	503	(b) Travelling and other Allowances ..		27.00
		● Forward ..		

*These items are arbitrary apportionments, as exact information is not available.

TRANSPORTATION EXPENSES—continued.

Year ended 31st March, 1925.			Year ended 31st March, 1296.
	I	<i>ADMINISTRATION—(contd).</i>	
		Forward ..	Thousands of Rupees. 27·00
	504	(c) Provident Fund Bonus	1·60*
	505	(d) Gratuities for Good Service	1·19*
	506	(e) Miscellaneous .. ..	..
		Total Administration	29·79
	II	<i>REPAIRS AND MAINTENANCE.</i>	
		1. Equipment—	
	510	(a) Office and Station Furniture and Equipment	1·69
	511	(b) Tarpaulins, Wagon Covers, etc.	96
	512	(c) Service Motor Cars (Rail) and Trolleys)	2
		Total Repairs and Maintenance	2·67
	III	<i>OPERATING EXPENSES.</i>	
		1. Running Staff—	
	520	(a) Wages of Locomotive Crews, Steam	28·46
	521	(b) Mileage and Overtime do. do.	19·16
	522	(c) Wages of Locomotive Crews, Electric	43
	523	(d) Mileage and Overtime do. do.	18
	524	(e) Train Staff	17·11
	525	(f) Train Staff Mileage and Over- time	7·41
	526	(g) Shed and Yard Cleaning and Fuelling Staff	17·10
	527	(h) Station Staffs	59·71
	528	(i) Inspecting Staff	17·64
	529	(j) Travelling Ticket Examining Staff	1·25
	530	(k) Provident Fund Bonus	11·00*
	531	(l) Gratuities for Good Service	7·12*
	532	(m) Miscellaneous	2·40
		2. Fuel—	
		(a) Coal—	
	540	(i) Indian	84·45
	541	(ii) Foreign	11
	542	(b) Patent Fuel .. ..	..
	543	(c) Oil Fuel	24·94
	544	(d) Wood and other	5
		(e) Freight on Fuel—	
	545	(i) Sea and Foreign Railway	69·28
	546	(ii) Home Railway	43·13
	550	3. Electric Power	6·15
	551	4. Lighting, Water and General Stores for Locomotives and Trains	12·81
	552	5. Oil, Tallow and other Stores	9·72
		Forward ..	4·39·61

*These items are arbitrary apportionments, as exact information is not available.

ABSTRACT D.—concluded.

TRANSPORTATION EXPENSES—concluded.

Year ended 31st March, 1925.			Year ended 31st March, 1926.
			Thousands of Rupees.
		<i>OPERATING EXPENSES—(contd.)</i>	
		Forward ..	4.39.61
		6. Telegraph Department—	
553	(a) Salaries of Superintendents and Assistants ..		59
554	(b) Salaries of Office Establishment ..		12
555	(c) Salaries of Signallers and Subordinate Executive Staff ..		8.19
556	(d) Travelling and other Allowances ..		91
557	(e) Provident Fund Bonus ..		50*
558	(f) Gratuities for Good Service ..		36*
559	(g) Miscellaneous ..		3
563	7. Fires, Lights and General Stores for Stations and Sheds ..		11.48
564	8. Clothing ..		1.96
565	9. Stationery Forms and Tickets ..		3.88
566	10. Loading and unloading Charges on Goods ..		8.81
	11. Payments to other Railways—		
570	(a) Expenses at Joint Stations ..		1.11*
571	(b) Rent of Joint Stations ..		Cr. 10.71
572	(c) Shunting at Joint Stations ..		Cr. 62
573	(d) Terminal Charges ..		9.22
580	12. Miscellaneous ..		16
	Add Proportion of Abstract "G" which will in practice be included in Stores Charges ..		14.00*
	Total Operating Expenses ..		4.89.60
	Total Abstract "D" ..		5.22.06

ABSTRACT E.

EXPENSES OF GENERAL DEPARTMENTS.

Year ended 31st March, 1925.			Year ended 31st March, 1926.
			Thousands of Rupees.
	I	<i>ADMINISTRATION.</i>	
		1. London Boards—	
600	(a) Board of directors and Staff ..		1.31
601	(b) Auditors and Accountants ..		..
602	(c) Construction Engineers and Inspectors' Fees and Allowances ..		12
603	(d) Office Expenses, etc. ..		..
	Forward ..		1.43

*These items are arbitrary apportionments, as exact information is not available.

ABSTRACT E.—*continued.*EXPENSES OF GENERAL DEPARTMENTS—*continued.*

Year ended 31st March, 1925.			Year ended 31st March, 1926.
		<i>ADMINISTRATION—(contd).</i>	Thousands of Rupees.
		Forward ..	1.43
604	2.	Share of Secretary of State's general charges .. .. .	..
605	3.	Charges in India for Government supervision, control and audit ..	69
606	4.	Leave Allowances in England ..	..
	5.	Indian Management and Control.	
607	(a)	Agent's Office—	
	(i)	Salaries of Administrative and Assistant Officers ..	2.19
608	(ii)	Salaries of Office Establishment	1.40
609	(iii)	Travelling and other Allowances	48
610	(iv)	Provident Fund Bonus ..	30*
611	(v)	Gratuities for Good Service ..	16*
612	(vi)	Office Expenses ..	53
	(b)	Accounts and Audit Department—	
613	(i)	Salaries of Gazetted Officers	2.06
614	(ii)	Salaries of Office Establishment	8.27
615	(iii)	Salaries of Outdoor Inspection and Verification Staff	1.31
616	(iv)	Travelling and other Allowances	1.85
617	(v)	Provident Fund Bonus ..	80*
618	(vi)	Gratuities for Good Service ..	47*
619	(vii)	Office Expenses ..	61
	(c)	Cash and Pay Department—	
620	(i)	Salaries ..	
621	(ii)	Travelling and other Allowances	1.88
622	(iii)	Provident Fund Bonus ..	10*
623	(iv)	Gratuities for Good Service ..	8*
624	(v)	Miscellaneous .. .. .	..
	(d)	Medical Department—	
625	(i)	Salaries of Medical and Nursing Staff	3.55
626	(ii)	Salaries of Office Establishment	53
627	(iii)	Travelling and other Allowances	39
628	(iv)	Provident Fund Bonus ..	40*
629	(v)	Gratuities for Good Service ..	26*
630	(vi)	Miscellaneous	33
		Forward ..	30.07

*These items are arbitrary apportionments, as exact information is not available.

ABSTRACT E—continued.

EXPENSES OF GENERAL DEPARTMENT—continued.

Year ended 31st March, 1925.			Year ended 31st March, 1926.
		<i>ADMINISTRATION—(continued).</i>	Thousands of Rupees.
		Forward ..	30·07
		(e) Police—	
631		(i) Contribution to Govern- ment for Crime and Order Police	69
632		(ii) Watch and Ward Estab- lishment	3·90
633		(iii) Provident Fund Bonus ..	25*
634		(iv) Gratuities for Good Service	16*
635		(v) Miscellaneous .. ..	..
		6. Law Charges—	
636		(a) Salaries of Railway Legal Staff and Fees to Counsel	40
637		(b) Provident Fund Bonus	3*
638		(c) Gratuities for Good Service ..	2*
639		(d) Costs and other Legal Expenses (net)	70
		7. Rents of Buildings and Land—	
640		(a) For Residential Purposes ..	85
641		(b) Other	16
642		8. Rates and Taxes	4·34
		9. Educational Grants—	
643		(a) Net Cost of Railway Schools ..	37
644		(b) Grants-in-Aid of other Schools	16
645		(c) Other	58
		10. Health and Welfare Service—	
646		(a) Sanitation Conservancy and Lighting in Railway Colonies and Residential Areas	3·29
647		(b) Contributions to Hospitals and Medicines	1·07
648		(c) Grants-in-Aid for religious purposes	19
649		(d) Grants-in-Aid for Recreation ..	1
650		(e) Miscellaneous	12
651		11. Expenses in connection with Indian Railway Conference Asso- ciation	10
652		12. Miscellaneous Contributions and Grants and other Expenses	1·44
		Total Administration ..	48·90
II		<i>REPAIRS AND MAINTENANCE EQUIPMENT.</i>	
660		(a) Furniture and Fixtures	1·03
661		(b) Service Motor Cars	3
		<i>Add: Proportion of Abstract "G" which will in practice be included in Stores Charges</i>	1·96
		Total Repairs and Maintenance	3·02
		Forward ..	51·92

* These items are arbitrary apportionments, as exact information is not available.

ABSTRACT E—concluded.

EXPENSES OF GENERAL DEPARTMENT—concluded.

Year ended 31st March, 1925.				Year ended 31st March, 1926.
				Thousands of Rupees.
		Forward ..		51·92
	III	OPERATING EXPENSES.		
		1. Catering Department—		
670		(a) Salaries and Wages of Catering Staff .. ..		..
671		(b) Provisions and Stores ..		..
672		(c) Wines, etc. .. ..		..
673		(d) Miscellaneous .. ..		..
		2. Miscellaneous—		
674		(a) Loss on light and base coin } and spurious notes		..
675		(b) Loss of cash earnings in } transit		..
676		(c) Expenses on collection of Bridge tolls		1*
677		(d) Miscellaneous Writing down stores ..		..
		Total Operation		1
		Total Abstract " E " ..		51·93

ABSTRACT F.

MAINTENANCE AND WORKING OF FERRY STEAMERS AND HARBOURS.

Year ended 31st March, 1925.				Year ended 31st March, 1926.
				Thousands of Rupees.
	I	ADMINISTRATION.		
		1. Management and Control—		
450		(a) Salaries		
		(i) Marine Superintendent, Harbour Superintendent and Assistants ..		
451		(ii) Subordinate Supervising Staff		
452		(iii) Office Staff		
453		(b) Travelling and other com- pensatory allowances ..		
454		(c) Provident Fund Bonus ..		
455		(d) Gratuities for Good Service ..		
456		(e) Office Expenses		
		Total Administration ..		

* These items are arbitrary apportionments, as exact information is not available.

ABSTRACT F—*continued.*

MAINTENANCE AND WORKING OF FERRY STEAMERS AND HARBOURS—*continued.*

Year ended 31st March, 1925.			Year ended 31st March, 1926.
			Thousands of Rupees.
	II	REPAIRS AND MAINTENANCE.	
		1. Steam boats	
459		(a) Wages	
460		(b) Provident Fund Bonus ..	
461		(c) Gratuities for Good Service ..	
		2. Barges and Minor Crafts—	
462		(a) Wages	
463		(b) Provident Fund Bonus ..	
464		(c) Gratuities for Good Service ..	
465		3. Harbours	
		4. Equipment—	
466		(a) Dredgers and other service vessels	
467		(b) Machinery and Tools ..	
468		(c) Other	
		5. New Minor Works—	
469		(a) In connection with Steamers and Barges	
470		(b) In connection with Harbours ..	
		Total Repairs and Maintenance	
	III	OPERATING EXPENSES.	
		1. Salaries, Wages and Allowances—	
474		(a) Traffic Staff (Station Masters, Booking Clerks, etc.) ..	
475		(b) Steamer Working Staff (officers and crews)	
476		(c) Jetty and Shore connection Staff	
477		(d) Fuelling, loading and unloading Staff or expenses ..	
478		(e) Provident Fund Bonus ..	
479		(f) Gratuities for Good Service ..	
481		2. Steamer Traffic Agencies ..	
482		3. Stationery, Forms and Tickets ..	
483		4. Clothing and Contingent Charges ..	
484		5. Pilotage fees	
		Cost at Weight pit's Tons. month.	
		6. Fuel—	
		(a) Coal—	
485		(i) Indian	
486		(ii) Foreign	
487		(b) Patent Fuel	
488		(c) Oil Fuel	
489		(d) Wood and other Fuel ..	
490		(e) Freight on Fuel	
491		7. Oil and miscellaneous Stores ..	

ABSTRACT F—*continued.*

MAINTENANCE AND WORKING OF FERRY STEAMERS AND HARBOURS—*continued.*

Year ended 31st March, 1925.			Year ended 31st March, 1926.
			Thousands of Rupees.
	8. Miscellaneous Expenses—		
493	(a) Registry Fees		
494	(b) Carriage of Revenue Stores excluding Fuel		
495	(c) Losses of Cash and Stores ..		
496	(d) Sundries		
	Total Operating Expenses		
IV	DEPRECIATION.		
498	1. Ferries		
	Total Depreciation		
	Total Abstract "F"		

ABSTRACT G.

STORES EXPENSES.

Year ended 31st March, 1925.			Year ended 31st March, 1926.
			Thousands of Rupees.
I	ADMINISTRATION.		
	1. Management and Control—		
700	(a) Salaries of Gazetted Staff ..		98
701	(b) Travelling and other Allow- ances .. ..		..
702	(c) Provident Fund Bonus ..		7*
703	(d) Gratuities for Good Service ..		4*
704	(e) Miscellaneous		34
	Total Administration ..		1.43
II	REPAIRS AND MAINTENANCE.		
710	1. Stores and Buildings ..	}	1.00*
711	2. Yards		
712	3. Equipment		
	Total Repairs and Maintenance		1.00
III	OPERATING EXPENSES.		
	1. Salaries and Wages—		
713	(a) Subordinate Supervising Staff	}	49
714	(b) Inspectors		4.23
715	(c) Storekeepers, Assistant Store- keepers and Clerks ..		
716	(d) Office Staff		78
717	(e) Wages of Lower Grade Staff ..		
718	(f) Travelling and other Allowances		25*
719	(g) Provident Fund Bonus ..		17*
720	(h) Gratuities for Good Service ..		
	Forward ..		5.92

* These items are arbitrary apportionments, as exact information is not available.

ABSTRACT G—continued.

STORES EXPENSES—continued.

Year ended 31st March, 1925.			Year ended 31st March, 1926.
			Thousands of Rupees.
	<i>OPERATING EXPENSES—(continued).</i>		
		Forward . . .	5.92
	2. Freight Charges on Stores—		
721	(a) Sea Freight		3.45
722	(b) Insurance, Port and other Charges		11.55*
723	(c) Carriage on Foreign Railways	}	3.00*
724	(d) Carriage on Home Railways		
725	(e) Other Charges . . . . .		..
	3. Losses on Stores—		
726	(a) Quantities	}	3.61*
727	(b) Value		
	Total Operating Expenses		27.53
	VI. DEPRECIATION.		
730	1. Stores Buildings	}	
731	2. Fences		1.00
732	3. Rail Lines		
733	4. Equipment		
	Total Depreciation		1.00
	Total Abstract "G"		30.96

ABSTRACT H.

ELECTRICAL DEPARTMENT.

Year ended 31st March, 1925.			Year ended 31st March, 1926.
			Thousands of Rupees.
	I. ADMINISTRATION.		
	1. Management and Control—		
750	(a) Salaries—		
	(i) Administrative and Executive Officers	}	90*
751	(ii) Subordinate Supervising Staff		
752	(iii) Office Staff		
753	(b) Travelling and other Allowances		6*
754	(c) Provident Fund Bonus		4*
755	(d) Gratuities for Good Service . . . . .		..
756	(e) Miscellaneous . . . . .		..
	Total General Administration		1.00

* These items are arbitrary apportionments, as exact information is not available.

ELECTRICAL DEPARTMENT—continued.

Year ended 31st March, 1925.				Year ended 31st March, 1926.
II	REPAIRS AND MAINTENANCE.			
				Thousands of Rupees.
	1. Electric Generating Stations.			
	<i>Generating Plants.</i>			
760	(a) Running Repairs .. ..	..	..	..
761	(b) Workshop Repairs .. ..	..	..	..
762	(c) Cables .. ..	..	..	..
	<i>Substations.</i>			
763	(a) Running Repairs .. ..	..	..	54
764	(b) Workshop Repairs .. ..	..	..	..
765	(c) Cables .. ..	..	..	..
766	(d) Transformers .. ..	..	..	..
	<i>Equipment.</i>			
767	(a) Machinery and Tools .. ..	..	..	3
768	(b) Sundries .. ..	..	..	1
769	2. Transmission Lines .. ..	..	..	..
	3. Electrical Equipment.			
770	(a) In Electrical Workshop .. ..	..	..	..
771	(b) In other Workshops .. ..	..	..	..
772	(c) In other Departments .. ..	..	..	..
	Total Repairs and Maintenance ..			58
	III. OPERATING EXPENSES.			
775	1. Electrical Power Purchased .. ..	..	..	3.92
	2. Electric Power Generated.			
776	(a) Wages .. ..	..	..	..
777	(b) Provident Fund Bonus .. ..	..	..	1*
778	(c) Gratuities for Good Service .. ..	..	..	1*
779	(d) Fuel .. ..	..	..	..
780	(e) Oil, Waste and other Stores .. ..	..	..	7
781	(f) Water .. ..	..	..	..
782	(g) Miscellaneous Expenses .. ..	..	..	..
	Total Operating Expenses ..			4.01
		Extra Cost of Renewals.	Depreciation Fund.	Total.
IV	DEPRECIATION AND RENEWALS.			
	<i>Electric Power Stations.</i>			
790	(a) Buildings .. ..	..	..	21
791	(b) Plant .. ..	..	..	35
792	(c) Transmission Lines .. ..	..	..	..
	Total Depreciation ..			56
	Total Abstract "H" ..			6.15
	This Expense is distributed as follows :—			
	Abstract "A" .. ..	..	..
	Abstract "B" .. ..	..	..
	Abstract "C" .. ..	..	..
	Abstract "D" .. ..	..	..
	Abstract "E" .. ..	..	..
	Abstract "F" .. ..	..	..
	Abstract "G" .. ..	..	..
	Stores .. ..	..	..
	Workshops .. ..	..	..

* These items are arbitrary apportionments, as exact information is not available.

EXHIBIT II.

GOVERNMENT OF INDIA STATE RAILWAYS.
CONSOLIDATED INCOME ACCOUNT.

Year ended 31st March, 1925.	Actual Rs.	Year ended 31st March, 1926.	
		Budget (Thousands of Rupees).	Actual Rs.
	Gross Earnings :		
	Coaching—		
	Passenger Sch. I, Col. 2		36,65,49,312
	Other " " 3		6,07,20,280
	Goods " " 4		61,57,67,401
	Miscellaneous " " 5		2,51,50,608
			1,06,81,87,601
	Deduct :		
	Working Expenses Sch. I, Col. 12		68,08,50,654
	Net Earnings of the State System		38,73,36,947
	Deduct :		
	Leased and Worked Lines proportion of Net Earnings Sch. I, Col. 13		3,55,41,928
	Net Earnings of State owned Lines Sch. I, Col. 14		35,17,95,019
	Add :		
	Miscellaneous Income Sch. II		48,30,217
			35,66,25,236
	Deduct :		
	Payments on account of share of Profits to Com- pany Lines Sch. III		1,77,41,943
	Other charges against Income Sch. IV		43,89,810
	Interest on Capital at charge (net) Sch. V		24,26,67,826
	Total Charges		26,47,99,579
	Net Income		Rs. 9,18,25,657
	Divisible as under—		
	Government of India 5,49,03,569		
	Reserve Fund 3,79,30,973		
		9,28,34,542	
	Less: Suspense Account, viz., Reduc- tion in Working Capital	10,08,885	
			Rs. 9,18,25,657

NET EARNINGS OF STATE OWNED LINES.
(For the year ended 31st March, 1926.)

EXHIBIT II.
SCHEDULE I.

Name and Class of Railways.	Passenger.	Other.	Goods Traffic Earnings.	Sundry Earnings.	Total Earnings.	Adminis- tration.	Repairs and Main- tenance.	Operation.		Appropri- ation to Dep- reciation Fund.	Total.	Leased and Worked Lines.	Net Receipts.
								Fuel.	Other than Fuel.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14
CENTRAL GOVERNMENT. COMMERCIAL.													
<i>State Railways worked by the State :</i>													
Aden	54,795	7,160	74,630	2,515	1,39,095	59,131	54,315	13,668	36,551	35,428	1,99,093	..	Cr. 59,998
East Indian	6,03,81,283	1,01,68,103	12,60,18,970	42,86,140	20,08,54,496	2,30,56,226	3,29,25,930	1,07,56,608	3,59,90,320	1,92,43,000	12,19,72,084	4,73,009	7,84,09,403
Eastern Bengal	2,43,29,362	53,33,229	3,36,15,434	16,76,646	6,49,54,671	96,00,622	1,26,31,983	53,60,456	1,19,09,246	75,73,571	4,70,75,878	9,05,894	1,69,72,899
North Western	6,24,07,159	88,94,613	8,89,03,018	27,70,841	16,29,75,631	1,76,88,268	2,14,97,840	1,86,82,899	2,68,33,351	1,87,91,000	10,34,93,358	1,26,06,333	4,68,75,940
Great Indian Peninsula	4,48,31,732	1,01,61,544	9,26,28,665	38,49,670	15,14,71,611	1,80,73,283	2,82,17,144	2,25,88,376	2,58,14,029	1,45,96,000	10,92,88,832	15,31,298	4,06,51,481
Total	19,20,04,326	3,45,64,649	34,12,40,717	1,25,85,812	58,03,95,504	6,84,77,530	9,53,27,212	5,74,02,007	10,05,83,497	6,02,38,999	38,20,29,245	1,55,16,534	18,28,49,725
<i>State Railways worked by Companies or by Indian States :</i>													
Assam Bengal	74,76,575	10,30,192	89,08,363	7,24,451	1,81,39,581	29,22,770	23,21,084	13,24,542	27,54,249	..	93,22,645	8,13,613	80,03,323
Bengal Nagpur	2,28,67,074	39,99,377	5,55,13,772	17,77,996	8,41,58,219	1,23,60,724	1,67,99,502	51,81,182	1,41,37,219	..	4,84,78,627	Cr. 68,035	3,57,47,627
Bezwada Extension	1,49,983	25,033	5,89,615	4,430	7,69,061	..	..	40,930	3,06,294	..	3,47,224	..	4,21,837
Bombay, Baroda and Central India	4,61,90,433	82,71,312	7,35,78,120	28,22,703	13,08,62,568	..	..	..	..	..	..	..	..
Burma (including Extensions)	1,66,18,260	15,33,157	3,03,09,315	10,11,033	4,94,71,765	1,52,35,483	1,95,77,842	1,33,12,707	2,03,67,093	..	6,84,93,125	36,07,499	5,87,61,944
Jodhpur Hyderabad	13,17,043	1,60,000	13,29,593	20,174	28,26,810	60,02,099	74,67,240	42,44,883	57,40,395	..	2,34,54,617	..	2,60,17,148
Lucknow Bareilly	27,48,636	3,30,973	34,20,729	2,93,451	67,93,789	3,32,194	5,75,347	2,97,452	7,24,071	..	19,29,064	2,89,455	6,08,291
Madras and Southern Mahratta	2,69,34,694	51,70,137	5,03,04,380	26,04,883	8,50,14,094	8,10,873	10,07,160	4,53,292	7,54,512	..	30,25,837	14,80,633	22,87,319
South Indian .. .. .	..	..	..	..	..	90,66,770	123,13,274	81,88,923	1,11,24,784	..	4,06,93,751	12,37,666	4,30,82,677
Tinnevely Quilon	2,69,39,017	29,08,124	2,63,58,016	22,92,888	5,84,98,045	62,23,471	85,60,737	64,16,423	80,81,728	..	2,92,82,359	16,09,368	2,76,06,318
Tirhoot	1,66,51,565	14,06,400	1,59,66,502	8,26,718	3,48,51,185	30,79,603	39,09,485	23,95,470	34,64,626	..	1,28,49,184	1,10,55,195	1,09,46,806
Contribution to Depreciation Fund on account of Company Worked Lines .. .. .	..	..	..	..	..	..	..	..	..	4,29,31,000	4,29,31,000	..	Cr. 4,29,31,000
Total	16,78,93,280	2,48,34,705	26,62,78,405	1,23,78,727	47,13,85,117	5,60,33,987	7,25,31,671	4,18,55,804	6,74,54,971	4,29,31,000	28,08,07,433	2,00,25,394	17,05,52,290
Total Commercial	35,98,97,606	5,93,99,354	60,75,19,122	2,49,64,539	1,05,17,80,621	12,45,11,517	16,78,58,883	9,92,67,811	16,80,38,468	10,31,69,999	66,28,36,678	3,55,41,928	35,34,02,015
<i>Strategic :</i>													
North Western	66,51,706	13,20,926	82,48,279	1,86,069	1,64,06,980	31,97,013	39,20,680	34,65,434	39,12,849	35,18,000	1,80,13,976	..	Cr. 16,06,996
Total Central	36,65,49,312	6,07,20,280	61,57,67,401	2,51,50,608	1,06,81,87,601	12,77,08,530	17,17,79,563	10,27,23,245	17,19,51,317	10,66,87,999	68,08,50,654	3,55,41,928	35,17,95,019

EXHIBIT II.
SCHEDULE II.

GOVERNMENT OF INDIA STATE RAILWAYS.
MISCELLANEOUS INCOME.

(For the year ended 31st March, 1926.)

	Rs.	Rs.
<i>Government Share of Surplus Profits :—</i>		
Amritsar Patti Kasur	1,87,332	
Hoshiarpur Doab	39,971	
Lines under the Audit of the Government Examiner, Bombay, Baroda and Central India Railway	7,646	
Sialkot Narowal	24,380	
Southern Punjab	29,10,789	
Sara-Sirajganj	35,539	
East Indian	1,56,640	
Kalighat Falta (Eastern Bengal Railway)	14,012	
Khulna Bagerhat (Eastern Bengal Railway)	7,704	
Darjeeling-Himalayan (Extension Bengal Railway)	658	
Rohilkund and Kumaon	1,21,291	
	<hr/>	35,05,962
<i>Sale of Land :—</i>		
Bengal and North Western	639	
Bengal Doars	150	
Lucknow Bareilly	311	
Tinnevely Tiruchendur	34	
Assam Bengal	22	
	<hr/>	1,156
<i>Contribution for Government Supervision, Audit and Control Recoverable from Com- panies :—</i>		
Assam Bengal	74,911	
Bengal Nagpur	2,51,800	
Bengal and North Western	84,171	
Bombay, Baroda and Central India	2,96,183	
Burma	1,53,742	
Great Indian Peninsula	68,663	
Madras and Southern Mahratta	2,24,062	
Rohilkund and Kumaon	22,831	
South Indian	1,46,736	
	<hr/>	13,23,099
		<hr/>
		48,30,217
		<hr/>

EXHIBIT II.
SCHEDULE III.

GOVERNMENT OF INDIA STATE RAILWAYS.

(Payments on Account of Share of Profits to Company Lines for the year ended 31st March, 1926.)

	Rs.	Rs.
<i>State Railways Worked by the State :—</i>		
Great Indian Peninsula		12,54,374
<i>State Railways Worked by Companies or by Indian States :—</i>		
Bengal Nagpur	6,80,410	
Bombay, Baroda and Central India (including Dholka Dhamduka)	26,40,435	
Burma (including Extension)	37,65,609	
Lucknow Bareilly (Rohilkund and Kumaon)	97,692	
Madras and Southern Mahratta	77,66,281	
South Indian Tinnevely Quilon, British Section	10,68,795	
Tirhoot (Bengal and North Western Railway)	4,68,347	
	<hr/>	1,64,87,569
		<hr/>
		1,77,41,943
		<hr/>

EXHIBIT II.
SCHEDULE IV.

GOVERNMENT OF INDIA STATE RAILWAYS.

(Other Charges against Income for the year ended 31st March, 1926.)

	Rs.	Rs.
<i>Land :—</i>		
Assam Bengal Railway :—		
Mymensingh Bhairab-Bazar	22	
Bengal Nagpur Railway :—		
Ahmadpur Katwa	194	
Burdwan Katwa	74	
Dasghara Jamalpurganj	11	
Parlakimedi Gunupur	661	
Bengal and North Western Railway	1,06,264	
Bombay, Baroda and Central India Railway :—		
Champaner Shivarajpur Pani	928	
Guzerat	677	
Pandharpur Miraj Extension	23,733	
East Indian Railway :—		
Hardwar Dehra	600	
Eastern Bengal Railway :—		
Bengal Dooars	745	
Kaligha Falta	17,010	
North Western Railway :—		
Amritsar Patti Kasur	1,538	
Hoshiarpur Doab	2,601	
Larkana Jacobabad	177	
South Indian Railway :—		
Mayavaram Tranquebar	370	
Tanjore District Board	3	
	1,54,928	
<i>Subsidy :—</i>		
Assam Bengal Railway :—		
Arakan Light Railway	1,61,045	
Bengal Nagpur Railway :—		
Bankura Damoodar River	88,519	
Dashgara Jamalpurganj	738	
Bombay, Baroda and Central India Railway :—		
Guzerat	28,121	
Rohilkund and Kumaon Railway :—		
Rohilkund and Kumaon Railway for waiving claim for supply of wood fuel	5,000	
	2,83,423	
<i>Commercial :—</i>		
Railway Board :—		
Office of Railway Board, salaries, travelling allowances and contingencies		14,48,781
Inspection :—		
Offices of Government Inspectors of Railways, salaries, travelling allowances and contingencies		3,89,849
Audit :—		
Office of Accountant General Railways, salaries, travelling allowances and contingencies	2,57,452	
Government Examiners of Railway Accounts and their establishments, salaries, travelling allowances and contingencies	2,85,902	
Chief Auditor, East Indian Railway's Office	84,375	
	6,27,729	
Forward		29,04,710

EXHIBIT II.
SCHEDULE IV.

GOVERNMENT OF INDIA STATE RAILWAYS—contd.

(Other Charges against Income for the year ended 31st March, 1928—contd.)

	Forward..		Rs.		Rs.
<i>Commercial—contd.</i>					29,04,710
Miscellaneous Establishments :—					
Indian Coal Committee			9,424		
Committee for the standardisation of wagons and coaches			49,440		
Carriage and Wagon Standard Committee			2,851		
Special Officer to investigate the question of terminal facilities at Bombay			11,600		
Committee to investigate and report on the question of terminal facilities at Calcutta			70,284		
Technical Office			27,360		
Investigation in connection with conversion of existing buffers on rolling stock on Indian Railways to automatic centre buffer coupler			18,821		
Expenditure in connection with the establishment of a Clearing House for Indian Railways			23,736		
Committee to examine the procedure of disposal of scrap material for auction in consequence of stores fraud on the Oudh and Rohilkund Railway			4,631		
Committee for the standardisation of switches and crossings			4,275		
Committee to investigate the question of repairs facilities in Indian State Railways Workshop			23,142		
Track Sub-Committee			5,740		
Standing Finance Committee		Cr.	40		
Stores Investigation Committee		Cr.	247		
Committee for the Revision of Open Line and General Rules			30,932		
Advertisements, maps and diagrams for report by the Railway Board on Indian Railways and Technical papers			10,988		
Share of gratuities and provident fund bonus payable by Government to Burma Railway employees			1,462		
Mr. R. N. Parker, officer on special duty in connection with the investigation of the sources of supply of wooden sleepers for Railways			3,600		
Special establishment and miscellaneous charges			1,46,731		
Committee appointed to investigate the stores balances of the E. I. and G. I. P. Railways prior to their being taken under State management			8,074		
Bridge Sub-Committee			41,838		
Special Officer to consider and report on the question of separation of Audit from Accounts on the East Indian Railway			33,091		
Special Officer to examine and report on the present method under which medical assistance is provided for the staff of the North-Western Railway and the agency by which general sanitary arrangements are supervised and controlled			53,395		
			5,81,128		
Miscellaneous and other charges :—					
Mining Engineer		Cr.	41,103		
Pensionary charges			3,75,567		
Leave and deputation salaries, etc., of railway officials and miscellaneous charges		Cr.	1,84,977		
Accountant General Railways' Auxiliary Accounts			46,937		
			1,96,424		
Surveys :—					
Assam Bengal Railway :—					
Mymensingh-Bhairab Bazar Railway to be called Sarachar-Kishoreganj Atharabari Branch extension			2,526		
Rajapur Ramchandrapur Extension			155		
Furkating Badulipara Jorhat		Cr.	102		
Shambhugani Hallooaghat and Netrakqua Mohanganj Extension			13,289		
Chittagong Akyab		Cr.	92		
Karimganj Longai Valley			194		
Sylhey Dwara and connected Railways			1,987		
Srimangal-Manumukg Extension			550		
Jharia-Jhanjail Bagmara-Jaligiri Extension			441		
			18,948		36,82,262
Forward					

EXHIBIT II.
SCHEDULE IV.

GOVERNMENT OF INDIA STATE RAILWAYS—*contd.*

(Other Charges against Income for the year ended 31st March, 1926—*contd.*)

	Forward		Rs.	Rs.
	..		18,948	36,82,262
<i>Commercial—contd.</i>				
<i>Surveys—contd.</i>				
Bombay, Baroda and Central India Railway :—				
Jambusar Kavi	Cr. 5,153	
Kapadvanj Meghraj	5	
Nadiad Kaira	260	
Burma Railways :—				
Minbu Pakokku	1,27,745	
Magwe-Irrawaddy River extension	36,276	
Myingyan Natogyi Paleik	23,980	
Ye-Tavoy	32,242	
Nyaunglebin Madauk	2,678	
Heho Inle-lake	Cr. 7,835	
Kyank-padaung-Nangu	300	
Kyaikthin-Yindaik	Cr. 3,344	
Bengal Nagpur Railway :—				
Tumsar Tirodi B. G.	Cr. 225	
South Karanpura Entrance	Cr. 2,466	
Kedla Siding	Cr. 1	
Ghordewa coalfield	537	
Raipur Vizianagaram	Cr. 3,999	
Tumsar Tirodi Dongru Bazraj	18,403	
East Indian Railway :—				
Sainthia Bausi Barhampur	84	
Chondausi Bijnor Chandok Project	3,093	
Chandpur Gomoh	62	
Lucknow Jaunpur Sultanpur	6,603	
Rosa Budaun Babrala	1,033	
Satra Canal	564	
U. P. Railway Project	Cr. 1,266	
Aligarh Mathura Project	Cr. 13	
Rajghat Shahjampur	202	
Unao Madhogan Balmer Hardoi Project	1,462	
Bareilly Chandausi Bijnor Chandok	1,706	
Cawnpore Area	368	
Rajghat Hapur	90	
Badan Bulandsahar	5	
Chandpur Saliganj	890	
Eastern Bengal Railway :—				
Alipur Dooars Traffic	28	
Kissenganj Siliguri Traffic	1,319	
Faridpur Charmugrah Traffic	2,598	
Ishurdi Pabna Sadhuganj Traffic	727	
Krishnagar Navadwip	507	
Dacca Aricha Traffic	Cr. 96	
D'najpur Alwari Traffic	177	
Purneah Dhandah Traffic	Cr. 4	
Azimganj Bhairamara Chord	Cr. 3	
Ishurdi Pabna Sadhuganj Engineering	Cr. 1	
Mograhat-Kakdwip	2,612	
Forward		2,61,098	36,82,262

EXHIBIT II.
SCHEDULE IV.
GOVERNMENT OF INDIA STATE RAILWAYS—contd.

(Other Charges against Income for the year ended 31st March, 1926—contd.)

	Forward	Rs. 2,61,098	Rs. 36,82,262
<i>Commercial—contd.</i>			
<i>Surveys—contd.</i>			
Eastern Bengal Railway :—			
Ishurdi-Pubna Sadhuganj Dacca-Aricha Engineering		2,122	
Nachoul-Rampur Boalia Traffic		1,874	
Saithia-Barhampur-Bhairamara Traffic		2,018	
Saithia-Borhampur Bhairamara Engineering		16,527	
Singani-Tangail Jamuna River Traffic		3,351	
Dinajpur Ruhea Engineering		10,984	
Purneah Feeder		1,843	
Electrification of Suburb Line		23,582	
Dhamuah-Lakhikantapur Engineering		6,405	
Nachoul Rampur-Boalia Engineering		13,209	
Great Indian Peninsula Railway :—			
Mumbra Mahad		12,161	
Lucknow Bareilly Railway :—			
Ramnagar Mohun		1	
North-Western Railway :—			
Amritsar Narowal		13,801	
Shahdara Narowal		25,026	
New Delhi Circular		893	
Amritsar Narowal alternative		13,902	
Rohtak Bhawani traffic		6,128	
Alternative side of Indus Bridge	Cr.	42	
Sindh left bank feeder lines		14,852	
Montgomery Pakpattan McLeodganj		9,429	
Feeder Lines Traffic		663	
Rohtak Bhawani Panipat		22,234	
Thanesar Jagadhri		3,329	
Mailsi Ludan Bakshan Khan		288	
Narowal Shakargarh		4,580	
Lyallpur Tandlianwala		4,836	
Saharanpur Swalak		87	
Chak Jhumra-Chuniot		84	
Jhang Gojra Tandlianwala		322	
Diversion of meter gauge Kishan Ganj to Agra-Delhi Chord Cabin		487	
Survey of Loco yard at Kishanganj including East Indian Railway cuttings		2,886	
New interchange goods yard at Delhi	Cr.	1,259	
Bombay Sindh connection railway	Cr.	105	
Madras and Southern Mahratta Railway :—			
Cumbum-Kalahasti Madras		9,168	
Madras Presidency		29,358	
Bombay Presidency		6,013	
Lines under the audit of the Government Examiner, Madras and Southern Mahratta Railway Nanjangud Tellicherry		5,868	
South Indian Railway :—			
Chinna Salem Vriddachallam Railway Engineering		19,518	
Podanur Coimbatore Extension		13,790	
Hydro Electric Scheme		35,000	
Trichinopoly-Madura Electrification		8,298	
Panruti Trichinopoly Railway	Cr.	42,322	
Villupuram-Trichinopoly Railway Engineering	Cr.	69,843	
Revision of Project Estimate of Panruti-Trichinopoly and Trichinopoly-Tamnad	Cr.	1,390	
Arangtangi-Karaikudi Manamadura Railway Engineering		174	
Forward		4,91,228	36,82,262

EXHIBIT II.

SCHEDULE IV.

GOVERNMENT OF INDIA STATE RAILWAYS—*contd.*(Other Charges against Income for the year ended 31st March, 1926—*contd.*)

	Rs.	Rs.
Forward ..	4,91,228	36,82,262
<i>Commercial—contd.</i>		
<i>Surveys—contd.</i>		
<i>South Indian Railway—contd.</i>		
Shoranur Ernakulam Railway Traffic	601	
Vriddhachallam Cuddalore Railway Engineering	1,413	
Trichinopoly Pudukottah Karaikudi Railway Final Location and detailed	35,073	
Madura-Bodinaikanur Railway Revision of Project estimate	345	
Chalakudivalparai Railway Engineering	9,869	
Shoranur Ernakulam Railway Engineering	12,268	
Salem-Attur Vriddachallam Cuddalore Railway Traffic	8,281	
Villupuram-Trichinopoly Railway Traffic	6,686	Cr.
Trichinopoly-Tirukoilur Chord Railway	3,138	Cr.
Lines under the audit of the Government Examiner, Assam Bengal Railway :—		
Hukong Valley Railway	6,600	
Jorhat	706	Cr.
Lines under the audit of the Government Examiner, Burma Siam Railway :—		
Tavoy-Mergui Section	42,480	
Mergui Siamese Frontier Section	76,259	
	<hr/>	6,73,887
<i>Strategic :—</i>		
<i>North Western Railway :—</i>		
Preliminary transportation bridge survey at Kalabagh	3	
Frontier Railway Reserve	13,002	
Chaman Kandhar	20,400	
Khyber Extension	256	33,661
	<hr/>	<hr/>
Total		43,89,810

EXHIBIT II.

SCHEDULE V.

GOVERNMENT OF INDIA STATE RAILWAYS.

(Interest on Capital at Charge for the year ended 31st March, 1926.)

	Rs.	Rs.
<i>Commercial—</i>		
<i>State Railways Worked by the State :—</i>		
Aden	70,238	
Central Indian Coalfields	4,45,129	
Delhi New Capital Railway Works	4,50,750	
East Indian	4,84,94,290	
Rishikesh Road	31,426	
Eastern Bengal	1,59,60,148	
Great Indian Peninsula	3,51,96,382	
North Western	3,01,30,337	
Kangra Valley	15,120	
Shabdara Narowal	17,146	
Amritsar Narowal	524	
	<hr/>	13,08,11,490

EXHIBIT II.
SCHEDULE V.

GOVERNMENT OF INDIA STATE RAILWAYS—*contd.*

(Interest on Capital at Charge for the year ended 31st March, 1926.)

	Rs.	Rs.
Forward		13,08,11,490
<i>Commercial—contd.</i>		
<i>State Railways worked by Companies or by Indian States :—</i>		
Assam-Bengal	69,03,687	
Furkaling Badulipur Jorhat	35,292	
Sibsagar Road Khowang	95,695	
Karimganj Lungai Valley	27	
Bengal Nagpur	2,86,90,575	
Bezwada Extension	67,355	
Bombay, Baroda and Central India (including Dholka Dhanduka)	2,34,31,455	
Jambusar Kavi	3,010	
Burma (including Extension)	98,67,092	
Jodhpur Hyderabad	2,13,398	
Lucknow Bareilly (Rohilkund and Kumaon)	8,94,856	
Madras and Southern Mahratta	1,90,61,879	
Dhone Kurnool	33,886	
South Indian	1,01,63,533	
Coonoor Ootacamund	1,87,168	
Tinnevely Quilon, British Section	36,537	
Tinnevely Quilon, Indian State Section	1,03,142	
Tinnevely Tiruchandur	Cr. 14,709	
South Behar .. .. .	..
Tirhoot (Bengal and North Western Railway)	30,42,263	
	<hr/>	10,28,16,141
<i>Miscellaneous :—</i>		
Abandoned projects, etc.	1,07,284	
State Railway Stores and other Suspense items	12,82,411	
	<hr/>	13,89,695
Total Commercial		23,50,17,326
<i>Strategic Lines :—</i>		
North Western	93,30,528	
Tank Kaur Khirgi	1,85,100	
Frontier Railway Reserve	4,32,955	
Nushki Extension	16,61,519	
Khyber	14,84,094	
Total Strategic	<hr/>	1,30,94,196
<i>Less : Interest Received.</i>		
<i>Commercial :—</i>		
Interest on balance of Reserve Fund	33,96,224	
Interest on balance of Depreciation Fund	18,73,416	
Interest and dividend on securities purchased on the Reserve Fund Investment Account	66,153	
Miscellaneous	298	
	<hr/>	53,36,091
<i>Strategic :—</i>		
Interest on balances of Depreciation Fund	1,07,605	
	<hr/>	54,43,696
	<hr/>	Rs. 24,26,67,826

RAILWAY.

EXHIBIT III.

BALANCE SHEET.

AS AT.....

Dr.

Cr.

<i>LIABILITIES.</i>						<i>ASSETS.</i>				
<i>Capital Contributions.</i>						<i>Road and Equipment</i> ... Schedule I				
Loans specifically raised for Railway purposes. Schedule VII						<i>Working Assets.</i>				
Loans and Stock of Operating Company .. ..Schedule VIII						Stores on Hand .. Schedule II				
Government of India, amount contributed ..Schedule IX						Fuel on Hand Schedule III				
<i>Depreciation Fund</i> ..Schedule X						Work in Progress in Schedule IV Shops.				
<i>Provident and other Funds</i> (detailed).						Debts due to the Railway ..				
<i>Working Liabilities.</i>						Government of India				
Government of India						Provincial Government				
Railway Board						Traffic Balances.. Schedule V				
Operating Company						Station Balances Schedule VI				
General Bills						Miscellaneous Accounts and Advances				
Miscellaneous Accounts						Railway Board Deposits.. ..				
Sundry Deposits						Cash with Controller of Currency				
Interest due and unpaid						Cash in Transit				
Accrued Liabilities						<i>Miscellaneous Deferred Accounts</i> ..				
Unadjusted Balances										
					Rs.					Rs.

RAILWAY.
CAPITAL EXPENDITURE UP TO 31st MARCH, 1928.

EXHIBIT III.
SCHEDULE I. SECTION A.

	Total as at 31st March, 1927.	New lines opened during preceding year trans- ferred from Section B.	Year ending 31st March, 1928.		Total to 31st March, 1928.	Further estimated expenditure during the year to 31st March, 1929.	Further estimated expenditure during subsequent years.	Total estimated expenditure on Works in hand at 31st March, 1928.
			Budget Estimate.	Actual Expenditure.				
Section								
A. On Lines open for Traffic.								
1. Structural Engineering Works—								
(1) Preliminary Expenses								
(2) Land								
(3) Formation								
(4) Bridgework								
(5) Fencing								
(6) Electric Telegraph								
(7) Ballast and Permanent Way								
(8) Stations and Buildings.. .. .								
(9) Shore connection for Ferry Steamers								
(10) Plant Construction								
(11) Electric Third Rail or Overhead Construction								
2. Equipment Plant—								
(1) Plant								
(2) Section and Office Furniture								
(3) Motor Lorries, Steamers, etc., for Railway purposes								
3. Rolling Stock—								
(1) Locomotives, Steam								
(2) Locomotives, Electric								
(3) Coaches								
(4) Wagons								
(5) Electric Motor Cars								
(6) Road Motor Cars								
(7) Ferries								
4. General Charges								
5. Commission and Exchange								
6. Premium over original cost paid by the Government of India on purchase of the Railway								
<i>Total Lines open for Traffic</i>								
<i>Add: Total Lines in course of construction, Schedule 1, Section B</i>								
Grand Total All Lines								

RAILWAY.

EXHIBIT III.

CAPITAL EXPENDITURE UP TO 31st MARCH, 1928.

SCHEDULE I. SECTION B.

	Total as at 31st March, 1927.	New lines opened during preceding year transferred to Section A.	Year ending 31st March, 1928.		Total to 31st March, 1928.	Further estimated expenditure during the year to 31st March, 1929.	Further estimated expenditure during subsequent years.	Total estimated expenditure on Works in hand at 31st March, 1928.
			Budget Estimate.	Actual Expenditure.				
Section								
B. On Lines in course of Construction.								
1. Structural Engineering Works—								
(1) Preliminary Expenses								
(2) Land								
(3) Formation								
(4) Bridgework								
(5) Fencing								
(6) Electric Telegraph								
(7) Ballast and Permanent Way								
(8) Stations and Buildings								
(9) Shore connection for Ferry Steamers								
(10) Plant Construction								
(11) Electric Third Rail or Overhead Construction								
2. Equipment Plant—								
(1) Plant								
(2) Station and Office Furniture								
(3) Motor Lorries, Steamers, etc., for Railway purposes								
3. Rolling Stock								
(1) Locomotives, Steam								
(2) Locomotives, Electric								
(3) Coaches								
(4) Wagons								
(5) Electric Motor Cars								
(6) Road Motor Cars								
(7) Ferries								
4. General Charges								
5. Commission and Exchange								
Total Lines in course of Construction								
(Agreeing with total of Schedule I, Section C.)								
This Statement will take the place of the following Statements at present in use :—								
In Annual Report V and VI.								
In Finance Accounts Schedule E.								
A separate statement will be prepared in above form for each new line, the total of each being carried to Schedule I, Section C.								

..... RAILWAY.
CAPITAL EXPENDITURE IN PROGRESS.
ROAD AND EQUIPMENT.

EXHIBIT III.
SCHEDULE I. SECTION C.

Description of each Work.	Total as at 31st March, 1927.	Expenditure during year ending 31st March, 1928.	Further estimated expenditure during the year to 31st March, 1929.	Further estimated expenditure during subsequent years.	Total estimated expenditure on Works in hand at 31st March, 1928.
Total agreeing with Schedule I, Section B					

EXHIBIT III.

SCHEDULE II.

.....RAILWAY.

STORES TRANSPORTATION FOR.....

(Figures in thousands of rupees.)

Debits.	Credits.
Balance at commencement of the year	<i>Issues during the year.</i>
<i>Receipts during the year.</i>	I. For consumption
English Stores—purchase cost	II. Sale and Transfer
expenses percentage addition ..	Total
Indian Stores—purchase cost	Balance at the close of the year—
expenses percentage addition ..	Stores in stock
Receipts from manufacture into stores	
Materials returned from works	
GRAND TOTAL ..	GRAND TOTAL ..

EXHIBIT III.
SCHEDULE III.

.....RAILWAY.
FUEL TRANSACTIONS FOR.....

(Figures in thousands of rupees.)

Debits.		Credits.			
	Quantity.	Value.		Quantity.	Value.
Balance at commencement of year			<i>Issues during the year.</i>		
<i>Receipts during the year.</i>			I. Transportation		
State Collieries—purchase cost			II. Workshops		
expenses percentage			III. Electrical Departments		
addition			IV. Sale and Transfer		
Other Collieries—purchase cost			V. Miscellaneous		
expenses percentage					
addition					
			Total ..		
			Balance at close of the year—		
			Fuel in stock		
GRAND TOTAL ..			GRAND TOTAL ..		

.....RAILWAY,
MANUFACTURING OPERATIONS FOR.....

EXHIBIT III
SCHEDULE IV

(Figures in thousands of Rupees.)

Description.	Amount.	Description.	Amount.
Balance at commencement of year		<i>Credits during the Year.</i>	
<i>Debits during the Year.</i>		<i>New Construction completed.</i>	
<i>Locomotive Workshops.</i>		Structural Engineering Works	
Labour		General Equipment	
Material		Rolling Stock	
Other charges		Total	
Total		<i>Work Chargeable to Abstracts.</i>	
<i>Carriage and Wagon Workshops.</i>		(a) Maintenance of Structural Works	
Labour		(b) Maintenance of Rolling Stock	
Material		(c) Commercial Expenses	
Other charges		(d) Transportation Expenses	
Total		(e) Expenses of General Departments	
<i>Engineering Workshops.</i>		(f) Maintenance and working of Ferry Steamers and Harbours	
Labour		(g) Stores Expenses	
Material		Total	
Other charges		<i>Manufactured Products to Stores.</i>	
Total		<i>Work done for Others.</i>	
<i>Other Workshops.</i>		Home Line Employees	
Labour		Other Government Departments	
Material		Other Railways	
Other charges		Sundries	
Total		Total	
<i>Electrical Department.</i>		Total Credits	
Labour		Balance at the close of the year	
Material			
Other charges		GRAND TOTAL	
Total			
Total Debits			
GRAND TOTAL			

**EXHIBIT III.
SCHEDULE VII.**

.....RAILWAY.

CAPITAL CONTRIBUTIONS.
(Loans specifically raised for Railway Purposes.)

Description of Loan.	Date and Authority.	Amount Authorised.	Amount Created.	Amount Issued.	Amount Redeemed.	Balance Outstanding.

EXHIBIT III.
SCHEDULE VIII.

.....RAILWAY.

CAPITAL CONTRIBUTIONS.

(Loans and Stock of Operating Company.)

Nature of Capital.	Date and Authority.	Amount Authorised.	Amount Created.	Amount Issued.	Amount Redeemed.	Balance Outstanding.
Debentures						
Preference Stock						
Ordinary Stock						
Ordinary Shares of £ each						

EXHIBIT III.
SCHEDULE IX.

.....RAILWAY.

CAPITAL CONTRIBUTIONS.

(Government of India, Amount Contributed.)

Balance at 1st April, 19	..	..	..	..	..	..
Additional contributions during the year ending 31st March, 19	..	..	..	..	..	..
"								
"								
"								
"								
"								
Total at 31st March, 19	..	..	..	..	..	..

EXHIBIT III.
SCHEDULE X.

.....RAILWAY.
STATEMENT OF DEPRECIATION FUND FOR THE YEAR.

Name of Asset.	Balance on 1st April, 1928.	Appropriation to Depreciation Fund during 1928-29.	Appropriation from Deprecia- tion Fund during 1928-29.	Balance on 1st March, 1929.
<i>Bridgework.</i>				
1. Steel work				
2. Masonry				
<i>Permanent Way.</i>				
3. Rails and fastenings including points and crossings ..				
4. Sleepers, wood				
5. Sleepers, cast-iron and ferro-concrete				
6. Sleepers, steel trough				
<i>Buildings.</i>				
7. Masonry				
8. All others				
9. Station machinery				
10. Plant				
11. Ferries				
<i>Rolling Stock.</i>				
12. Locomotives, engines and tenders				
13. Locomotive boilers				
<i>Carriage and Wagon.</i>				
14. Coaching vehicles				
15. Goods vehicles				
<i>Motor vehicles.</i>				
16. Rail				
17. Road				
18. Electric instruments and telephones				
Total				
Add Worked Lines				
GRAND TOTAL				

RAILWAY BOARD.

BALANCE SHEET.

AS AT

Dr.

Cr.

<i>Liabilities:</i>				<i>Assets:</i>			
<i>Depreciation Accounts of Company Worked Lines.</i>				<i>Debtors.</i>			
				Government of India-			
				Railways			
				Miscellaneous			
<i>Creditors.</i>				<i>Investments.</i>			
Government of India				Depreciation Fund			
Railways				General			
Miscellaneous							
<i>Reserve Account.</i>				<i>Cash.</i>			
				With Controller of Currency			
				In Hand			
Rs.				Rs.			

APPENDIX IV.
SYSTEM OF TRAFFIC ACCOUNTING.

Section I.

81. As explained in Chapter VIII of the Main Report, it is recommended that the methods of traffic accounting and audit at present in force in the Railway Clearing House be extended gradually throughout all the State Railways.

82. The first step will be to open a Central Station Accounting Office at Delhi in which will be done all the work at present carried out in the Clearing House at Lahore. Branches of this Central Accounting Office will next be opened at Karachi, Howrah and Wadi Bunder in which will obtain the procedure explained hereafter. In time, further branch accounting offices will be opened at convenient centres to control groups of adjacent stations, and this policy will be continued until all stations are centralised under the control of these branch offices and an immediate audit of the prime traffic documents and a consequent early rectification of station errors thereby made possible.

83. The present organisation of the Clearing House Office for foreign and local traffic respectively is set out in two memoranda prepared for use in this report by Mr. W. H. Scott, Director of the Clearing House, and annexed as Sections II and III of this appendix.

84. It is necessary to supplement these in two respects:—

- (a) To show the suggested variation in the procedure at the Branch Accounting Offices from that at the Central Station Accounting Office.
- (b) To show how the results produced by the Central Station Accounting Office will be carried into the general books under the new system of accounting recommended for the Head Office.

85. *Branch Accounting Office Procedure.*—The procedure in the branch offices will vary slightly from that adopted in the Central Station Accounting Office. These branch offices will be furnished daily with the audit copy of all invoices to which will be gummed the Dalton strip. The rates on these invoices will be checked cent. per cent. and such check will be made of the calculations as is considered necessary. Thereafter, a card will be punched in the branch office for every invoice, both local and foreign, as against the Central Accounting Office procedure of punching a card for every foreign invoice, but only one card for the total of each station to station local abstract.

86. Punching a card for each invoice will relieve the station staffs of all the clerical work at present necessary in the preparation of abstracts and summaries, as in the branch offices it will only be necessary to tabulate these cards to provide the daily station to station abstracts. At the end of the month, master cards will be punched from these abstracts and tabulated to get the forwarded summaries, the forwarded paid figures of which will be furnished to the Station Staff to be entered in the balance sheet. This balance sheet will be prepared by the Station Staff and then submitted to the Branch Accounting Office for audit. The audit completed, the branch office will send the abstracts, summaries, master cards, and any other necessary documents, to the Central Station Accounting Office in support of the audited balance sheet submitted.

87. In the Central Station Accounting Office it will only be necessary to make the comparison of the forwarded station to station abstract figures with those returned by the destination stations in their received station to station abstract, as all other figures will have been audited by the Branch Office.

88. These branch offices will also prepare and submit division sheets to the Central Accounting Office in respect of all forwarded foreign traffic emanating from the stations under their control. Regarding the inwards traffic the invoices, after being checked by the Station Staff and recorded in the Goods Received and Delivered Book, will be passed to the Branch Office where, after being checked, a card will be punched for each invoice. Thereafter, these cards will be tabulated to prepare an inwards abstract, and from these abstracts master cards will be punched and tabulated to get the received summaries. The total "to pay" of these summaries will be the figure to appear in the station balance sheet. Thereafter, the abstracts, summaries and master cards will be forwarded monthly to the Central Station Accounting Office with the audited balance sheet.

				Forward Rs.	—	Rs.	—
<i>Government Passenger Traffic :—</i>							
Passengers	..	Local	..	..	—
		Foreign	..	..	—
Soldiers baggage		Local	..	..	—
		Foreign	..	..	—
Sundries	..	..	..	..	—
					—		
					—		
<i>Ordinary Parcels Traffic :—</i>							
Local	..	..	Outwards paid	..	—		
			Inwards to pay	..	—		
Foreign	..	..	Outwards paid	..	—		
			Inwards to pay	..	—		
Out agency	..	..	Outwards paid	..	—		
			Inwards to pay	..	—		
Horses, carriages and dogs.		Local	..	..	—
		Foreign	..	..	—
Sundries	..	..	..	..	—
					—		
					—		
<i>Government Parcels Traffic :—</i>							
Horses, carriages and dogs.		Local	..	..	—
		Foreign	..	..	—
Sundries	..	..	..	..	—
					—		
					—		
<i>Telegraph Earnings</i>							
..	—		
<i>Other Miscellaneous Earnings :—</i>							
Excesses in booking	..	..	..	..	—
Sundries	..	..	..	..	—
					—		
					—		
						Rs.	—

92. Not later than the 12th of each month one copy of each of these summaries will be furnished to the Chief Accountant who will then incorporate the figures into the financial books in the manner explained hereafter.

93. *Adjustments of Differences between Central Station Accounting Office and Station Figures.*—It has been found in practice that the figures prepared in the Clearing House from the forwarded invoices do not always agree with the figures entered in their balance sheets by the destination stations concerned. These differences will continue to arise owing to the non-receipt of forwarded invoices by destination stations until after the accounts for the month have been closed and the balance sheet submitted.

94. In respect of these differences the Clearing House at present compiles and the Central Station Accounting Office will continue to compile, for both goods and coaching traffic and render to the Chief Accountant of each Railway by the 12th of each month a monthly statement, in duplicate, showing in respect of each station :—

- (a) The amount of the outwards paid and inwards to pay traffic *vide* the station summaries.
- (b) The amount as passed in the Central Station Accounting Office.
- (c) The details of the differences between (a) and (b) above.

The Chief Accountant will sign and return one copy to the Central Accounting Office and from the other will make the necessary entries in the financial books as explained later.

95. *Summaries of Credit Side of Balance Sheets.*—On the credit side of the station balance sheets there appears the cash and vouchers for each day and the total for the month, and at the foot thereof are also shown any other credits taken up by stations during the month.

96. The audit of the cash and voucher figures appearing in the balance sheets will not be done in the Central Station Accounting Office, but the respective monthly totals of all stations will be summarised in duplicate, in a manner similar to that already explained for the summarising of the balance sheet debits. As with the debits, separate summaries will be necessary for the credit side of the goods and coaching balance sheets respectively, and forms 11 and 12 are specimens suitable for this work.

97. The miscellaneous credits appearing in the station balance sheets will, however, be audited in the Central Station Accounting Office and when this audit has been completed, the totals of these credits, analysed under the appropriate revenue account heads will also be included in the goods and coaching balance sheet summaries, forms 11 and 12 respectively. One copy of each summary will then be forwarded to the Chief Accountant in order that he may make the necessary entries in the financial books.

98. *Entries in the Financial Books.*—At the end of each month the Chief Accountant will be receiving copies of the following documents from the Central Station Accounting Office :—

- (a) Summary of debits in goods balance sheets, form 9.
- (b) Summary of debits in coaching balance sheets, form 10.
- (c) Statement of differences between Central Accounting Office debits figures for goods traffic and the figures submitted by stations.
- (d) Statement of differences between Central Accounting Office debits figures for coaching traffic and the figures submitted by stations.
- (e) Summary of cash, vouchers and miscellaneous credits in goods balance sheets, form 11.
- (f) Summary of cash, vouchers and miscellaneous credits in coaching balance sheets, form 12.
- (g) Copies of the division sheets submitted to other Railways.
- (h) Copies of any other documents affecting the traffic earnings of the Railway.

The figures in these statements have to be incorporated into the financial books and this will be done through the journal.

99. From the summaries of the debit side of the goods and coaching balance sheet he will pass the journal entry annexed hereto as No. 1 and illustrated below,

and then make the necessary postings to the debit and credit of the accounts affected in the General Ledger :—

Sundry stations control account	Dr. Rs.—	
To sundries :—		
Goods earnings, including demurrage	Rs.—	
Miscellaneous goods earnings	Rs.—	
Passenger traffic earnings	Rs.—	
Parcels traffic earnings	Rs.—	
Telegraph earnings	Rs.—	
Miscellaneous coaching earnings	Rs.—	
(Being earnings by stations for the month of <i>vide</i> the Central Station Accounting Office summaries of audited balance sheets.)		

100. From the statements of differences he will pass a journal entry debiting or crediting the amounts to the appropriate traffic accounts affected in the General Ledger and debiting or crediting the net difference to "sundry stations in suspense." It is to be noted that this net difference is to be entered in this suspense account and not in the sundry stations control account, and the following illustration should make the reason clear.

101. A "to pay" invoice for Rs. 100 not received by the destination station during the month of issue, will consequently be omitted from its summary and balance sheet. The Central Station Accounting Office will be working from the forwarded invoices, however, and will take up this item as an earning, return it as a difference to the Chief Accountant who will thereupon pass the journal entry No. 2 annexed, *viz.* :—

Sundry stations in suspense Dr. Rs. 100

To goods earnings, including demurrage Rs. 100

and incorporate it into the month's earnings. In the following month the station will have taken up the invoice but the Central Accounting Office, having no forwarded invoice, will now return the item as a debit difference, and the Chief Accountant will therefore journalise it as shown at journal entry No. 3 annexed hereto, *viz.* :—

Goods earnings including demurrage Dr. Rs. 100

To sundry stations in suspense Rs. 100

In the month in which this second journal entry will be passed, the Chief Accountant will also have taken up the item from the summary of the goods balance sheets and thereby incorporated it into his financial books as a credit to goods earnings and a debit to sundry stations control account.

102. With reference to this sundry stations in suspense account, the balance thereof should always be either a debit or nil, and will represent earnings taken up by the Central Accounting Office but not taken up by stations. The Chief Accountant must prove its correctness monthly by checking the debit items in the difference statements against the subsequent credits, and the sum of the outstanding debits must always agree with the balance of this suspense account.

103. The Chief Accountant will next deal with the summaries of the credit side of the balance sheets and from these he will pass journal entry No. 4 annexed and illustrated below, *viz.* :—

Sundries	Dr.	
To sundry stations control account	Rs. —	
Treasurer's stations cash control account	Rs. —	
Voucher Ledger control account	Rs. —	
Goods earnings, including demurrage	Rs. —	
Miscellaneous goods earnings	Rs. —	
Passenger traffic earnings	Rs. —	
Parcels traffic earnings	Rs. —	
Telegraph earnings	Rs. —	
Miscellaneous coaching earnings	Rs. —	

(Being analysis of credits taken up by stations during the month of *vide* Central Station Accounting Office summaries of balance sheets).

104. The amount debited to the treasurer's cash control account represents the amount shown by stations as having been remitted during the month. The Chief Accountant will next post to the credit of this control account the amount shown in the treasurer's stations cash books as having been banked on behalf of Stations during the month. The posting of this credit entry should balance this control account. Should there be a difference, however, it must be investigated by the Chief Accountant and proof obtained that it has since been adjusted.

105. The Voucher Ledger control account will be debited with the total of all vouchers as shown on the summaries. The detailed accounting procedure in connection with vouchers is explained in a subsequent paragraph.

106. The remaining debits are to the various revenue accounts and are, in effect, adjustments of earnings overstated in either the current or previous months.

107. The figures on the division sheets will also be journalised the amounts being debited or credited to the traffic account head affected according to whether they are payable or receivable, the contra entry being to the credit or debit of the Railway concerned. When the division sheets show that a balance is payable to foreign Railways the journal entry will be as annexed hereto at No. 5 and illustrated below, *viz.* :—

Sundries :—

To Voucher Ledger control account	..	..	..	Rs. —
North Western Railway	..	..	..	Rs. —
East Indian Railway	..	..	..	Rs. —
<i>et seq.</i>				
Goods earnings, including demurrage	..	Dr.	Rs.	—
Miscellaneous goods earnings	..	..	Dr.	Rs. —
Passenger traffic earnings	..	..	Dr.	Rs. —
Parcels traffic earnings	..	..	Dr.	Rs. —
Miscellaneous coaching earnings	..	..	Dr.	Rs. —

(Being the proportions of home Railway traffic receipts for the month of 192 due to the foreign Railways shown above, *vide* the Central Station Accounting Office division sheets.)

The debit postings will be made to the debit of the traffic accounts affected and the total thereof credited to the Voucher Ledger control account, all these accounts being in the General Ledger. The accounts of the individual Railways will be maintained in the Voucher Ledger, and the necessary credit postings will be made to these accounts in that Ledger.

108. Should the division sheets show amounts receivable from the foreign Railways, the above journal entry will be reversed as shown in the specimen No. 6 annexed, and the postings will then be made to the debit of the Railways concerned and to the credit of the respective traffic earnings accounts.

109. Normally, the foregoing will represent the entries to be made in the financial books in respect of traffic, and at this stage it will be necessary to prove the correctness of the balance of the sundry stations control account. It has already been provided that on the summaries of the balance sheet credits, the Central Station Accounting Office will include the closing balances of all stations, and the totals of these balances must now be agreed with the balance of the sundry stations control account in the General Ledger.

110. *Railway Earnings Collected by the Treasurer which would not appear in Station Balance Sheets.*—There will, of course, be a considerable amount of revenue collected direct by the treasurer. Typical instances of these items will be :—

Freights for transport of Post Office mails.

Rents.

Advertisement charges,

etc.

The accounts to the firms or persons concerned will be rendered by the Chief Accountant, and it will be advisable to keep all these debtors accounts in a separate ledger, which may conveniently be called the Miscellaneous Earnings Ledger.

111. All bills and accounts rendered will be entered in a Miscellaneous Earnings Journal and posted therefrom to the Ledger. At the end of each month the total of this journal will form the basis of journal entry No. 7 annexed, and will then be posted to the credit of miscellaneous traffic earnings and debited to Miscellaneous Earnings Ledger control account, both these accounts being in the General Ledger. The detailed accounting work necessary for the maintaining of the Miscellaneous Earnings Ledger will be similar to that explained hereafter in connection with the Voucher Ledger.

112. In order to facilitate the preparation of the figures for the published accounts, the abstract number and sub-head thereof to which the item will subsequently be analysed must be shown against each entry in the Miscellaneous Earnings Journal. At the end of each month these items will be analysed to get the monthly total for each sub-head of the abstract affected and these individual totals will then be posted by the Chief Accountant to their appropriate account heads in the analysis of Earnings Register.

113. *Published Accounts.*—In the published accounts, the earnings are shown in considerably more detail than it is necessary to keep them in the financial books. This amplification presents no difficulties however. All that will be necessary will be an Analysis of Earnings Register, in which will be kept an account for each item shown in Abstracts 1 and 2.

114. With the exception of earnings from transport of Post Office mails, etc., mentioned above, the classified totals in respect of the home Railway coaching traffic under the headings shown in Abstract 1 will be furnished monthly to the Chief Accountant by the Central Station Accounting Office and the Chief Accountant will post the amounts to the credit of the abstract account heads in the Analysis of Earnings Register. The total of these Central Accounting Office classifications will agree with the earnings as shown by the summary of coaching balance sheets :—

- (a) plus or minus the net balance of the statement of differences between the Central Accounting Office figures for coaching traffic and the figures submitted by stations.
- (b) plus or minus the amount receivable or payable as shown by the coaching traffic division sheets.

115. It will still be necessary to charge the various coaching earnings accounts in the register with their proportions of the total of the miscellaneous coaching credits allowed to stations by the Central Station Accounting Office during the month and taken up by them in their coaching balance sheets. These allowances will also be classified by the Central Accounting Office under the various abstract headings, and a copy of this classification sent to the Chief Accountant who will thereupon make the necessary entries in the Register to reduce the amount of the earnings previously taken up.

116. At the end of each month the sum of the balances of the accounts in the Analysis of Earnings Register affecting Abstract 1 must be agreed with the sum of the balances of the coaching traffic revenue accounts in the General Ledger.

117. With regard to Abstract 2, the procedure will be similar to that already outlined as being necessary for Abstract 1.

118. *Voucher Ledger.*—(1) *Vouchers from Stations.*—It is explained in paragraphs 127-131 how the treasurer will compile daily lists, showing the amount of vouchers received from each station, and maintain a record of these figures in his stations cash books, form 13. Daily, he will send the voucher list together with all vouchers, to the voucher accounts section, in order that the amounts of these vouchers may be debited in the Voucher Ledger to the accounts of the firms or individuals concerned. These debits will be made through a voucher journal.

119. Cash received from firms in payment of these voucher accounts will be extended by the treasurer to the Voucher Ledger column in the Miscellaneous Receipts Cash Book, form 2, and posted therefrom to the credit of the account concerned in the Voucher Ledger by the voucher section staff.

120. (2) *Weight only Invoices.*—The consignment of coal on what are termed “weight only” invoices is peculiar to the East Indian Railway. These weight only invoices are, in effect, vouchers and the procedure in connection therewith briefly is as follows:—

121. The Colliery Manager prepares and hands to the pilot guard a Declaration Note for each loaded wagon or number of wagons for one destination. The pilot guard weighs and clears the wagons and enters the weight on the Declaration Note. From this note the invoice is then prepared which shows, *inter alia* :—

- (a) Consignor.
- (b) Consignee.
- (c) Actual weight.
- (d) Chargeable weight.
- (e) Freight per ton.

It does not, however, show the total freight payable. At the end of each day each colliery invoicing station summarises all Declaration Notes, and sends this summary and notes to the Coal Manager’s Office in Calcutta, where a staff of forty-seven men are engaged in calculating the freights payable, billing the firms responsible for the freight, etc.

122. When the branch of the Central Office has been opened at Howrah, all summaries of Declaration Notes must be sent thereto. After the freight rates have been checked and the amount payable ascertained with the aid of a calculating machine, a card will be punched for each item on each Declaration Note. In coding the card one field must be allotted to the firms or persons responsible for the freight. Thereafter it will only be necessary to tabulate the card in order to get lists showing the amounts of freight due by each firm or person. A copy of these lists will be sent on Wednesday and Saturday of each week to the Chief Accountant, East Indian Railway, and he will pass it to the voucher accounts section in order that the necessary charges may be debited in the Voucher Ledger to the accounts of the firms or individuals concerned. These tabulated lists will be utilised as a journal and it will not be necessary to copy the items into the voucher journal but only to number and bind the tabulated lists in journal form.

123. The cash received from firms in payment of these coal bills will be extended by the treasurer to the Voucher Ledger column in the Miscellaneous Receipts Cash Book, form 2, from which the individual amounts will be credited to the account of the firm concerned in the Voucher Ledger.

124. (3) *Voucher Ledger Control Account.*—It has already been shown how the Voucher Ledger control account will be debited monthly with the total of all vouchers as shown on the Central Station Accounting Office summaries of the station balance sheets and either debited or credited with the amount receivable from or payable to foreign Railways, *vide* the division sheets. It will next be credited with the total for the month of the Voucher Ledger column of the Miscellaneous Receipts Cash Book and the balance of the control account then agreed with the sum of the balances appearing in the Voucher Ledger. This agreement must be effected monthly.

125. *Coal Balance Sheet.*—At the end of each month, the Howrah branch of the Central Station Accounting Office will tabulate all cards in order to prepare station to station abstracts and summaries, and the total of these will be entered in the coal balance sheet as coal traffic earnings. This total must agree with the total of all the lists furnished to the Chief Accountant during the month, and this agreement having been effected the amount will be entered on the credit side of the coal balance sheet as “Vouchers forwarded to Chief Accountant”.

126. The coal balance sheet will then be sent to the Central Station Accounting Office and the totals of the debits and credits will be included in the Central Accounting Office summaries of the goods balance sheets forwarded to the Chief Accountant.

127. *Treasurer’s Summaries of Station Remittances.*—After the cash and vouchers have been checked against the entries in each station cash remittance note, the details of all notes will be summarised by the treasurer in order to get the

total of all cash and all vouchers under stations for each day, and the running totals of these for each station and for all stations for the month to date.

128. Separate summaries will be prepared in respect of each branch of the Imperial Bank or sub-treasury of the Government of India into which a group of stations pay their receipts, in order that control may be had over the moneys so banked.

129. A specimen cash and voucher summary sheet (Stations Cash Book) is given at form 13, and has been designed to permit this work being done with the aid of a Burroughs machine. It is somewhat difficult to explain in a report how this summary will be prepared and it will be much simpler to get the Burroughs representatives to give a demonstration. Briefly, the procedure will be:—

- (a) The names of all stations will be printed on the summaries, and the cash remittance notes arranged in this order.
- (b) The operator will first strike up the cash and voucher figures for each station and these will be recorded on a separate sheet.
- (c) The machine will automatically reprint these cash and voucher figures in adjoining columns on another page, and this page will then become a "Stations" Cash Book.
- (d) The operator will then strike up the accumulated cash and voucher totals for the previous days of the month and these will be printed.
- (e) The machine will then automatically print the separate cumulative totals of cash and vouchers for each station to date.
- (f) The cast of the columns of the stations cash book will give the separate totals of cash and vouchers either for the day or to date.

130. There will always be cash and vouchers in transit at the end of each month, and the station summaries and cash books will be kept open until the 7th of the next month, in order that the amounts may be brought to account in the month to which they relate.

131. At the end of each day the treasurer will send the separate voucher list, plus all vouchers, to the voucher accounts section in order that the debits may be raised against the firms and persons concerned in the manner already explained. He will also enter in the appropriate column of the General Cash Book, form 3, the total cash collections for the day received from each group of stations.

..... RAILWAY.

JOURNAL ENTRY.

No. 1.

Month.....192.....

No.	Description.	Folio.	Dr.	Cr.
			Rs. a. p.	Rs. a. p.
831	Sundry stations control account		—	
	To Sundries—			
881	Goods earnings, including demurrage ..			—
882	Miscellaneous goods earnings			—
883	Passenger traffic earnings			—
884	Parcels traffic earnings			—
885	Telegraph earnings			—
886	Miscellaneous coaching earnings ..			—

Being earnings by stations for the month of.....192.....vide the Central Station Accounting Office summaries of audited balance sheets.

Prepared by.....Clerk.

Verified by.....Assistant Accountant.

Approved for entry by.....Accountant.

Posted by.....Clerk.

.....RAILWAY.

JOURNAL ENTRY.

No. 2.

Month.....192.....

No.	Description.	Folio.	Dr.	Cr.
			Rs. a. p.	Rs. a. p.
832	Sundry stations in suspense		—	
881	To Goods earnings, including demurrage ..			—

To bring to account the amounts by which the goods earnings for the month of.....
192 .. as prepared from forwarded invoices by the Central Station Accounting Office
 exceed the goods earnings figures appearing in the Station Balance Sheets owing to the stations
 having worked from received invoices, *vide* Central [Station Accounting Office statement of
 differences for the month of.....192.....

Prepared by..... Clerk.

Verified by..... Assistant Accountant.

Approved for entry by..... Accountant.

Posted by..... Clerk.

.....RAILWAY.

JOURNAL ENTRY.

No. 3.

Month.....192...

No.	Description.	Folio.	Dr.	Cr.
			Rs. a. p.	Rs. a. p.
881	Goods earnings, including demurrage ..		—	
832	To Sundry stations in suspense			—

To adjust items of goods earnings already taken up by the Central Station Accounting Office from forwarded invoices in previous months, and now brought to account by stations in their Balance Sheets from the received invoices, *vide* Central Station Accounting Office statement of differences for the month of.....192.....

Prepared by.....Clerk.

Verified by.....Assistant Accountant.

Approved for entry by.....Accountant.

Posted by.....Clerk.

.....RAILWAY.

JOURNAL ENTRY.

No. 4.

Month.....192...

No.	Description.	Folio.	Dr.	Cr.
			Rs. a. p.	Rs. a. p.
	Sundries—			
831	To Sundry stations control account ..	..		—
837	Treasurers stations cash control ..	..	—
830	Vouchers ledger control account ..	..	—
881	Goods earnings, including demurrage..	..	—	
882	Miscellaneous goods earnings ..	..	—
883	Passenger traffic earnings ..	..	—
884	Parcels traffic earnings ..	..	—
885	Telegraph earnings ..	..	—
886	Miscellaneous coaching earnings ..	..	—

Being analysis of credits taken up by stations during the month of.....192.....
vide Central Station Accounting Office Summaries of Balance Sheets.

Prepared by.....Clerk.....

Verified by.....Assistant Accountant.....

Approved for entry by.....Accountant.....

Posted by.....Clerk.....

.....RAILWAY.

JOURNAL ENTRY.

No. 5.

Month.....192.....

No.	Description.	Folio.	Dr.	Cr.
			Rs. a. p.	Rs. a. p.
	Sundries—			
830	To voucher ledger control account			—
	North Western Railway			—
	East Indian Railway			—
	<i>et seq</i>			
881	Goods earnings, including demurrage		—	
882	Miscellaneous goods earnings		—	
883	Passenger traffic earnings		—	
884	Parcels traffic earnings		—	
886	Miscellaneous coaching earnings		—	

..... Being the proportions of home railway traffic for the month of.....192.....
 due to the foreign railways shown above, *vide* Central Station Accounting Office division sheets.

Prepared by.....Clerk.

Verified by.....Assistant Accountant.

Approved for entry by.....Accountant.

Posted by.....Clerk.

.....RAILWAY.

JOURNAL ENTRY.

No. 6.

Month.....192....

No.	Description.	Folio.	Dr.	Cr.
			Rs. a. p.	Rs. a. p.
830	Voucher ledger control account		—	
	North Western Railway		—	
	East Indian Railway <i>et seq.</i>		—	
	To Sundries—			
881	Goods earnings, including demurrage ..			—
882	Miscellaneous goods earnings			—
883	Passenger traffic earnings			—
884	Parcels traffic earnings			—
886	Miscellaneous coaching earnings			—

Being the proportions of the traffic receipts of foreign railways for the month of.....192
due to the home railway, *vide* the Central Station Accounting Office division sheets.

Prepared by.....Clerk.

Verified by.....Assistant Accountant.

Approved for entry by.....Accountant.

Posted by.....Clerk.

.....RAILWAY.

JOURNAL ENTRY.

No. 7.

Month.....192.....

No.	Description.	Folio.	Dr.	Cr.
			Rs. a. p.	Rs. a. p.
829	Miscellaneous earnings Ledger control account.		—	
887	To miscellaneous traffic earnings			—

Being the total of miscellaneous traffic earnings for the month of
192....., vide the Miscellaneous Earnings Journal.

Prepared byClerk.

Verified byAssistant Accountant.

Approved for entry byAccountant.

Posted byClerk.

APPENDIX IV.

SECTION II.

MEMORANDUM SUBMITTED BY Mr. W. H. SCOTT ON CLEARING ACCOUNTS OFFICE PROCEDURE.

(i) *Foreign Goods.*

Form No. S.N. 38-A. (Special) Foreign (form 14). 132. *Preparation of Invoice.*—Stations have been supplied with special invoice books labelled “Clearing House Traffic.” There are separate books for paid and to-pay traffic. Each book contains 50 invoices of five foils each, which are written by the forwarding stations by carbon process and utilized as under:—

- (i) the first foil for railway receipt;
- (ii) the second foil for clearing house;
- (iii) the third foil for through invoices;
- (iv) the fourth foil for junction invoice;
- (v) the fifth foil for record.

Each set of invoices is consecutively machine numbered and in addition to machine numbers, the invoices are also given manuscript serial numbers between each pair of stations *via* each route.

133. *Submission of Invoices.*—The second foils marked “Clearing House”, arranged in order of “Station to” and serial numbers are sent periodically by a number of big forwarding stations to the Clearing Accounts Office on the following dates:—

- 1st period from 1st to 12th on the 13th;
- 2nd period from 13th to 24th on the 25th;
- 3rd period from 25th to the end of the month on the 2nd of the following month.

Form No. 1.—Clearing House Revised (form 15). Other stations send them monthly on the 2nd of the following month. The invoices for each period or month are accompanied by a list which shows the commencing and closing printed machine numbers of the invoices issued during the period, the total number of invoices issued and the printed machine numbers of the invoices cancelled.

134. *Check by the Clearing Accounts Office on the receipt of Invoices.*—The list referred to above enables the Clearing Accounts Office to watch the account by the forwarding stations of all the invoices issued by comparing the numbers in a list with the closing numbers of the previous list and also enables it to see that all the invoices issued by the forwarding stations during a period or month are completely submitted.

135. *The check of Invoices.*—The Clearing House invoices besides other particulars are required to show only the rate due to each Railway, the total rate, and the total freight. They are not required to show the proportion of freight due to each Railway. After the receipt of invoices has been checked as detailed in paragraph 134, the invoices are checked by rate experts in respect of class and the proportions of rates due to each Railway and the total rate. The invoices are then passed on to the Dalton machine operator, who checks the accuracy of the total freight charges, undercharges and overcharges being recorded on the invoices. After the invoices for the whole month have been checked, their total as obtained by the Dalton machine is checked with the corresponding totals in the abstracts. Similarly, the total of abstracts is checked by the Dalton machine with the corresponding totals in the station summaries. This procedure applies to stations submitting invoices monthly. In case of stations required to submit invoices periodically, the accuracy of freight charges of invoices is also checked, by the Dalton machine. After the invoices, say, for the first period, have been checked, the slip on which the Dalton machine prints the total of calculations is attached to the list (Form No. 1.—Clearing House), Revised form 15, with which

the invoices for the first period were received from the forwarding station concerned. When the invoices for the next period are received, the total on the slip is taken up on the Dalton machine and the process of check carried on for the ensuing period. Similarly, the detail of calculations of the invoices for the third period is also carried out and the grand total struck. If the grand total tallies with the grand total of the freight shown in the summary of the station concerned, the check of abstracts and summaries, invoice by invoice, becomes unnecessary. If, however, differences are noticed they are located and set right.

136. *Issue of Error Sheets against the Stations.*—The error sheets for the amounts undercharged by stations are issued monthly after the abstracts of the receiving station are referred to, to see that the undercharge detected in the Clearing Accounts Office as the result of audit of invoices received from forwarding stations has not been accounted for by the receiving stations. For undercharges of large amounts or occurring in a large number of invoices, telegrams are issued for the recovery and intimation to the stations in such cases is not deferred till the audit of invoices for the entire month is finished.

137. *Code numbering of Invoices and punching of Cards.*—After the invoices have been audited in respect of rates and calculations of total freight charges, all the essential information on the invoices such as "Station from," "Station to," "Commodity," and "Via," etc., are given code numbers. To ensure accuracy, the code numbers given by one man are checked cent. per cent. by another man. The coded invoices are then passed on to the punchers. The card designed by the Clearing Accounts Office, besides containing the material for the division of earnings between Railways, provides also for all information necessary for the compilation of statistics and the apportionment of earnings to worked lines. The cards are punched from the invoices and the punched cards are checked cent. per cent. to ensure accuracy in punching.

Specimen card
(form 16).

138. *Abstracts and summaries—their preparation and submission.*—The abstracts and summaries are prepared by the forwarding and receiving stations once a month. As in the case of Clearing House invoices, they also do not show the proportions due to each Railway. The entries for each pair of stations *via* each route are posted on separate abstracts and the total of each abstract is brought forward in a separate summary for each route. A general summary showing traffic *via* all routes to each Railway is then prepared. The abstracts and summaries for outward traffic are sent by the stations on the second day and for the inward traffic on the eighth day of the following month duly entered in transit memo.

Forms:—
Outward Abstract
No. S. N. 60-A
(Special) Foreign
(form 17).
Outward Summary
No. S. N. 46-A
(Special) Foreign
(form 18).
Inward Abstract
No. S. N. 60-C
(Special) Foreign
(form 19).
Inward Summary
No. S. N.
46-C (Special) Foreign
(form 20).
Transmit Memo.
No. 3.—Clearing
House N. W. Rail-
way (form 21).

139. *Check of abstracts and summaries and the check of printed cards.*—As stated in paragraph 135, the check of abstracts and summaries is done by Dalton machine. The punched cards for each forwarding station in the case of big stations and for a group of small stations are then passed through the tabulator and the totals of the two columns weight and total freight are got therefrom. These total are then tallied with the corresponding totals in the summaries. The agreement of these totals proves that the cards have been correctly punched and the total of summaries have been correctly made by the stations.

140. *Division of earnings between Railways.*—After the accuracy of the cards has been proved as stated above, the cards are sorted in order of weight and by means of the method of summary multiplication, the weight on each card is multiplied on the Hollerith machine by the proportions of rates due to each Railway and thus the proportion of freight charges due to each Railway is arrived at in the summary multiplication sheet. The total of these proportions added to the special charges and overcharges which are worked out separately in the abstracts and summaries must correspond to the total freight charges in the summaries and their agreement conclusively proves the correctness of the division of earnings made between the Railways. In actual practice, however, there are small differences between these figures, as the freight charges in the summary are the result of rounding off pies on each transaction whereas the division of earnings made on the Hollerith machine represents the actual amount due to each Railway without rounding off the pies.

Form of sum-
mary multiplication
sheet (form
22).

141. *Compilation of division sheets.*—After the proportion of freight charges due to each Railway has been calculated as indicated above and the amount of special charges and overcharges ascertained, master cards are punched for each large station or a group of small stations for which the summary multiplication sheet has been prepared. The master cards punched for these sheets are then passed through the tabulator and the total debit against and credit in favour of each Railway is printed on the division sheet form, and the net debit or credit due against or in favour of a Railway is worked out. The detail of invoices working up to the total traffic apportioned in the division sheet is printed, if required by any Railway, in the statement of invoices by passing the cards punched for invoices through the tabulator.

Master card
(form 23).

Form of division
sheet and state-
ment of invoices
(forms 24 and 25).

142. *Division of freight on special kind of traffic.*—For livestock and military traffic in wagon loads and for coal traffic for which rates are uniform, the division is made on mileage basis. This is done by punching on a specially designed card the rate due to each Railway in terms of decimal fractions of one rupee between each pair of stations and ascertaining the share due to each Railway by means of summary multiplication. Jute is charged so much per bale instead of per maund and consequently a special card has been designed for the apportionment of freight on such traffic.

Specimen cards
(forms 26 and 27).

Jute traffic card
(form 28).

143. *Check on the account of the entire forwarded traffic by the stations.*—From the forwarded abstracts received from the forwarding stations, total cards are punched and are passed through the tabulator to ascertain the total weight and freight for each big station or a group of small stations. The totals thus ascertained are verified with the corresponding totals in the stations' summaries. This ensures the accuracy of the punched "total cards." These cards are then sorted in the order of receiving stations and listed in the shape of summaries. The summaries thus prepared from the forwarded abstracts in the Clearing Accounts Office are compared with the inward summaries received from the receiving stations. In case of differences, reference is made to the abstracts and the discrepancies between the two sets of returns are listed. For paid traffic accounted for by the receiving stations and not accounted for by the forwarding stations, debits are raised forthwith in the accounts in hand. In regard to all other traffic, lists supported by copies of invoices are sent to the audit or account office concerned to get the invoices accounted for by the stations and in case of non-compliance within three months including the month of issue of the invoices, the unaccounted for items are forced into the station accounts.

Form of sum-
mary made by
machines (form 29).

Form of list
(form 30).

144. *Figures for the audit of balance sheets.*—A monthly statement in duplicate is prepared with the aid of a typewriter, and is sent to the Railway concerned showing against each station—

- (i) The amount of outward paid and inward to-pay traffic as per station summaries ;
- (ii) The amount as passed in the Clearing Accounts Office ;
- (iii) The detail of differences between (i) and (ii).

One copy of the statement is retained by the Railway concerned for the audit of its balance sheet and the other is sent back to the Clearing Accounts Office duly acknowledged.

145. *Division to worked lines.*—The cards punched from individual invoices on which freight is due to worked lines are sorted by the sorting machine and listed. In cases when division of freight between a worked line and North Western Railway or foreign Railway, or other worked lines, is necessary, the apportionment is made by means of summary multiplication.

146. *Compilation of statistics.*—The cards punched from invoices are sorted by commodities and earnings attributable to each commodity are obtained by means of summary multiplication. The cards will be again sorted to ascertain the weight by commodities between each pair of stations to enable the statistical offices concerned to calculate commodity ton miles.

(ii) *Foreign Parcels.*

Form No. S. N. 13
(Special) (form 31).

147. *Preparation of way-bills, their submission to the Clearing Accounts Office and the check by the Clearing Accounts Office over their receipt.*—Paragraphs 132 and 134 of foreign goods traffic apply similarly to parcels traffic. The only differ-

ence is that there are only four foils for way-bills instead of five, as in the case of invoices, *i.e.* ;—

No. 2—Clearing
House Revised
(form 32).

- (i) The first foil for owner ;
- (ii) The second foil for clearing house ;
- (iii) The third foil for guard ;
- (iv) The fourth foil for record.

148. *Check of way-bills.*—The rate due to each Railway is not shown on the way-bills by stations as the division is made on a mileage basis on the abstract totals between each pair of stations. The way-bills are checked by the way-bill checkers in respect of rates. The arithmetical accuracy of freight charges is checked by means of Dalton machines, the totals obtained by the machines being checked with the corresponding totals in the abstracts and similarly the abstracts totals are checked into the summaries. The overcharges or the special charges due to each of the Railways involved in the transaction are shown on the way-bills and are separated on the abstracts to arrive at the net freight divisible to the Railway concerned on the mileage basis. The procedure with regard to the issue of error sheets against the stations is the same as laid down in paragraph 136 under foreign goods.

Forms
Forwarded
Abstract No.
S.N. 34-A
(Special)
Revised
(form 33).
Forwarded
Summary No.
S.N. 34-A
(Special)
Summary
Revised
(form 34).
Received
Abstract No.
S.N. 34-CII
(Special)
(form 35).
Received
Summary No.
S.N. 34-CI
(Special)
(form 36).

149. *Abstracts and summaries, their preparation and submission.*—The remarks in paragraph 138 under foreign goods apply to this traffic as the procedure is similar.

150. *Check of abstracts and summaries and filling in decimal fractions and code numbers.*—As stated in paragraph 148, the abstracts and summaries are checked on the Dalton machine, the overcharges and special charges due to the Railways concerned being brought over from the way-bills into the abstracts. These special charges and overcharges are deducted from the total freight charges between each pair of stations for each route leaving the net amount divisible between the Railways on the mileage basis. The clearing Accounts Office has calculated the proportions of freight due to each Railway on the mileage basis in terms of the decimal fraction of a rupee and these decimals are then filled in the abstracts, after which the abstract entries are coded as in the case of goods invoices, the code numbers being checked cent. per cent.

151. *Punching of cards, checking of summaries with the punched cards and division of earnings between Railways, compilation of division sheets.*—From the abstracts, as thus coded, cards are punched showing the total freight, net freight divisible and the decimal fraction due to each Railway. These cards after being checked cent. per cent., are then passed through the tabulator and the total and net freight in the summaries is agreed with the machine totals from the cards. The cross total of the totals of the decimal fractions are also struck and if this total agrees with the total number of cards put in the machine, the accuracy of the decimal fractions punched on the cards is proved as the sum total of decimals on each card is equal to a unity. The punched cards thus verified are then passed through the tabulator and the earnings due to each Railway calculated by the method of summary multiplication. The further process of compiling the division sheets is similar to that described in paragraph 141 under foreign goods.

Specimen card
(form 37).

Form of
summary
multiplication
(form 38).

Master card
(form 39).

Form of division
sheet and
statement of
parcel way-bills
(forms 40 and
41).

152. *Check on the account of the entire forwarded traffic by the receiving stations.*—Remarks in paragraph 143 under foreign goods apply to this traffic also. The procedure is similar.

153. *Preparation of figures for the audit of balance sheets and division to worked lines.*—Remarks in paragraphs 144 and 145 under foreign goods apply to this traffic.

154. *Compilation of statistics.*—No statistics are prepared for this traffic.

(iii) *Foreign Passengers.*

155. *Preparation and submission of passenger classification and its check in the Clearing Accounts Office.*—The passenger classification with its connected summary, is prepared monthly and sent to the Clearing Accounts Office by the forwarding stations duly entered in transit memorandum on the 4th of the following month. The stations are not required to show the proportion of fares due to each

Passenger
Classification
Form No.
S.N. 28-A—
Clearing House
(form 42).

Form No.
S.N. 28-A.—
Summary
(form 43).
Statement
showing number
of non-issued
tickets.
Form No.
T.M. 262.
Revised I.
(form 44).

Railway in the passenger classification. On receipt in the Railway Clearing Accounts Office they are checked in respect of commencing and closing numbers, the number of tickets to be accounted for, the number of tickets treated as non-issued, and the number of tickets sold or issued during the month. Thereafter, the accuracy of the total rates for tickets and of the proportions of the total rates due to each Railway are checked by the passenger rate experts, who separate also the Poll Tax included in the rates from the proper Railway fare. In case of the tickets charged at reduced fares it is seen that the necessary concession vouchers are received from the stations and the validity of those vouchers is also checked.

156. *Check of collected Highest Number Printed Tickets and all collected Blank Card and Paper Tickets.*—The collected highest number printed tickets and blank card and paper tickets are received from the collecting Railways. The collected highest numbers of tickets are compared with the closing numbers accounted for in the classification to ensure that all the tickets issued during a month have been accounted for by the station in the same month. All collected blank card tickets and paper tickets are compared with the entries in the classifications to see that the account of tickets has been correctly made by the station.

157. The passenger classifications are then passed on to the Dalton machine operator. The latter checks the accuracy of the total fares recovered and throws out under and overcharges, if any, against each item in the classification. The poll tax due to each Railway is also calculated by him. The total fares entered in the summary of the passenger classification plus the undercharges minus the overcharges detected by the Dalton machine operator are tallied with the progressive total fares on the Dalton machine, and if this agreement takes place, the checking of totals in the passenger classifications and in the summary of Passenger Classifications becomes unnecessary. If this agreement does not take place, the totals in the passenger classification and its summary are checked and the mistake located and set right.

158. *Code numbering and punching of Cards, Checking of Punched Cards with the summary of Passenger Classification.*—The various facts in the Passenger Classification are then assigned code numbers which are checked cent. per cent. From the coded classifications, cards are punched and the punching is checked cent. per cent. to ensure accuracy. The punched cards are then passed through the tabulator and the totals of the fares columns is obtained. This total is tallied with the total fares in the summary of passenger classification and differences, if any, are traced and set right. This proves the accuracy in punching.

Specimen
(form 45).

card

Form of summary
multiplication (form
46).

Master
(form 47).

card.

Form of division
sheet (form 48).

159. *Division of Earnings between Railway and Compilation of Division Sheets.*—The process of division of earnings and the compilation of division sheets is the same as for goods and parcels traffic, the number of passengers on each card being multiplied by the proportion of rates per ticket due to each Railway under the method of summary multiplication on the Hollerith machines.

Statement
passengers (form
49).

of

160. *Figures for the audit of balance sheets.*—As in the case of goods a monthly statement in duplicate is prepared and sent to the Railways concerned showing:—

- (i) the amount of traffic booked as per station return ;
- (ii) the amount as passed in the Clearing Accounts Office ; and
- (iii) the detail of difference between (i) and (ii).

One copy of the statement is sent back to the Clearing Accounts Office duly acknowledged.

Forms :—
Luggage Traffic.
—No. S. N. 4-A
(form 50).

161. *Issue of error sheets against the stations and divisions of earnings to worked lines.*—Remarks in paragraphs 136 and 145 under foreign goods apply to this traffic.

162. *Compilation of statistics.*—The cards punched for the apportionment of earnings are sorted by classes of passengers and earnings attributable to each class are ascertained by means of summary multiplication. The cards are again sorted to ascertain the number of passengers by classes between each pair of stations to enable the Statistical Office concerned to calculate passenger miles by classes.

(iv) *Foreign Luggage, Horses, Carriages and Dogs, etc., Traffic.*

163. *Preparation of luggage, horses, carriages and dogs, etc., traffic returns and summaries and their submission to the Clearing Accounts Office.*—These returns are prepared by the forwarding stations from the luggage and horses, carriages and dogs traffic tickets. They are sent to the Clearing Accounts Office, monthly, duly entered in transmit memo. on the 4th day of the following month. Separate sets of returns are prepared (i) for luggage and specie traffic, and (ii) for horses, carriages and dogs traffic. Traffic between each pair of stations is entered on separate abstracts of the returns as for parcels traffic and the abstracts are summarised as in the case of parcels traffic.
164. *Audit of Luggage, etc., traffic returns.*—The luggage, horses, carriages and dogs, etc., traffic returns on receipt in the Clearing Accounts Office will first be checked in respect of the continuity of numbers. In the case of luggage the free allowance allowed on the tickets is checked and accountal of the tickets on which free allowance has been allowed is checked into the passenger classification of the station concerned. Thereafter the accuracy of the freight charges is checked and verified on the Dalton machine as for parcels traffic.
165. *Filling in decimals, code numbering, punching of cards, division of earnings between Railways and compilation of division sheets.*—The process is the same as for parcels traffic.
166. *Check of accountal of the entire forwarded traffic by the forwarding station.*—The collected tickets received from the destination stations are compared with their corresponding entries in the returns of the forwarding stations. No return is prepared for these collected tickets by the receiving stations.
167. *Figures for the audit of balance sheet, issue of error sheets against stations and division of earnings to worked lines.*—Paragraphs 160 and 161 under passenger traffic apply to this traffic.
168. *Compilation of statistics.*—No statistics are compiled for this traffic.

General Remarks.

169. It will be thus seen that from the initial document to the final division, sheet and account entries, the entire process is machine checked.

M421RD

Horses, Carriages and Dogs, etc.—No. S. N. 3-A (form 51).
 Return of Luggage, Horses, Carriages and Dogs, etc.—No. S. N. 31-A—Clearing House. (Form 52)
 Summary of Luggage, Horses, Carriages, and Dogs, etc.—No. S. N. 31-A (Summary) Clearing House (form 53).
 Card for luggage traffic (form 54).
 Card for H.C. and dogs' traffic (form 55).
 Form of summary multiplication (form 56).
 Master card for luggage traffic (form 57).
 Master card for H.C. dog's traffic (form 58).
 Form of division sheet (form 59).
 Statement of luggage traffic (form 60).
 Statement of H.C. and dog's traffic (form 61).

APPENDIX IV.

SECTION III.

MEMORANDUM SUBMITTED BY Mr. W. H. SCOTT ON PROCEDURE FOR LOCAL TRAFFIC UNDER EXPERIMENT ON N. W. RAILWAY.

170. *Introductory remarks.*—With the approval of the Railway Board and the Auditor-General, the local traffic work of the North Western Railway has for some months past been handled by the Clearing Accounts Office staff in collaboration with the Chief Auditor, North Western Railway. The object in view has been the application of machines to this work and the possible centralisation of traffic accounts work at Delhi. The detailed procedure as the result of the experiment now in force is given below :—

(i) *Local Goods.*

171. *Preparation of invoices.*—Special invoice books each containing 50 sets of invoices have been supplied to the stations. There are separate books for paid and to-pay traffic. Each set of invoices is consecutively machine numbered, and in addition to machine numbers, they are also given manuscript serial numbers between each pair of stations. Each set consists of four foils :—

- (i) the first foil marked " Original " is the audit office copy ;
- (ii) the second foil marked " Invoice " is for the destination station ;
- (iii) the third foil marked " Receipt " is for the consignor ;
- (iv) the fourth foil marked " Record " is for record at the forwarding station.

172. *Submission of invoices.*—The first foils marked " Original " arranged in order of " Stations to " and manuscript serial numbers are sent by 15 big forwarding stations to the Audit Office periodically on the following dates :—

- 1st period from 1st to 12th on the 13th ;
- 2nd period from 13th to 24th on the 25th ;
- 3rd period from 25 to the end of the month on the 2nd of the following month.

Other stations send the invoices monthly on the second of the following month. With the invoices for each period or month is sent a list which shows the commencing and closing printed machine numbers of invoices issued in each period or month, the total number of invoices issued and the printed machine numbers of cancelled invoices which also come.

173. *Check on the correct receipt of invoices.*—The list referred to above enables the Audit Office to watch the account by the forwarding station of all invoices issued by comparing the commencing numbers in a list with the closing numbers in the previous list, and also enables it to see that all the invoices issued by the forwarding stations are completely submitted.

174. *Check of Invoices.*—After the correct receipt of invoices has been checked as detailed in paragraph 173, the invoices are checked by the rate experts in respect of the rates charged by the stations and are then passed on to the Dalton machine operator. The latter checks the arithmetical accuracy of the freight charges, under and over charges detected by him being recorded on the invoices, and works out the progressive totals between each pair of stations to check the correct account of freight on invoices in the abstracts. This procedure applies to stations submitting invoices monthly. In the case of stations required to submit invoices periodically, the accuracy of the freight charges, on the invoices is also checked by the Dalton machine. After the invoices, say, for the first period, have been checked, the slip on which the Dalton machine prints the totals of calculations is attached to the list (No. 1 special goods form 63) with which the invoices for the first period were received

from the forwarding stations concerned. When the invoices for the next period are received, the total on the slip is taken upon the Dalton machine and the process of check carried on for the ensuing period. Similarly, the detail of calculations of the

Form No.
S.N. 38-B.—
Local (form 62).

Form No. 1.—
Special Goods
(form 63).

invoices for the third period is also carried out and the grand total struck. If the grand total tallies with the grand total of the freight shown in the summary of the station concerned, the check of abstracts and summaries, invoice by invoice, becomes unnecessary. If, however, differences are noticed they are located and set right.

175. *Issue of error sheets against the stations.*—The error sheets for the amounts undercharged by stations are issued monthly after the abstracts of the receiving stations are referred to to see that the undercharge detected in the Clearing Accounts Office as the result of the audit of the invoices received from forwarding stations has not been accounted for by the receiving stations. For undercharges of large amounts or occurring in a large number of invoices, telegrams are issued for the recovery, and intimation to the stations in such cases is not deferred till the audit of invoices for the entire month is finished.

176. *Abstracts and summaries.*—The abstracts and summaries, are prepared by the forwarding and the receiving stations once a month. The entries for each pair of stations are posted in separate abstracts and the total between each pair of stations carried forward to the summaries and grand total struck. The abstracts and summaries for forwarded traffic are despatched by stations on the second and for the received traffic on the eighth day of the following month duly entered in the Transmit Memo. S. N. 54 Revised form No. 68.

Forms :—
Outward Abstracts No. S.N. 60
Local (form 64).
Outward Summary No. S.N. 46.—
Local Special (form 65).

177. *Check of abstracts and summaries and their code numbering.*—As stated in paragraph 174, the total of the freight charges entered on the invoices as obtained on the Dalton machine, is checked with the corresponding totals in the abstracts or summaries. In the former case the totals in the abstracts are checked by means of the Dalton machine with the summary. This method obviates the necessity of comparing invoices one by one with the abstracts and the abstracts with the summaries so far as the accounting of the freight charges is concerned. The various facts in the abstracts are then coded and the code numbering is checked cent. per cent.

Inward Abstract No. S.N. 60-B.—
Local (form 66).
Inward Summary No. S.N. 46-B.—
Local Special (form 67).
Transmit Memo. No. S.N. 54.—
Revised (form 68).

178. *Check on the account of entire forwarded traffic by stations.*—From the forwarded abstracts thus coded "total" cards are punched and are checked per cent. They are then passed through the tabulator, and the grand total of weight and freight for each big station or a group of small stations is obtained. The machine totals are tallied with the corresponding total in the station summaries. This ensures the correctness of the cards and summaries. The cards are then sorted in order of receiving stations and listed in the shape of summaries. After this process is over, the forwarded abstracts are also sorted in order of receiving stations by hand and their totals are checked with the inward summaries prepared by means of the tabulating machine to ensure that all the forwarded abstracts have been sorted correctly. The summaries for inward traffic thus prepared from the forwarded abstracts are compared with the inward summaries received from the receiving stations. In the case of differences, references are made to the abstracts and the discrepancies in the two sets of returns are located and listed. For "paid" traffic accounted for by the receiving stations and not accounted for by the forwarding stations, debits are raised forthwith in the accounts in hand. In regard to all other traffic, lists supported by copies of invoices are sent to the receiving stations concerned to enable them to account for the invoices in their received abstracts and summaries, and in the case of non-compliance within three months, including the month of issue of the invoices, the unaccounted for items are forced into the station accounts.

Specimen of "total" card (form 69).
Inward summary (compiled from station outward summary) (form 70)

179. *Figures for the audit of balance sheet.*—The forwarded and the received summaries duly checked are made over to the balance sheet checker with a memo. prepared on each summary showing in the case of forwarded summaries :—

- (i) the amount of outward paid as accounted for by the forwarding station ;
- (ii) the amount as passed in the Audit Office ; and
- (iii) the detail of differences between (i) and (ii).

A similar memo. is prepared for inward "to-pay" received summaries.

Forms :—
 Statement showing detail of local goods traffic divisible to worked lines (form 71).
 Worked lines division sheet (form 72).
 Cards :—
 Master cards (local goods) worked lines (form 73).
 Total card (worked lines) (forms 74).
 Forms :—
 Parcel Way Bill No. N.W.R. and S.N. 13.
 N. W. R.—
 Revised I. S.N. 13. (forms 75 and 76).
 Abstracts of Parcels forwarded.—
 S.N. 34 Local (form 77).
 Summary of Parcels forwarded
 S.N. 34.—
 Local (form 78).
 Abstract of Parcels received
 S.N. 34-B.—
 Local (form 79).
 Summary of Parcels received.
 —S.N. 34-B. I.—
 (form 80).
 Form No. S.N. 28 large (Revised) I. (form 81).
 Form No. S.N. 26 Revised (form 82).
 Specimen card (form 83).
 Form of summary multiplication (form 84).
 Luggage ticket No. S.N. 4 Revised (form 85).
 Horses, carriages, and dogs, etc.; Ticket No. S.N. 6 Local (form 86).
 Return of excess luggage and horses, carriages and dogs' etc. Traffic No. S.N. 31 (form 87).

180. *Division to worked lines.*—The “total” cards punched from forwarded abstracts are sorted to ascertain the items on which freight is due to the worked lines. Such items are listed and in cases where division of freight between a worked line and North Western Railway or other worked line is necessary, the apportionment is made by means of summary multiplications.

181. *Compilation of statistics.*—The “total” cards are then made over to the Statistical Section, where they are sorted by commodities to arrive at the earnings by commodities and again sorted to arrive at forwarded, received and junction figures according to directions and commodities to admit of commodity ton-miles figures being calculated.

(ii) *Local Parcels.*

182. The procedure for the local parcels traffic is generally similar to that already described for local goods traffic. No statistics, however, are required for parcels traffic.

(iii) *Local Passenger Classifications.*

183. The local passenger classifications are prepared monthly and are sent by the forwarding stations duly entered in the transmit memorandums to the audit Office on the fourth of the following month. On receipt they are checked in respect of the continuity and the account of tickets, etc., in the same way as the foreign passenger classifications. Then the rates per ticket are compared with the corresponding rates in the previous month. After the rates have been checked, the facts in the passenger classifications are coded. In the card designed for the compilation of statistics and apportionment of earnings to the worked lines, space has been provided for the rates per ticket. The cards are punched from the coded classifications. The punched cards are checked by a second checker and then passed through the tabulator and the total amount of the passenger classification verified with the machine totals. This ensures both the accuracy of the classification totals and that of the punching. The arithmetical accuracy is tested by means of summary multiplication carried out for groups of stations at a time. The earnings arrived at by this means are tallied with the total earnings accounted for in the passenger classification for each group. Small differences are ignored; those of any consequence are traced. Arithmetical errors in classifications are few, so that tracing of errors ordinarily does not arise.

184. *Issue of error sheets against the stations and preparation of figures for the audit of balance sheets.*—The procedure for the issue of error sheets against the stations and preparation of figures for the audit of balance sheets is the same as for local goods traffic except that there is no “to-pay” traffic in the case of passengers.

185. *Compilation of statistics and apportionment of earnings to worked lines.*—The cards punched as above are then used to compile statistics and for the purposes of apportionment to worked lines as explained in the case of local goods traffic.

(iv) *Local Luggage and Horses, Carriages and Dogs Traffic.*

186. Separate returns are prepared (i) for luggage and specie traffic, and (ii) for horses, carriages and dogs, etc., traffic. They are received from the forwarding stations on the fourth day of the following month. The continuity of the numbers of luggage or horses, carriages and dogs' tickets are checked, as well as the free allowance admissible on the tickets issued. The arithmetical accuracy of the charges and the total of each abstract is then verified by means of the Dalton machine. The division to worked lines is made by punching cards and apportioning the freight by means of summary multiplication. No statistics are prepared for this traffic. Further procedure regarding the issue of error sheets against stations and submission of figures for the audit of balance sheets is the same as described in the case of local passenger traffic.

187. *General remarks.*—It will be thus seen that from the initial document to the final division sheet and account entries, the entire process is machine checked.

APPENDIX V.

SYSTEM OF STORES ACCOUNTING.

188. The stores records and accounting systems fall naturally into two distinct sections :—

- (a) the Controller of Stores for the unpriced stores records and the custody of the stores themselves ;
- (b) the Chief Accountant for the priced stores records.

Each of these is dealt with in turn, (a) above being taken first.

Controller of Stores Section.

189. *Depot Recoupments.*—When the requirements of a depot cannot be satisfied from stock, the usual procedure is for the main depot to send a stock recoupment to the Controller of Stores. For this purpose a suitable recoupment is given at form 88 and has been modelled on the one now used by the Eastern Bengal Railway. The requisitioning depot will prepare this recoupment in triplicate and send two copies to the Controller of Stores, who will then sign and send one to the purchasing officer as a request for the stores to be obtained. It will be observed that space has been provided to enable the Controller of Stores to enter on each recoupment (a) the order number, and (b) the date the goods were supplied. When recoupments are satisfied, he will file them away in their serial number order under depots.

190. This stock recoupment and all other forms mentioned hereafter will be serially numbered in print and as far as possible will be prepared with the aid of typewriters. Also, the fullest use should be made of distinguishing colours so that forms may be easily identified.

191. *Price lists.*—The two left-hand columns of the stock recoupment are headed respectively :—

Class No.

Price List No.

Reference has been made in Chapter IX of the Main Report to the necessity of adding a percentage charge to the purchase price of all stores in order that stores may be issued at a price which will include the supplies' cost, plus also the appropriate proportion of freight and handling charges and all stores overhead expenses. These freight and other charges which are collected, together with a special Abstract G supporting the revenue account, will all be debited to a "Stores Overhead Expenses" account in the general ledger and the percentage recovered by addition to the price of goods purchased will be credited thereto.

192. In practice this percentage calculation and addition can most conveniently be done on the duplicate of the supplier's bill and shown also in Part 8 of the delivery note mentioned hereafter, and provision has been made on the specimens of these forms submitted for this percentage addition to be made and shown thereon. The percentage adopted at first would be a tentative figure and would later be altered to the percentage indicated by experience as being the one necessary to clear the debit from the stores overhead expenses account.

193. From the bills register, one posting will be made to the credit of stores overhead expenses account at the end of each month for the total percentage addition to purchases during the month.

194. *Purchases.*—As a general rule, all stores purchased for depots fall into one of three classifications :—

- (1) Local stores, Indian manufacture.
- (2) Local stores, European manufacture.
- (3) English stores.

To effect the necessary purchases the purchasing officer may place his orders as under :—

- (a) with the firm supplying the goods under an annual contract, provided the goods required are included in the contract ;
- (b) with a selected firm after obtaining tenders, quotations, etc.,
- (c) with the India Office on an annual indent if the goods are English stores.

195. *Local stores.*—After the price and the supplier have been settled the purchasing officer will prepare a purchase order, form 89. This specimen is also modelled on the order now used by the Controller of Stores of the Eastern Bengal Railway. It should be prepared in sets of five and the five copies disposed of as under :—

- Part 1 sent to the indenter as an intimation that the stores have been ordered the serial number of the stock recoupment being quoted ;
- Part 2 sent to the supplier as an official order ;
- Part 3 sent to the Chief Accountant for his information ;
- Part 4 sent to the Controller of Stores for his information ;
- Part 5 retained as office record.

196. With the supplier's order will be sent Parts 6, 7, 8 and 9 in blank. These will be utilised as delivery notes, Form 90, by the supplier, and when the goods have been despatched he will dispose of these notes as follows :—

- Part 6 will be sent to the Controller of Stores ;
- Parts 7, 8 and 9 will be sent to the destination to which the goods were delivered.

197. After the goods had been received and inspected, the inspecting officer will sign Parts 7, 8 and 9. He will then return Part 7 to the supplier in token of acceptance of the goods, send Part 8 to the Chief Accountant as a warning that the supplier's bill will be presented for payment, and Part 9 to the depot stores accountant who will enter up his quantity records therefrom and then file it.

198. It happens frequently that suppliers are instructed to deliver the goods to a central depot at which they are inspected and from which they are despatched subsequently to the requisitioning depot. In these cases the officer in charge of inspection at the first receiving depot will complete and dispose of Parts 7 and 8 of the delivery note as explained above. He will then send Part 9 with the goods to their ultimate destination and that receiving officer will enter up his quantity records from Part 9 and then file it.

199. It will be noticed that on Parts 8 and 9 two columns have been added, headed :—

- (a) Stores unit ;
- (b) Number of units.

These additions have been made to pave the way for the use of mechanical accounting machines. In both the priced and unpriced stores records the quantities would always be maintained in units, *i.e.*, if the unit were 1 lb. and the quantity received into stock were 10 lb. the number of units, *i.e.* quantity would be 100. It will of course be necessary for the Railways to fix the unit for each article of stock, and this unit must be the smallest quantity in which each particular item of stock is issued. It would be useless to fix a unit at say 1 lb. if it were customary to issue the commodity in ounces. The unit having been fixed, it will only be necessary to multiply the unit by the weight to get the number of units (*i.e.*, quantity) received or issued.

200. It is suggested that the inspection staff should always complete the units columns of the delivery notes as this staff will always handle all delivery notes.

201. *Passing bills for payment.*—In the ordinary course of events the next step will be the receipt of a bill from the supplier. It is recommended that a standard bill form be adopted by Railways for use by all suppliers and a specimen therefor is

given at form 91. The purchasing officer will furnish these bills in duplicate to the supplier with the order, and the supplier, after completing, will send both copies to the Chief Accountant, and in support thereof, will annex the Part 7 of the delivery note already received from the officer who accepted the goods. The Chief Accountant will be receiving daily the certified Parts 8 and the appropriate of these, together with the copy of the order, will be paired with the Part 7 annexed to the supplier's bill, and will be the Chief Accountant's authority for passing the bill for payment.

202. It is to be noted that supplier's bills will be sent to the Chief Accountant, and not to either the purchasing officer or the Controller of Stores. The certification of supplier's bills as correct must not be made by either of these last two officials. The Chief Accountant will be in possession of certified copies of all material documents and will, therefore, be in a position to maintain a complete check on these bills.

203. Firms from whom supplies are obtained regularly will be furnished with quantities of standard invoices and delivery notes, thereby relieving the purchasing Officer of the necessity of attaching these to every order.

204. *English stores.*—Subject to the slight variation mentioned below, it is recommended that the Eastern Bengal Railway procedure of circularising all depots periodically for the quantity of English stores consumed and on hand) be adopted by all railways. The form used by the Eastern Bengal is styled "Statement of Consumption of English Stores, C. S. 52," and when completed it enables the Controller of Stores to gauge the quantity for which he must indent, and thereafter these quantities are incorporated into the English indent. A specimen of this Eastern Bengal form is given at No. 92.

205. The suggested variation is that instead of continuing the present procedure of sending the C. S. 52 to one depot, from which, after being completed, it is sent to the next depot, and eventually returned by the last depot to the Controller of Stores, the latter should send a separate modified form to each depot and then summarise these on the C. S. 52 when they had all been completed and returned to him.

206. The Eastern Bengal English indent form is recommended as being of a type suitable for all railways, as it furnishes all the necessary information in a small space, and leaves the greater part of the indent form free for the necessary entries to be made in the office of the Director General of Stores in England. It is to be noted, however, that the price list number of the article must be shown on both these forms.

207. When English stores are received in India, the subsequent depot accounting procedure will be similar to that for stores purchased locally, except that the inspecting officer will be required to prepare the delivery notes and distribute them. Part 6 will go to the Controller of Stores, and Part 7 (which will not be required in these cases), can be disposed of conveniently by being sent to the Chief Accountant with the Part 8. Part 9 will go with the goods to their destination and will be the document from which the receiving stock-keeper will write up his quantity records.

208. *Depot records.*—At this stage the purchased goods have been delivered to the depot and the next step is to take them on charge in the depot unpriced stores records, form 93. These cards will be arranged in their price list classification and serial number order, and at all depots of sufficient size will be written up with the aid of Burroughs machines. The necessary postings to the cards in respect of purchases received will be made from the Part 9 of the delivery note, and the ledger clerk will enter the posting folio, *i.e.*, the price list number, on the delivery note and initial it.

209. Subsequent postings in respect of receipts from other sources, issues, etc., will be made from the appropriate of the documents mentioned hereafter.

210. It has been recommended above that Burroughs machines be used as an aid towards the posting of the stores' records. It is difficult to give in a report either an adequate description of how these machines are worked or of the advantages to be derived from their use as compared with ordinary clerical methods,

and it is suggested that the Burrough's representatives be asked to give a demonstration of posting stores records with the aid of their machines. Briefly, however, it may be stated that a machine would be operated as follows :—

- (1) It would be set for either receipts or issues according to which were being posted.
- (2) The operator would strike up the closing balance and this would be printed by the machine in the " pick up " column.
- (3) The operator would strike up the amount of the receipt or issue and the machine would print this in the appropriate column.
- (4) The machine would automatically print the closing balance and clear itself at the same operation.
- (5) For the posting of priced stores records, the machine would be set to accumulate the total of all postings and also the total of all balances in addition to performing the purely posting work set out in (2) to (4) above.

211. *Stacking and binning of stores.*—It is essential to efficiency that all stores be stacked and binned in the manner most convenient to their issue. As an illustration of this, it is suggested that finished and partly finished parts be stored in steel bins, numbered to corresponded with the part numbers. Mild steel and brass bars will be stored in racks near power saws. Bars will be cut into lengths as required by the works, the short lengths being kept in stock to be used as opportunities occur. A recoupment order to complete the " maximum " quantity shown on the card, will be placed as soon as the available balance (the actual balance minus the quantity reserved) reaches the prescribed minimum. The average time taken for recoupment, *i.e.*, the period between the date on which the order is placed and the date of completion of the order, will be used for computing the minimum stock to be carried. The " reserved " column on the depot stores ledger card will be ticked off in blue immediately the material is issued. One of the first essentials of an efficient costing system is to ensure that all material issued or received has been correctly weighed ; for this purpose weighing machines fitted with automatic ticket punching attachments will be installed. Form 94 shows a punched ticket which will be filed and will be available for reference during the analysis of costs, if there is any query regarding the value of material.

212. *Stores notification when material is available.*—The necessary information regarding material required to be held against pending orders will be obtained by the storekeeper from the stores sheet issued to him by the Main Progress Office, and he will notify the latter on a stores notification, form 95, within three weeks thereafter whether material is or is not available. In cases where the storekeeper does not send this notification to the Main Progress Office within the prescribed time limit, the latter will issue a shop notification, form 96, and the storekeeper will at once advise the progress office of probable date of availability of the stores. This procedure will apply to all materials, including products made in the process shops.

213. The storekeepers will prepare fixed time schedules for delivery to the works of the articles requisitioned on material delivery notes and deliveries will be made in regular order except in cases of emergency.

214. *Issues of stores.*—Broadly, the issues from the depots will fall into two classes, *i.e.* :—

- (a) Issues from main to subsidiary depots for replenishment of the stocks of latter.
- (b) Issues from these subsidiary depots for consumption by shops, engineers, etc.

215. *Issues to subsidiary depots.*—These issues are really transfers of stocks from one depot to another, and in connection therewith there should be one Standard Depot Material Requisition, form 97, which will be used by all depots requisitioning for stores, and which alone will be recognised by the issuing depots. The indenting depot will prepare four copies thereof and dispose of them as follows :—

- (a) the first three copies will go the stores depot ;
- (b) the fourth copy will be retained as the indenter's record.

The issuing stores depot in turn will dispose of the three copies received as follows :—

- (a) one copy will be sent to the indenting depot with the goods and will be the document from which the receiving storekeeper will take the goods on charge in his unpriced records ;
- (b) one copy will be sent direct to the central accounting office, stores section by the issuing depot and will there be priced prior to entering up the priced stores records ;
- (c) the third copy will be retained by the issuing depot and will be the document from which the necessary postings will be made to the unpriced depot stores records.

216. It is essential to note that requisitioning officers will enter one item only on each requisition and in the event of their indenting for more than one item on one requisition, the depot storekeepers must be empowered to return the requisition owing to the non-observance of this essential rule.

217. Should the requisition received by the depot be for goods not in stock, the depot will then indent on the Controller of Stores on the Recoupment Form 88 mentioned in the opening paragraphs.

218. *Issues from sub-depots for consumption.*—As a general rule the sub-depot issues will be either to workshops or to engineers, and each of these calls for some further comment.

219. *Issues to workshops chargeable to specified work orders.*—In Appendix VI there has been detailed the accounting procedure necessary in connection with workshops, and it has been explained therein that the Planning and Progressing Section will issue a stores sheet, form 98, to workshop stores depots, as an authority for them to issue stores for use on specified work orders. Planning and progressing will also issue material delivery notes, form 99, in duplicate, to its shop progress offices, separate notes being issued for each item of stores specified on the stores sheet, form 98.

220. When the material is required, the shop progress offices will present both copies of the material delivery notes to the workshops storekeeper and on the occasion of each issue, the latter will retain both copies. From one he will enter the quantities issued in the appropriate column of the stores sheet, and also in his unpriced records, and daily will send the other to the assistant workshop accountant. The duties of this accountant are defined in Appendix VI and it is sufficient to say here that he will be a member of the Chief Accountant's staff. All material delivery notes will be priced by him immediately they are received.

221. It has been suggested in Appendix VI that tabulating machines be installed at the large workshops in order to reduce clerical work and expedite the ascertainment of costs. At these centres a card, form 100, will be punched for every material delivery note and in addition to the tabulations necessary for the costing records, these cards will also be tabulated daily on form 157 in the serial order of price list numbers in order to get a group tabulated list of issues in unit quantities and values.

222. Thereafter a carbon copy of this tabulated list will be sent daily to the central accounting office, stores section, and will be the document from which the necessary postings will be made to the priced stores records.

223. In respect of other shops where the volume of tabulating work will not be sufficient to warrant the installation of a tabulating machine, it has been suggested in the same appendix that these assistant workshop accountants be supplied with such mechanical accounting machines as can profitably be employed. These will be Burroughs' or similar type machines in conjunction with Paramount cards (see chapter XVII of the main report) and with the aid thereof lists of material issues to shops will be prepared daily and forwarded to the stores section of the central accounting office. Before listing, it will be necessary to arrange the material delivery notes in their price list serial number order, so as to furnish the central office with one figure for each item for quantity and value in order to minimise the postings.

224. *Issues to workshops chargeable to standing orders, etc.*—There will be numerous issues to shops chargeable to standing orders, etc., and in these cases the workshop storekeeper will issue on a material delivery note prepared by the Progress Office. The postings to the unpriced records will be made from one copy of the delivery note, and on the other the Assistant Workshop Accountant will enter the values and thereafter these quantities and values will be incorporated into the tabulated or other machined list of quantities and values furnished to the central office.

225. *Issues to permanent-way inspectors and engineers for consumption.*—These issues will be to meet the requirements of the permanent-way inspectors and engineers, both for maintenance and capital. In both cases the engineer's clerk will prepare five copies of the Standard Material Requisition, form 97 (one more copy than for other issues) and after obtaining the signature of the engineer thereon will dispose of these as under :—

(a) Send four copies to the Supplying Depot.

(b) Retain the fifth copy as the engineer's record.

226. The issuing stores depot in turn will dispose of the four copies received as follows :—

(a) One copy will be sent to the permanent-way inspector or engineer with the goods and will be the document from which this receiving officer will take the goods on charge in his unpriced records, form 93 ;

(b) One copy will be sent direct to the central accounting office, stores section, and will there be priced ;

(c) One copy will be sent to the divisional assistant accountant and utilised by him at the end of the month to check the receipts quantities shown on the permanent-way inspector's return, form 101 ;

(d) One copy will be retained by the issuing depot and will be the document from which the necessary postings will be made to the depot unpriced stores records.

227. At the end of each month the permanent-way inspectors will prepare in triplicate a statement showing all receipts during the month and sources from which received, form 101, and dispose of these as follows :—

(a) Send two copies to the engineer, who will sign both and send one to the stores section of the central office, where it will be priced and thereafter used in connection with the monthly reconciliation of the permanent-way inspector's money control account, as explained later under priced stores records.

(b) Send the other copy to the divisional assistant accountant, who will check the entries thereon with the copies of the material requisitions which he has received. In the event of requisitions being outstanding for some time the Assistant Accountant will take the matter up, first with the permanent-way inspector to ensure that it has not been received, and thereafter with the stores depot to ascertain when it will be supplied. Should this check reveal that the copy already sent to the central office contains serious inaccuracies, he will advise the Chief Accountant at once. Minor discrepancies may be adjusted in the return of the following month.

(c) The third copy will be retained by the permanent-way inspector as his record.

228. It will also be necessary for the permanent-way inspector to prepare monthly a statement showing all issues during the month and the work on which the stores were used, form 102. The account number against which the material is to be charged will be entered by the Divisional Assistant

Accountant and not by the permanent-way inspector, who will confine himself to preparing the documents and disposing of them as under :—

- (a) Send two copies to the engineer, who will sign and send both copies to the Divisional Assistant Accountant. The latter will enter the account numbers against which the material is chargeable. This done, he will send one copy to the stores section of the Central Office, where it will be priced, and as far as stores only are concerned will be utilised in connection with the reconciliation of the permanent way inspector's money control account as explained later under priced stores records. The other copy will be retained by the Divisional Assistant Accountant.
- (b) The remaining copy will be retained by the permanent-way inspector and will be the document from which the quantities consumed will be written off his unpriced records.

229. At any given date the balances on these unpriced records will be represented by the stock held in the Inspector's depot plus all materials under his charge at sites.

230. The Issue Sheets, form 102, to be used by the permanent-way inspectors should be printed as far as possible, as the materials to be used will be the same from month to month. It should be possible, therefore, in the case of the constantly recurring articles to print the class number, the price list number and the name of the article, leaving only the quantity consumed and the balance on hand to be entered by the permanent-way inspectors.

231. Similar statements will be rendered by the engineers-in-charge at the end of each month in respect of materials received or issued on capital works. These returns must be sent to the Engineer not later than the third day in each month, and must be sent by the Engineer to the Stores Accounting Section of the Central Office not later than 6th of each month.

232. *Monthly recoupments from stores trains.*—The Great Indian Peninsula and Eastern Bengal Railways have a system whereby the small consumable stores carried by station master, train examiners, etc., are replenished monthly from travelling stores trains, and this procedure should be adopted by the other railways. Before it can be adopted, however, it will be necessary for them to fix the number or quantity of each article to be carried by each of these officials. In this connection the experience of the railways mentioned above should be useful to the others.

233. The train will be loaded from the main stores and a receipt taken from the train stores clerk on a train stores issued note, form 103, for the quantities issued to him. As far as possible the classification, price list and serial numbers and names of all items should be printed, leaving only the quantities to be entered by hand. This train stores issued note will be prepared in triplicate and the three copies disposed of as under :—

- (a) One copy will be sent direct to the stores section of the Central Accounting Office by the issuing depot, and will be priced prior to being entered in the priced stores records.
- (b) One copy will be retained by the issuing depot, and will be the document from which the necessary postings will be made to the depot unpriced stores records.
- (c) One copy will be handed to the Train Stores Clerk.

234. At each station or other centre where an issue is made, the Train Stores Clerk will enter the quantities on a composite issue sheet, form 104, and obtain a receipt thereon in duplicate from the receiving official. The form submitted is an adaptation of one of the sheets now used by the Great Indian Peninsula Railway, and will serve as a guide for the other Railways.

235. Great care will have to be exercised in designing these composite issue sheets, as at a later stage they become the documents from which the issued stores are charged to the various account heads. One set of sheets will contain only the names of railway stations at which the stores will all be drawn for consumption in the ordinary running of the station, as the value of these will all be chargeable to one account head in the expenditure section. Similarly, other sheets will be designed to record issues allocatable to another account head, and this particular point is dealt with at some length in Appendix VIII, as this side of the matter concerns the allocations of the values of the stores consumed after the necessary entries have been made in the priced stores records.

236. In practice the stores train clerk will always have small quantities of stocks on hand at the end of each trip, and these he will list on a form similar to a train stores issued note. These quantities as entered will be checked by the depot storekeeper before replenishing the train, and after checking he will certify that the balances are correct. Thereafter, he will hand one copy to the train stores clerk and send the other to the Central Accounting Office, stores section, where the form will be utilised in the manner explained hereafter under priced stores records.

237. *Issues of fuel to engines.*—In chapter IX of Part 1 provision has been made for the quantity of coal and oil taken on by an engine driver to be entered on form 105, and then signed for by the driver. From the office copy of this document the quantities issued will be written off charge in the unpriced stores records of the issuing depot. One copy of each 105 will be sent daily to the Central Accounting Office, stores section, where the issues of coal will be priced and written off charge in the priced stores records. No entries will be made in the priced stores records in respect of issues of oil as these come within the category of imprest stocks.

238. *Miscellaneous issues.*—It will happen in practice that certain issues will be made from stores in addition to those already outlined. These, however, should be comparatively few, and in the ordinary course of events will be items required for immediate consumption, *i.e.*, by train examiners, running shed staffs, etc. In these cases issues will be made on a form similar to the standard material requisition, form 97. The only alteration necessary will be to alter the "Debit. . . Depot No. . . ." at the foot of the form to read "work for which required." This description of work will be sufficient to enable the expenditure section to allocate the value of the stores to the debit of the appropriate account head.

239. For issues of this nature from workshop stores one copy of these requisitions will go to the Assistant Workshop Accountant, and the details thereof will be caught up in the tabulated lists. For issues from other depots the issuing storekeeper will send one copy of the requisition to the Central Accounting Office, stores section, where the necessary entries will be made in the priced stores records, and the document then passed to the expenditure section.

240. *Manufactures in shops.*—A source from which depots will obtain supplies is from goods manufactured in the workshops. When the manufacture has been completed the goods will be sent to stores on a manufactured products to stores note, form 106. This note will be prepared in triplicate by the Inspection Department and disposed of as under after the goods have been inspected :—

- (a) Two copies will go with the goods to the storekeeper and from one the latter will take the articles on charge in his unpriced ledger and send the other to the Costing Section.
- (b) On the copy received from stores the assistant workshop accountant will price the products. Thereafter the quantity and value thereof will be notified daily to the central accounting office on either a tabulating or Burrough's machine list so that the items may be brought on charge in the priced stores records.
- (c) One copy will be the inspection record of the quantity inspected and passed.

The procedure to be followed by the assistant workshop accountant in pricing the workshop manufactures is laid down in Appendix VI, dealing with workshops.

241. *Supplies by other railways.*—It is understood that it is the practice of railways to purchase stocks from each other. There is no reason why one railway should make any distinction between another supplying railway and an ordinary private supplier, and the procedure explained in connection with private suppliers should be followed by the railways in respect of transactions with each other.

242. *Returns of material to stores.*—There are two general sources from which material will be returned to stores, *i.e.* :—

- (a) from shops
- (b) from sites.

This material when returned may fall into one of three classes :—

- (a) good ;
- (b) second-hand ;
- (c) scrap.

In all cases where materials are returned to stores a material returned to stores note, form 107, must be used. The returning shop, officer or department will prepare four copies of this note, of which he will retain one and send the remaining three with the goods to the depot. On these will be entered the classification accorded the goods by the receiving officer, and they will then be disposed of as under :—

- (a) One copy will be retained by the depot storekeeper in support of the entry in the unpriced records.
- (b) For returns to workshop stores one copy will be sent to the assistant workshop accountant and priced by him in accordance with the classification. Thereafter details of quantity, classification and value will be furnished daily to the central accounting office stores section on a machined list. For returns to depots other than workshop stores, this copy of the material returned note will be sent to the central office, stores section.
- (c) One copy will be sent to the returning officer or department.

In cases where materials were consigned by rail, the returning officer will attach the railway receipt to the depot stores copy of the returned note.

243. At all depots visited a separate set of ledgers was maintained to record details of second-hand stocks received and issued. These records should be continued.

244. The records kept for scrap, however, varied considerably. A third set of unpriced records should be maintained for scrap, which will be recorded under as many classifications as possible.

245. When materials returned have been classified as scrap they should be stacked in a separate section of the yard pending their disposal. There are two methods by which scrap is sold, *i.e.* :—

- (a) by auction ;
- (b) by tender.

246. The Controllers of Stores in Calcutta expressed the opinion that sales of scrap by auction tended to produce better prices than sale by tender. Conversely, in Bombay and Lahore it was stated that sales by tender were more satisfactory than sales by auction. It would appear, therefore, that what is suitable to Bombay and Lahore is not suitable to Calcutta, and the procedure in connection with sales of scrap at various centres should be controlled by local conditions.

247. Before scrap is sold it should be listed and then inspected by the Stores Committee to ensure as far as possible that only scrap is being sold. A specimen list is given at form 108, and after inspection the chairman of the committee will send one copy to the Chief Accountant as an intimation that a sale is pending.

248. The foregoing outline covers the usual routine of depot store keeping and the procedure in connection with the priced stores records is now taken.

Chief Accountant's Section.

249. *Price stores records.*—All priced stores records will be kept by the stores section in the central office of the Chief Accountant and these records will be

sectionalised under depots in order to keep control over both the work and the staff. The accounts in the detailed ledgers will be arranged in the class and serial number order in which they appear in the official price list, and this arrangement will permit of the ready ascertainment of monthly totals of each class of materials for each depot and for all depots. To facilitate further the ascertainment of the values of stocks of coal, a separate priced stores ledger will be maintained for coal only, and in it will be recorded the quantities and money values of all stocks of coal, irrespective of where these may be held.

250. It is mentioned hereafter that it is not considered necessary to keep detailed priced stores records in certain instances. The stores section of the central office will receive monthly statements from these excepted depots showing the quantities of stocks received and issued during the month and the balances at the end of the month, and thereafter the monthly totals of materials under classes for these depots will also be readily ascertainable :

251. There are two methods by which priced control of stores may be maintained, *i.e.* :—

(a) By keeping detailed priced stores records in respect of both quantity and value for each commodity at each depot.

(b) By keeping a control account in value only for each depot.

In view of the conditions which obtain in India, it is considered essential to adopt method (a) above and keep detailed priced stores records for all stocks at all depots, except the following :—

(a) Permanent-way inspectors' depots, maintenance stocks.

(b) Engineers' depots, capital stocks.

(c) The stocks held on travelling stores trains.

(d) The stocks held by station masters, train examiners, etc.

(e) Scrap.

The special accounting to be adopted for these exceptions is detailed later.

252. In respect of all other depots it is suggested that method (b) above, control in value, be also adopted. The only additional work necessary will be to ascertain in totals the daily values of the receipts and issues of each depot for each day and to post these totals daily to the debit and credit of the appropriate depot stores control account. This being done, the balance of that depot stores control account will represent the value of the stores at the depot on any given date, and the individual balances of the priced ledger cards of that depot must be agreed monthly with the balance of the control account. Similarly, a separate control account will be maintained for coal and the balance on this account will represent the value of the coal stocks on any given date, and must be agreed monthly with the sum of the balances appearing on the separate coal priced stores ledger.

253. One main stores control account governing all the depots will be opened in the general ledger and to this account will be posted monthly the respective sums of the debits and credits affecting stores for the month as compiled in the expenditure section. The details of how these monthly figures will be compiled is explained in Appendix IX. Thereafter the balance of this main control account will represent the value of the stores held throughout the railway on any given date and must be agreed monthly with the balances of the individual depot control accounts.

254. For the priced stores records themselves, the detailed accounting procedure will be as follows :—

255. *Receipts.*—Daily the Stores Section through the Chief Accountant will be receiving from each depot, etc., all documents relating to receipts, the principal of which will be :—

(a) Part 8 of the delivery notes ;

(b) One copy of the standard material requisitions ;

(c) The tabulating machine or Burroughs' list received from the Assistant Workshop Accountant in respect of manufactured products sent to store ;

(d) The tabulating machine or Burroughs' list received from the Assistant Workshop Accountant of materials returned to stores ;

(e) The material returned to stores notes in respect of returns made to other than workshop stores depots.

When received, these documents will go to the relative priced stores accounts section. With the exception of (b) above, they will all be priced when received, so the pricing work will be limited to the standard material requisitions. Pricing completed, the delivery notes, requisitions and materials returned to stores notes will be sorted in their class and price list serial number order. The tabulated lists received from the assistant workshop accountants will have the items arranged in this order when received.

256. The next step will be to post the quantities and values to the debit of each account concerned in the priced stores ledgers, form 109, and for this posting work it is recommended that a Burroughs' posting machine be used. This machine will automatically record the value total of each set of documents, and it is the grand total of these values that will be posted to the debit of the appropriate Depot Stores Control Account.

257. At the end of each day the delivery notes will be passed to the "bill" section, as they will be required in connection with the checking of the bills prior to their being passed for payment. After the bills have been passed, these delivery notes will be returned to the stores section and filed in their order of dates and price list serial numbers, as they will be required for the audit of the priced stores records. There will be attached to and filed with the suppliers bill the part 7 of the delivery note plus the Chief Accountant's copy of the purchase order, and these will be sufficient for audit purposes. Should reference to the part 8 be desired, however, the suggested method of filing will permit it being found quickly.

258. The material requisitions will next be required by that section of the stores staff keeping the priced records of the depots issuing the goods. It will, therefore, be necessary to sort them under issuing depots, the code numbers of which are shown at the foot of each document, and then to pass them to the appropriate sections.

259. The material returned to stores notes, if any, will be passed to the expenditure section in order that the value of the returns may be credited to the appropriate account head.

260. The remaining documents will be filed under depots under their order of dates.

261. *Issues.*—The stores section, through the Chief Accountant, will also be receiving daily the following documents supporting issues made by depots:—

- (a) The copy of the standard material requisition already mentioned under receipts ;
 - (b) The tabulating machine or Burroughs' list prepared by the Assistant Workshop Accountant in respect of all issues to shops, etc., from workshop stores ;
 - (c) The copies of the adapted standard material requisitions themselves in cases where miscellaneous issues for consumption were made from other than workshop stores depots ;
- and periodically
- (d) the copies of the train stores issued notes for issues to travelling stores trains.

The material requisitions (a) above will have been priced in the section dealing with the receipts and will be arranged by this section in their price list serial number order before being handed over to the appropriate sections for the issue postings to be made. The tabulated lists will have been priced and the items serially arranged by the workshop accountants. The requisitions covering miscellaneous issues and the train stores issued notes will have to be priced.

262. Thereafter, the only work to be done will be the posting of the quantities and values of each item to the credit of the appropriate ledger account. The machine will record automatically the totals of values posted from the material requisitions and these totals will then be agreed with all the corresponding totals already recorded by the sections where the receipts were posted. This will prove

the arithmetical correctness of these postings. Similarly, the total of the individual postings from the tabulated lists will be agreed with the total of the lists. The totals posted from the adapted requisitions will be agreed with a separate machine cast of those requisitions. Thereafter, the grand total of all issues by each depot will be posted to the credit of the control account of that depot. The requisitions covering miscellaneous issues will then be passed to the expenditure section to enable the values of the issues to be debited to the appropriate account head. The remaining documents will be filed.

263. The exceptions mentioned in the opening paragraph dealing with priced stores records are now taken.

264. *Permanent-way inspectors' depots, maintenance stocks.*—It is not considered necessary to keep detailed priced stores records in respect of the small stocks held by permanent-way inspectors as control by a value control account will be sufficient. It is understood that an average maximum in quantities can be fixed for all stocks usually held by these inspectors, and the values of these quantities will be the figure which the balance of each permanent-way inspector's control account in the central account office books should not exceed. Should it be exceeded it will be necessary for the ledger clerk to report the matter to the head of his section.

265. In the financial books, each permanent-way inspector's control account will be debited daily with the value of all receipts, *vide* the standard material requisitions, form 97, material returned to stores notes, form 107, etc.

266. At the end of each month the control account will be credited with the values of all issues (*i.e.*, stores consumed), *vide* the monthly statement of issues, form 102, received through the engineer.

267. The balance of the control account will then represent the value of the stores held by the inspector at the end of the month, and must be agreed with the value of his stores as shown on his monthly summary of issues, *i.e.*, the quantity balances of the inspector as priced by the priced stores section in the central office. Differences must be investigated and adjusted.

268. In practice it should be found that the only differences will be those arising from receipts taken up by the central office and debited to the control account in one month, but not taken up by the permanent-way inspector as he may not have received the goods until the following month, or *vice versa*.

269. The serial numbers of the requisitions, etc., will be a guide to these items. To permit of the ready reconciliation of the two receipts' figures, there is submitted a specimen reconciliation of receipts, form 110, and after being completed it will be attached to and filed with the appropriate statement of receipts. It will, of course, be necessary to see that all items outstanding in one month are brought to account in the succeeding month.

270. After posting the value of the stores consumed to the credit of the control account, the monthly statement of issues will be passed to the expenditure section for the necessary allocation of expenditure to be made to the appropriate account heads.

271. *Engineers' depots, Capital stocks.*—The accounting procedure for these will be similar to that already outlined for the permanent-way inspectors.

272. *Stocks held on travelling stores trains.*—A control account will be opened for each travelling stores train and will be debited with the value of stores issued to the stores train clerk, *vide* the train stores issued note, form 103. At the end of each trip, the control account will be credited with the value of all issues, as shown by the composite issue sheets, form 104. Thereafter, the balance of this control account must be agreed with the value of stores held by the train clerk on his return, *i.e.*, the quantities entered by him and checked and certified by the depot storekeeper and priced by the stores section in the central accounting office.

273. When the necessary postings have been made from the composite issue sheets, these will be passed to the expenditure section so that the necessary allocation of the value of the issues may be made against appropriate account heads.

274. *Stocks held by station masters, train examiners, etc.*—It is understood that these officials are authorised to carry sanctioned quantities of certain stocks. The values of these will be ascertained from the authorised schedule, and thereafter the value held by each official will be debited to a control account in his name. No further entries will be made to this account unless the quantities authorised are altered. The progressive stock checker's reports will reveal whether the stocks of materials held are in excess of the quantity allowed or not, and should there be an excess the matter will have to be investigated.

275. *Scrap.*—The commodities on certain of the material returned to stores note will be classified as scrap by the receiving officer, and the value thereof will be debited to the scrap control account of the depot receiving the goods. When these debits have been posted, the material returned to stores notes relating to scrap will also be passed to the expenditure section for the necessary credits to be allocated to the account heads affected.

276. After the periodical sales of scrap have been held, the Chief Accountant will be furnished with details of the tenders accepted, or if sold by auction he will get the auctioneer's statement of sales. The difference between the value accorded the scrap by the receiving officer and already taken up by the stores section in the Central Office as a debit to the depot scrap control account in the general ledger, and the amount realised by the sale now held will be either a loss or profit on sales of scrap, and the balance thereof for the year will be cleared by a transfer to either the debit or credit (as the case may be) of stores overhead expenses account in the general ledger. In practice the amount to be so transferred should be small, provided the depot control account were balanced to the date on which the last of the scrap now sold was received and taken on charge.

277. *Record of documents passed to expenditure section.*—It is essential that a record be maintained of all documents passed from the stores section of the central accounting office to the expenditure section. This can be done easily by machining a daily statement in duplicate, handing one to the expenditure section with the documents and obtaining on the other a receipt for the documents handed over, after which it will be filed by stores. It will not, however, be necessary for the stores section to part with their tabulated lists, as the expenditure section will also be receiving tabulated lists allocating these material values to account heads. It will, however, be necessary for the expenditure section to agree the totals of their lists with the figures furnished by stores. When differences arise it will be necessary to compare the two lists and investigate the difference.

278. In addition to the depot from which received and the date, this daily statement will show :—

- (a) The total of the tabulated list of manufactured products sent to store.
- (b) The total of the tabulated list of materials returned to store.
- (c) The number and amount of each material returned to stores note in respect of all returns of materials made to other than workshops stores depots. In respect of these returns no tabulated or machine lists will be available and it will, therefore, be necessary to pass the notes also to the expenditure section.
- (d) The total of the tabulated list of issues to workshops, etc.
- (e) The number and amount of each issue requisition received from other than workshop stores depots. In respect of these issues no tabulated or machine lists will be available and it will, therefore, be necessary to pass the requisitions also to the expenditure section.
- (f) The total of the monthly statement of issues by each engineer and permanent way inspector. These statements will be handed over.
- (g) The total of the composite issue sheets in respect of issues from travelling stores trains. These issue sheets will be handed over.
- (h) The details of any other documents from which stores were taken on or written off charge, the value of which affects accounts in the expenditure section.

279. *Progressive stocktaking.*—In view of the great value of the stocks held by railways (it is understood that their approximate average aggregate value is Rs. 14,00,00,000) it is recommended that every item of stock be verified by actual

count, weighing, etc., at least twice a year. To ensure this it will be necessary to appoint a staff of competent stock checkers who will work under and be directly responsible to the Chief Accountant, who will lay down the items of stock to be checked from time to time. The results of this stocktaking will be reported to the Chief Accountant on the Progressive Stocktaking Statement, form 111. After investigation, these differences will be adjusted in respect of both quantities and values in the priced stores records, the necessary postings being made from the Progressive Stocktaking Statement. It will also be necessary to adjust the depot stores memorandum control accounts to the extent of the values represented by these discrepancies. The official intimation to the depot to adjust the unpriced records will be made on the adjustment form 112. After adjustment the depot storekeeper will sign and return one copy to the Chief Accountant.

280. When an item has been verified, the ledger account in the priced stores records will be clearly marked to show the date and result of the verification. It must be incumbent upon the priced stores records keepers to prepare lists periodically of items that have not been verified during the past six months, and to submit these lists to the head of their section for further action to be taken.

281. *General.*—There are, of course, certain stores and depots, etc., which have not been specifically mentioned in the foregoing outline, *i. e.*, clothing stores, printing stores, stationery stores, etc. The accounting procedure already detailed will apply to these, however, as priced and unpriced records will be kept for all depots. The principle to be observed always is to have complete quantity and value records of all stores from the moment they are received until they are consumed, irrespective of where the goods may be stored.

282. In Chapter IX, I have referred to two letters containing complaints concerning the delay in receipt of stores requisitioned for ordinary shop work and the hindrance thus caused to the workshops. Copies of the letters are as follows:—

Eastern Bengal Railway.

No. 2 SM/26/259.

From:

The Loco. and Carriage Superintendent,
Eastern Bengal Railway, Kanchrapara,

To:

The Controller of Stores,
Eastern Bengal Railway, Calcutta.

Dated 6th November, 1926.

Dear Sir,

Stores out of Stock.

In continuation of my No. 2/SM/26/228, dated the 5th October, 1926, I beg to give the following instances showing the loss sustained to the Railway by stores running out of stock.

Apart from our men being idle in shops, for which they are paid, the Railway loses the earning capacity of wagons, etc., thus held up.

Cotton waste.—

One hundred and fifteen wagons were held up for 14 days. The earning capacity of a metre gauge wagon is about Rs. 5 per day. This represents a loss of $115 \times 14 = \text{Rs. } 8,050$ in 14 days.

Antimony.—

No stock for 24 days.

Coaching and wagon stock held up for white metal bearings.

Loss in rupees not known.

M. S. Plate.—

No stock for 10 days.

Fifty-seven wagons held up at Rs. 5 per day—a loss of earnings to the Railways of $57 \times 5 \times 10 = \text{Rs. } 2,850$ in 10 days.

These are articles in constant demand, and there should be no question of stores being able to supply immediately.

The Railway Board call on us to turn out wagons, etc., and any delay has to be explained.

I attach copy of Works Manager, Saidpur's letter No. 12/SG/26/82, dated the 9th October, 1926, which gives complete information regarding requisition dates, etc.

I shall be glad to hear what action has been taken to prevent a recurrence.

Yours faithfully,
(Sd.) D. CARDEW,
for Loco. and Carr. Supdt.

Eastern Bengal Railway.
No. 12/SG/26/82.

From

The Works Manager,
Eastern Bengal Railway, Saidpur,

To

Loco. and Carriage Superintendent,
Kanchrapara.

Dated 8/9th October, 1926.

Dear Sir,

Your No. 2/SM/26, dated 27-9-26.

In reference to your above, I beg to give below three concrete instances of failure of stock for which our works was affected :—

1. *Cotton waste.*—

DCS/SDP'S stock recouplement No. 1008 of 22-7-26 on CS/CA for 30 cwts.

CS/CA'S Order No. 16225, dated 26-7-1926.

DCS/SDP'S S. R. No. 1176/A of 23-8-26 for 30 cwts.

CS/CA'S Order No. 18861, dated 27-8-26.

Both these orders were executed from Cawnpore and the material was booked from there on 4th September, 1926, and received at Saidpur on the 29th September, 1926, *i.e.*, after 25 days in transit. Stock actually failed on 15th September, 1926, therefore there was no stock of cotton waste for 14 days. One hundred and fifteen wagons were held up for 1,311 days due to this shortage.

2. *Antimony.*—

DCS/SDP'S S. R. No. 1274/C., dated 1-9-1926.

CS/CA'S Order No. 21253, dated 17-9-1926.

Stock failed on 8th September, 1926, and recouped on 2nd October, 1926, therefore, there was no stock for 24 days. Consignment booked on 27th September, 1926, and arrived on 2nd October, 1926, *i.e.*, it took five days in transit. Coaching and wagon stock held up for white metal bearings.

3. *M.S. plate 8' × 4" × $\frac{3}{16}$ ".*—

DCS/SDP'S S.R. No. 1032/C, dated 26-7-26 for 75. CS/CA'S Order No. 16395, dated 20-8-26.

18 despatched on 3-9-26	} 8 days in transit.
18 received on 11-9-26	
51 despatched on 25-8-26	} 1 month in transit.
51 received on 25-9-26	
6 despatched on 10-9-26	} 20 days in transit.
6 received on 1-10-26	

Stock of the above actually failed on 15-9-26 and the material received on 25-9-26, hence there was no stock for 10 days. Fifty-seven wagons held up for 285 days.

Yours faithfully,
(Signed) S. TAYLOR,
Works Manager.

APPENDIX VI.

SECTION I.

System of accounting for Locomotive and Carriage and Wagon Workshops.

283. Effective control of workshop expenditure necessitates (1) proper planning, progressing and scheduling of the work through the shops; and (2) reliable and prompt cost figures.

284. The proposed workshop procedure, costing and accounts, are dealt with in detail under the following headings:—

I.—Planning and progressing of Manufacturing Orders through the Shops.

II.—Scheduling of Repair and Construction Orders through the Shops.

III.—Accounting Organization.

IV.—Labour.

V.—Materials.

VI.—Overhead Expenses.

VII.—Costing and Cost Ledger.

VIII.—Workshop Ledger Accounts.

285. All forms for use in each class of workshop will have the workshop name printed at the top, e.g., locomotive, carriage and wagon, etc., and will be of distinguishing colours.

286. The activities of the workshops may be grouped broadly as follows:—

(a) Under the control of the planning and progressing divisions:

(1) The manufacture, assembly and repair of parts for—

(a) Locomotives.

(b) Carriages and wagons.

(b) Under the control of the scheduling division:

(2) Engine construction.

(3) Engine repairs.

(4) Carriage and wagon construction.

(5) Carriage and wagon repairs.

287. Although the locomotive and the carriage and wagon shops, both for construction and repairs, are invariably separate, so much of the system is common to both that it is more convenient to deal with them together, and they are accordingly dealt with together hereafter, any points peculiar to either being particularised.

288. The organisation necessary for the workshops will be as follows:—

Works Manager.

Production Engineer—

*Assistant Works Manager
(Manufacturing)—*

*Assistant Works Manager
(New Construction
and Repairs)—*

Planning and Rate Fixing.

Main Progress Office.

Scheduling Staff.

Shop Progress Offices.

Foremen.

Jig and Tool Drawing
Office.

Foremen.

Tool Room.

Feed and Speed Charge-
men.

Inspection.

Planning and Progressing of Manufacturing Orders through the Shops.

289. The planning and progressing of the work through the shops will be under the control of the production engineer and assistant works manager (manufacturing). Foremen and other supervisory staff should, so far as possible, devote practically all their time to actual supervision of the activities of the workers, and should be relieved as much as possible of all other work and particularly of clerical work.

290. *Drawings.*—It will be necessary to prepare correct detail drawings of all parts and careful consideration should be given to the design in order to make each part suit as many types of engines as possible. Blue prints of drawings, mounted on thick cardboard, will be kept in a central blue print store in the workshop.

291. Great care must be taken that no deviation from design is made without the sanction of the Chief Mechanical Engineer. When this sanction has been obtained, a "Drawing Alteration", form 113, will be used and will be prepared in duplicate in the drawing office. Both copies will be sent to the clerk in charge of the central blue print store in the workshop, who will sign and return them to the drawing office with the necessary blue prints. After alteration in the drawings, the prints and the two forms will be returned to the central blue print store and the clerk in charge will sign both forms, send one copy to the drawing office and the other, accompanied by the altered prints, to the production engineer. The latter, after examination of the alteration, will make the necessary amendments in the operation and specifications sheets and in the designs of patterns, jigs, tools and dies. The effect on parts in stock will also be considered.

292. *Production Engineer and staff.*—The production engineer will be responsible for the compilation and allocation of part numbers; for the planning and rate fixing of jobs, for which he will have the assistance of a qualified planner and rate fixer, who, in addition to planning and rate fixing, will demonstrate machine operations. Chargemen will assist the production engineer in time studies and on controlling speeds and feeds of machine tools. Jig and tool draughtsmen and material inspectors will also form part of his staff.

293. *Part numbers.*—It is essential that numbers be allotted to and stamped on all parts of locomotives and vehicles, so that these parts may be readily identified. In the case of locomotives, a code prefix to the part number will also be allotted and this prefix will indicate the section of the locomotive to which the part is to be fitted. The allocation of these prefixes and part numbers will be the duty of the production engineer and for his guidance a list of locomotive code prefixes is given below :—

<i>Code Prefix.</i>	<i>Section of the Locomotives.</i>
00 .. ..	.. Ashpan.
01 .. ..	.. Bogie.
02 .. ..	.. Brake gear.
03 .. ..	.. Boiler mountings.
04 .. ..	.. Boiler.
05 .. ..	.. Cab and fittings.
06 .. ..	.. Clothing.
07 .. ..	.. Cylinders.
08 .. ..	.. Equipment.
09 .. ..	.. Ejectors.
10 .. ..	.. Frames.
11 .. ..	.. Firebox
12 .. ..	.. Injectors.
13 .. ..	.. Motion.
14 .. ..	.. Oil fuel fittings.
15 .. ..	.. Pipe, clips and couplings.
16 .. ..	.. Smoke box.
17 .. ..	.. Tender brake gear.
18 .. ..	.. Tender; tank and cab.
19 .. ..	.. Tender frame.
20 .. ..	.. Tender oil tank.
21 .. ..	.. Tender wheels and axles.
22 .. ..	.. Wheels and axles.

Similar code prefixes will not be necessary for carriage and wagon parts.

294. On completion of standardisation, illustrated catalogues of spare parts for every type of engine will be prepared and these will be distributed to the various running sheds. All stores requisitions for parts will then be by part number only, but miscellaneous items, such as bolts and studs, will not have part numbers and will have to be ordered by description.

The Production Engineer will maintain a Part Number Register, form 114, in which will be entered all parts and their appropriate part numbers.

295. *Planning*.—The general procedure to be followed by the planner and rate fixer on receipt of a drawing of a newly designed standard part will be as under :—

- (1) The drawing will be examined to see if any alterations can be made in the design in order to cheapen cost of production.
- (2) The number of parts to be manufactured will be decided.
- (3) When parts are to be made from castings, it will be decided whether the moulds are to be made on a moulding machine or by hand.
- (4) The details of various operations and types of machines on which the parts are to be made will be recorded on an Operation Sheet, form 115, estimated times being fixed for each operation. This operation sheet will be typewritten in duplicate, one copy filed in the Planning Office and the other sent to the Progress Office. A code of operations is given below in paragraph 296.
- (5) A standard Specification Sheet, form 116, will be typewritten in duplicate, one copy filed in the Planning Office and the other sent to the Progress Office. This specification sheet will show the section and length of material required for making one part and every item required for assembling a fitting.
- (6) The jigs, fixtures or special tools required will be decided and particulars thereof passed to the jig and tool draughtsmen, who will prepare the necessary drawings.

296. The code of operations referred to immediately above will be as follows :—

Locomotive Shops.

<i>Code</i>				<i>Index Key for Operations and Machines.</i>
00	..	..	..	.. Bar lathes and bar automatics.
01	..	..	..	.. Broaching.
02*	..	..	..	.. Coppersmith.
03	..	..	..	.. Drilling.
04*	..	..	..	.. Tinsmith.
05*	..	..	..	.. Forging.
06	..	..	..	.. Grinding.
07*	..	..	..	.. Heat treatment.
08*	..	..	..	.. Joinery work.
09*	..	..	..	.. Boiler maker.
10	..	..	..	.. Lathes.
11	..	..	..	.. Milling.
12	..	..	..	.. Horizontal boring machine.
13	..	..	..	.. Vertical boring and turning.
14	..	..	..	.. Planing.
15	..	..	..	.. Shaping.
16*	..	..	..	.. Rolling, shearing, punching and flanging.
17	..	..	..	.. Slotting.
18*	..	..	..	.. Tube repairing.
19	..	..	..	.. Screw machine.
20	..	..	..	.. Sawing.
21*	..	..	..	.. Electric or acetylene welding and cutting.
22*	..	..	..	.. Fitting and assembling.
23	..	..	..	.. Gear cutting.
24	..	..	..	.. Polishing.
25	..	..	..	.. Marking off.
26	..	..	..	.. Hammering piston rings.
27	..	..	..	.. Castings available.
28	..	..	..	.. Material available, except castings.

* Indicates operations which will be carried out by gangs.

Carriage and Wagon Shops.

<i>Code.</i>					<i>Index Key for Operations and Machines.</i>
00	..	::	..	..	Bar lathes and bar automatics.
01	..	..	..	..	Boring.
02	..	..	..	..	Marking off.
03	..	..	..	..	Drilling.
04*	..	..	..	..	Drop forging and finning.
05*	..	..	..	..	Forging.
06	..	..	..	..	Grinding.
07*	..	..	..	..	Heat treatment.
08	..	..	..	..	Nibbling and spearing.
09*	..	..	..	..	Flanging on hydraulic process.
10	..	..	..	..	Lathes.
11	..	..	..	..	Milling.
12	..	..	..	..	Steam Hammer.
13	..	..	..	..	Planning.
14	..	..	..	..	Shaping.
15*	..	..	..	..	Shearing, punching.
16	..	..	..	..	Slotting.
17*	..	..	..	..	Tinsmith.
18	..	..	..	..	Screw machine.
19	..	..	..	..	Sawing.
20*	..	..	..	..	Electric and acetylene welding.
21*	..	..	..	..	Fitting and assembling.
22	..	..	..	..	Gear cutting.
23	..	..	..	..	Polishing.

297. *Progress offices.*—The main and shop progress offices will be controlled by the assistant works manager (manufacturing). Shop Progress Offices will be located in the machine shop, foundries, and such other shops as found necessary in order to relieve the foremen of all routine work and enquiries in connection with orders.

298. For the purpose of accounting and costing, the shops have been grouped under :—

- (a) Process shops ;
- (b) Job shops.

The process shops will be :—

- (a) Iron foundries ;
- (b) Steel foundries ;
- (c) Brass foundries ;
- (d) Rolling mills ;
- (e) Saw mills.

Job shops will be all other shops.

299. For the process shops the progress office will issue orders for all jobs to be done. Time worked, and material consumed on these jobs will not be recorded against the individual job order numbers, but to an account number for the shop in which the job was done. In the financial books an account will be kept for each of these shops and will be debited with the value of wages and materials, and also with the proportion of overhead expenses allocatable thereto. It will be credited with the total output of the shop at a fixed unit rate and care will be taken to see that the amount credited, after allowing for work in progress, approximates closely to the total debits. The accounting procedure in connection therewith is explained fully in paragraphs 435—442.

* Indicates operations which will be carried out by gangs.

300. In the job shops, all work will also be done on orders issued by the progress office, but the individual cost of every job will be ascertained. For this purpose the progress office will issue with each job shop order :—

- (a) time sheets on which will be recorded the actual time taken on the job ;
- (b) material delivery notes showing the quantity of material required for the job.

From these documents the costing section will subsequently compile the actual cost of each job in the manner explained in paragraphs 430—434.

301. All orders will be issued by the Works Manager through the main progress office. The general procedure will be that the order, together with the necessary time sheets and material delivery notes, will go to the shops concerned through the shop progress offices. The manufacturing orders that will be issued may be classified as under :—

- | | | | |
|-------------------|----|---|--|
| For process shops | .. | (1) Process shop orders. | |
| For job shops | .. | (1) Standing orders ; | |
| | | (2) Sundry orders ; | |
| | | (3) Manufacturing orders for stores which may be sub-divided :— | |
| | .. | (a) Parts orders ; | |
| | .. | (b) Assembly orders ; | |
| | .. | (c) Repair orders ; | |
| | .. | (d) New patterns orders ; | |
| | .. | (e) New tools, jigs and fixtures orders. | |

302. As the carriage and wagon and locomotives workshops are entirely distinct both for production and accounting, there will be no confusion in using the same series of order numbers for both. These will be grouped and numbered as follows :—

<i>Locomotive Workshop Order Nos.</i>		<i>Carriage and Wagon Workshop Order Nos.</i>
<i>Process shops.</i>	<i>(1) Process shop Orders.</i>	
060-064	(a) Iron foundries (With a separate number to indicate each foundry.)	060-065
065	(b) Steel foundry .. .. .	....
066-079	(c) Brass foundry Mixtures (With a separate order number for each principal mixture and one general order number for all other mixtures.)	066-079
080	(a) Rolling mill .. .. .	....
..	(d) Saw mills	080-081
<i>Job Shops.</i>	<i>(2) Standing Orders.</i>	
2601-2603	(a) Recoverable expenditure for work done not exceeding Rs. 200 on orders received from either other Government Departments or employees of the Home Railway.	2101-2103
2611-2613	(b) Irrecoverable expenditure for work done not exceeding Rs. 500 for other Departments of the Home Railway, chargeable to expenditure abstracts.	2111-2113

2701—4999	(3) <i>Sundry Orders.</i>	2201—4999
	(a) For work similar to 2 (a) and 2 (b) above, but exceeding Rs. 200 and Rs. 500 respectively.	
	(b) For repairs to machinery and equipment exceeding Rs. 200 per unit.	
	(c) All work done for other railways or individuals chargeable to them on completion and not otherwise provided for above.	
	(4) <i>Manufacturing Orders for Stores.</i>	
5001 upwards.	(a) Parts, standing prefix 1/	5001 upwards.
	(b) Assembly orders, standing prefix 2/.	
	(c) Repair orders, standing prefix 3/.	
	(d) New patterns orders, standing prefix.	
	(e) New tools, jigs and fixtures orders, standing prefix.	

303. For example, a parts order requiring new patterns, etc., may be numbered 5001 ; it will necessitate two orders, viz. : 1/5001 and 4/5001 ; the former for the shop where the parts will be manufactured and the latter for the pattern shop for the new patterns.

304. In determining the quantity of parts for which a separate order should be given, regard will be had to the time required to complete the order so as to avoid as far as possible undue accumulation of finished parts in the shops, it being understood that it is only on completion of an order that parts manufactured thereunder are sent into store.

305. *Process orders.*—Three typewritten copies of a “Process Shop Order”, form 117, will be prepared for each order put in hand, and one item only will appear on each order. One copy of the order will be sent to the shop progress office, one to the assistant workshop accountant and the other will be filed in the main progress office.

306. It will be observed that on the form 117, the order number is shown :—

Order No. { Process.....
 { Manufacturing.....

The process number is the shop account number and the manufacturing number is the job number, e.g., 060/5000, would be job number 5000 in an iron foundry, and 080/6000 would be job number 6000 in a saw mill.

307. Orders to foundries will be issued only when notification has been received that patterns have been completed.

308. *Standing orders.*—Standing Orders are usually understood to be those allotted to jobs of a non-productive nature. In India, however, the term “Standing Orders” is not interpreted in this sense, but is in fact applied to grouped estimated cost jobs, the actual cost of which is not desired to be ascertained individually as the estimated cost of each is thought to be sufficient. In practice, the time is really the only factor estimated as the material is governed by the quantity sanctioned by the main progress office on the material delivery note, and thereby becomes an actual.

309. Three typewritten copies of each Standing Order, form 118, will be prepared and one item only will appear on each order. These orders will bear a main progress office identification serial number in addition to the job standing order number, and one copy will be sent to the shop progress office concerned, one to the assistant workshop accountant and the other filed in the main progress office. After the completion of each order the foreman will sign the completed order form and return it to the shop progress office, by whom it will be returned to the main progress office

in order that the estimated time and material may be entered thereon. This being done, the order form will be sent to the assistant workshop accountant, who will match it with the copy already received, price the estimated time and material and add the proportion of overheads.

310. *Sundry orders.*—These orders will also be typewritten in duplicate, form 119, and one item only will appear on each order. One copy of the order will be sent to the assistant workshop accountant and the other will be filed in the main progress office. The intimation to the shop progress office will be the progress sheet, time sheet and material delivery note explained in paragraphs 323 and 326.

311. *Manufacturing orders for stores.*—It is essential that a close working alliance be maintained between the workshops stores and the main progress office and that manufactures are not held up through shortages of stocks. Stock recoupments will be obtained from two sources :—

- (a) purchases of raw materials and commodities which cannot be manufactured in the shops ;
- (b) articles manufactured in the shops for the recoupment of stores.

The procedure for (a) above is explained fully in Appendix V, dealing with stores. For recoupments by manufacture the procedure will be that the office in charge of the workshops stores will be responsible for sending recoupment orders for manufactured parts to the progress office, when his stocks are down to the minimum of two months' requirements, and form 120 will be used for this purpose.

312. Manufacturing orders to cover recoupments of stock may be classified under three main headings :—

- (a) Parts ;
- (b) Assemblies ;
- (c) Repairs.

313. (a) *Parts Orders.*—Separate parts orders will be issued for all items stocked as single parts, and held either for issue as parts or as components for assembly orders. For example, injector cones will be made on parts orders, placed in stock and eventually issued either to replace worn cones or for fitting into new injectors assembled on assembly orders.

314. In addition to the large number of finished standard parts that are stocked, many partly finished parts will also be stocked and these will be standard only up to a certain stage in their manufacture. The chief advantage of adopting this method will be as follows :—

- (1) Cheaper final cost.—Parts will be manufactured in large quantities up to the stage to which they are standard ;
- (2) Expedites repairs.—Only one or two further operations will be required to make the parts ready to be fitted ;
- (3) Reduces costs in running sheds.—These parts, as well as finished parts, will be supplied to running sheds in order to relieve them of as much machining as possible.

315. (b) *Assembly orders.*—These will be issued for the assembling of fittings from completed parts.

316. (c) *Repair orders.*—All worn stock fittings that are worth repairing will be repaired on repair orders. The fittings will be collected in suitable batches for inspection and a report will be drafted by the assistant works manager and sent to the main progress office showing the work to be done and the new parts required. The cost of repair orders will be checked with the cost of similar new fittings made on parts orders.

317. Parts, assembly and repairs orders, form 120, will each be typewritten in duplicate and one item only will appear on each order. One copy of the order will be sent to the Assistant Workshop Accountant and the other will be filed in the main progress office. The intimation to the shop progress office will be the progress sheet, time sheet and the material delivery note, as explained in paragraphs 323 and 326. The stores number quoted on the stores manufacturing order, form 120, is an identification number of the stores requiring recoupment and will appear also on all progress, stores and cost sheets.

318. (d) *New patterns orders.*

(e) *New tools, jigs and fixtures orders.*—In some cases it may be necessary to make either new patterns or new tools, jigs, etc., before manufactures can be undertaken. These orders, form 121, will also be typewritten in duplicate and the subsequent procedure will be similar to that for manufactures for stock.

319. (f) *Pattern alteration orders.*—These orders, form 122, will be typewritten in triplicate, one copy sent to the shop progress office, one to the assistant workshop accountant, and the other filed in the main progress office. It is to be noted, however, that the cost of the pattern alterations will be charged to the respective foundries.

320. At this stage the procedure in connection with the authorising, preparing and issuing of orders has been explained. The documents from which the subsequent costs will be compiled will be prepared and issued to the shops by the main progress office through its shop progress offices, and only sent to the costs office when all wages and materials have actually been expended. These documents and the manner in which they will be dealt with are as follows :—

321. *Process shops (for process orders).*—The order itself constitutes an instruction to manufacture. Time worked in each shop will be recorded on the muster roll and transferred from there to the pay sheet. For material consumed, each process shop foreman will prepare a daily report in duplicate, form 123, showing the consumption of all bulk materials such as pig iron, scrap, sand, etc., and send both copies to stores, the latter in turn sending one copy to the material section. All other materials will be obtained from stores on a material delivery note. Process shop products will be priced at fixed rates and the method in which these fixed rates will be ascertained is explained fully in paragraphs 440 and 442 dealing with costing.

322. *Job shops (for standing orders).*—In these cases the order again constitutes the instruction to manufacture. The time sheets, form 124, will be issued to the shops by the shop progress office every ten days. The material delivery notes, form 99, will be prepared by the main progress office and issued to the shops through the shop progress office and on these the foreman will draw the necessary materials from stores.

323. *Sundry orders, parts orders, assembly orders, repair orders, new patterns, new jigs, tools, etc.*—The procedure in connection with these orders will be similar, and, therefore, they are all dealt with in one paragraph. With each order the main progress office will prepare :—

- (a) Progress sheets, form 125, in duplicate, one copy being sent to the shop progress office.
- (b) Stores sheet, form 98. This sheet will be sent to stores and no copy retained by the main progress office, as all the information is obtainable from the specification sheets.
- (c) Material cost sheets, form 126.
- (d) Combined labour and cost summary sheet, form 127. These sheets will be sent to the costing section. No copies will be retained by the main progress office as the costing will be done in the costing section.

324. The headings of these four sheets (a) to (d), will be typed together at one operation, the carbon papers being trimmed so that the operation code index letters are not typed on the stores and cost sheets. The information for typing will be obtained from operation and specification sheets.

325. The main progress office will not instruct the shops to commence manufacture until it is known that the materials required are available. The stores sheet, form 98, will have been issued to stores and within three weeks of date of receipt thereof stores will notify the main progress office that the material either is or is not available, form 95. In cases where the stores officer does not send this notification to the main progress office within the prescribed time limit, the latter will issue form 96 and the stores officer will at once advise the progress office of probable date of availability of the stores.

326. When intimation is received that materials are available the main progress office will prepare :—

(a) Time sheets, form 128, for operators, form 129, for gangs.

(b) Material delivery notes, form 99, in duplicate.

327. *Time sheets and material delivery notes.*—The first operation time sheet will have two material delivery notes attached, and these will be secured by perforated edges, but second and subsequent operation time sheets will have no material delivery notes attached. The operator's time sheets and the material delivery notes will be typed at one operation, but separate typings will be necessary in the case of gang time sheets. Complete information of the work to be carried out, of the jigs and special tools to be used and of the type of machine on which the job is to be machined will be clearly shown on each time sheet. On no account will any material be issued from stores unless sanctioned by the main progress office on stores sheets and material delivery notes.

328. *Progressing work.*—The time sheet and both copies of the material delivery note will be sent to the shop progress office, in which each machine or gang will be represented by a compartment on the machine or gang control board, and the process orders, standing orders and time sheets will be distributed in these compartments, thus giving the shop progress office a visual indication of the amount of work accumulated for each machine or gang. Twenty-four hours before an operator finishes an operation a charge man will notify the shop progress office that material for the next order is required. The shop progress clerk will turn to the compartment on the machine or gang control board, take out the top time sheet and detach the material delivery notes with the machine number entered thereon. The material delivery notes will be sent to the stores and the material will be delivered to the machine. A similar procedure will be adopted for second and subsequent operations, except that the partly finished parts will be moved from one machine to another and material delivery notes will not be required. In cases where the operations are performed in more than one shop the time, material delivery and progress sheets will be sent to the first shop, and on completion of the operation laid down for it, this shop will return the sheets to the main progress office so that the progress sheet and the next operation time sheets may be issued to the next shop concerned.

329. Progress extension sheets, form 130, have been designed to show the progress of each order and these will be filed in a folder opposite the shop copy of the progress sheet, form 125. The sequence of operations and the machine numbers to which the time sheets have been allocated will be entered on the progress extension sheets when the time sheets are filed in the compartments. The date and the mark, following the machine or gang number, will be entered when the time sheet is issued to the operator. When the operation is finished the time sheet will be returned to the shop progress office clerk, who will indicate in the operation column that the particular operation has been completed. These progress extension sheets will then show at a glance how any particular order is progressing.

330. *Booking time.*—In the process shops time will not be booked against specific work orders. In the job shops, however, the time clerks will always find in the tin holders (1) an operator's or (2) a gang time sheet for the order on which the men are working.

331. The shop progress offices will fix these time sheets in the tin holders attached to machines or to fitter's benches, and the time taken on orders will be entered on these sheets by clerks working under the direct control of the assistant workshop accountant. They will visit each machine operator three times daily and each gang twice daily, and the charge men of each section will give them all information required. On completion of each operation or order (except standing orders) the time sheet will be signed by a foreman and forwarded to the shop progress offices. Immediately after the progress extension sheet has been marked up in the manner described in paragraph 329, the shop progress office will forward the time sheet to the main progress office, where the completed operation will be recorded on their copy of the progress sheet. The time sheet will then be sent to the production engineer for approval and immediate transmission to the costing section. Idle time though booked on the standing order time sheet will be explained on "particulars of idle time", form 131.

332. *General.*—In the case of (a) Standing Orders, form 118, and (b) some Sundry Orders, form 119, it will be impracticable to fix the estimated time and to issue progress sheets, form 125. Also, occasional orders for manufacture of parts will not warrant that procedure.

333. *Inspection.*—When the last operation of a part is completed, the shop progress office will despatch the finished parts, accompanied by the last operation time sheet, to the inspection department. This department will inspect and gauge the parts and stamp the part number on all parts, before sending them to the stores on a "Manufactured Products to Stores Note," form 106. This form will be made out in triplicate, two copies going with the goods to stores, from which one will be sent to the costing section, and the triplicate will be retained by the inspection department. When the inspection has been completed, the final time sheet will be signed by the chief inspector.

334. *Rejected parts.*—A waster sheet, form 132, will be made out in quadruplicate by the inspection department when parts are rejected, one copy being sent to the main progress office for recording, two copies to stores, one of the latter being handed on to the costing section, and the quadruplicate retained by the inspection department. The waster sheet will briefly state the reason for rejection, and cases of faulty workmanship will be taken up with the foreman responsible. The stores will not accept a waster sheet unless the rejected parts accompany it. Unless absolutely necessary to do so, the rejected parts will not be replaced, as it is not economical to set up machines for making a few parts. In some cases the parts will be capable of rectification, and when this happens, a time sheet endorsed "Rectification" will be issued and the time taken booked against the original order number.

335. *Modification or order.*—The costing section and the stores will be notified of all modifications to orders by the use of the "Modification sheet" form 133. These sheets will be made out in triplicate in the main progress office, one being filed in the main progress office, one sent to stores and the third to the costing section.

336. *Investigation of time booked on operations.*—The production engineer or the planner and rate fixer will inspect each completed time sheet and will compare the estimated time with the actual time taken. A great deal of valuable information will be obtained from these comparisons of times. In investigating cases of excessive time, the following points will be examined to see if one or more is the reason for the excessive time.

- (1) Slight alterations to design to facilitate machining.
- (2) Excessive material on castings and forgings.
- (3) Alterations to casting methods.
- (4) Unsuited or excessively hard material.
- (5) Improved tool layout or clamping method required.
- (6) Tuition required by operator.
- (7) Operator lazy or unsuitable.

Foremen will note, in the space for "Remarks" on operation time sheets, any special reasons that may have caused excessive time to be taken on any operation.

337. Form 134 shows an operation record card; these cards will be compiled and filed in the production engineer's office.

338. *Costing.*—The main progress office will notify the costing section of the completion of an order on form 135, and immediately after agreement of the time for the periods ending on the 10th, 20th and last day of each month, the costing section will prepare a cost sheet for each completed (a) manufacturing order for stores, and (b) sundry order, and send this cost sheet to the works manager for entry on the "Works Manager's cost card," form 136. These cards will enable the works manager to make comparisons of the costs of the different manufacturing orders passing through the works, and will be used for fixing prices in the yearly list of manufactured articles.

II.

Scheduling of Repairs and New Construction through the Shops.

339. All work on engine or carriage and wagon repairs and new construction will originate with the scheduling division under the supervision of the assistant works manager (finishing), and the detailed procedure will be as follows:—

Engine Repairs and New Construction.

340. *Advance requirements.*—When engines are sent to shops for repair, the divisional superintendents will send the works manager brief reports regarding the condition of the engines and boilers. These reports will be examined before issuing the schedules. In cases where cylinders, crossheads, etc., require renewal, if there is any doubt as to the supply of the necessary replacements by the schedule date, an “advance requirement sheet,” form 137, will be sent by the foreman, erecting shop, to the officer in charge of the works store. The stores officer will report on form 138 if he can supply the parts required by the schedule date. When stores are unable to comply with the demand, work on the engine will not be taken in hand until the special items required are available.

341. *Heavy boiler repairs.*—Form 139 will be forwarded by the boiler shop foreman to the assistant works manager (finishing) before an engine is taken in for repairs. The foreman will report whether he considers it advisable to use a spare or whether the boiler should be sent into the shop for repairs. In cases where there are no spare boilers available and a very heavy repair is required, special arrangements will be made to speed up the repairs.

342. *Issuing schedules.*—The assistant works manager (*finishing*) will issue repair and construction schedules, form 140, and these will be divided into six sub-schedules, *viz.*: engine, tender, boiler, fitting, engine wheel and tender wheel. The following operation numbers will be used:—

Engine schedule	..	..	..	..	1 to 199
Tender schedule	..	..	..	..	200 to 299
Boiler schedule	..	..	..	..	300 to 399
Fitting schedule	..	..	..	..	400 to 499
Engine wheel schedule	..	..	..	..	500 to 599
Tender wheel schedule	..	..	..	..	600 to 699

343. The erecting, boiler, fitting and wheel shops will have special assembly gangs for the different repair operations. The date given in the “should start” column indicates the latest date for material to be delivered or information supplied, such as sizes, etc., to the shop responsible for repair of the item. The column headed “actual start,” will be filled in when the material or information is actually sent to the shop performing the operation. The dates shown in the “should complete” column as the dates the items should be completed. Column 8 will show actual date of completion.

344. *Alterations to design.*—Instructions regarding alterations to engine design will be forwarded by the chief mechanical engineer to the works manager, and the latter will circulate the information to the staff concerned. Each schedule issued will show the alterations to design required on that particular engine.

345. *Requirement sheets.*—After an engine is stripped and the fittings cleaned in bosh tanks, the parts will be sent to the shops from where the items will be scheduled, *viz.*, erecting, boiler, fitting, and wheel shops. The parts will be examined and the requirement sheets for shops, form 141, and, for stores, 142, will be prepared showing the parts to be repaired or manufactured. These requirement sheets will reach their destination *via* the assistant works manager (finishing), and after the repairs to the engine have been completed and the latter has been despatched, the requirement sheets will be collected and filed in the works manager’s office.

346. *Special requirement sheets.*—Special requirement sheets, form 143, will be issued if it is found that any items have been omitted from the original requirement sheets. The particulars on the special sheets will be transferred to the original sheets, as soon as they are received. This is desirable in order to keep a complete record of the repairs executed to any individual engine and its components, on as few sheets as possible.

347. *Stores allocation.*—On receipt of requirement sheets in stores, each stock item required will be allocated to the particular engine or boiler, and issues will be made on the material delivery notes, form 99, prepared by the scheduling section. These notes will be carefully compared with the requirement sheets, in order to safeguard against duplicate issues. As items are issued, they will be marked off immediately on the requirement sheets.

348. *Size sheets.*—These sheets, form 144, will be made out by the shop foremen and forwarded to the machine shop for machining parts to the exact size to suit a particular engine.

349. *Stock fittings.*—Stock fittings required for engines will be drawn from stores. On engines under repair there will be many standard fittings composed of several parts, such as injectors, steam cocks, oil boxes, bye pass valves, etc., which on examination will be found to require repair or replacement of their component parts and it will be economical to repair these in quantities and not individually. They will be sent to the shops concerned and repaired in suitable batches on repair orders. The shops, however, will not wait for the repair of the particular fittings of any one engine, as all the repaired standard fittings will go to stores, when the repairs have been completed.

350. *Engine schedule boards.*—There are several effective schedule board schemes in use in the different locomotive workshops. The one in use in the Moghalpura shops, North Western Railway, has special merit in its simplicity. An outline of the operation of the scheme is appended below for adoption in other shops :—

- (1) Operation schedule boards will be maintained close to where each gang is working.
- (2) Small master schedule boards will be maintained in each shop for the information of foreman and chargeman. These boards will be ruled in columns, one for each working day and lined across for each of the operations under the control of the foreman concerned. Separate cards for each operation showing the number of the engine and the date the operation should be completed will be attached to the boards opposite the operation concerned and underneath the date it is required. Foremen will thus be in a position to see at a glance (a) what gang is in arrears and to what extent, and (b) what work is on hand. The current date will be indicated by a moveable string.
- (3) A master schedule board showing each of the operations will be maintained in the office of the assistant works manager (finishing). On the right hand side it will be similar to the shop master schedule boards. On the left hand side a column will be provided for each engine number and as each operation is completed the ticket on the right hand side will be removed therefrom and placed under the engine to which it refers. Thus the engine will be built up and the progress thereof will be clearly shown by the ticket under each engine number on the left hand board. The blank spaces under this number will represent either an operation which has not yet become due or although overdue has not been completed. In order to discriminate between these two it will be arranged that when an operation is overdue the space will be filled in with a red or blue ticket. The red ticket will represent boiler operations and the blue ticket engine operations.

351. From the above the assistant works manager (finishing) will see at a glance:—

- (1) From the right hand board:—
 - (a) The due date of every major operation for every engine in the shop.
 - (b) What gangs are in arrears with their work and to what extent.
- (2) From the left hand board:—
 - (a) The progress of each engine in the shop.
 - (b) What operations are not yet due and what operations are overdue.

The schedule board cards will be moved once daily upon receipt of reports from foremen.

Carriage and Wagon Repairs and New Construction.

352. *Scheduling.*—Schedule cards, forms 145 and 146, will be used to account for the progress of repairs and new construction through the shops.

353. Carriage and wagon repairs will be separated into light and heavy, and a fixed time in the shop for each will be prescribed. Heavy repairs and new construction of both carriages and wagons will be further divided into principal operations and a time fixed for each operation.

354. Before work is started the scheduling staff will prepare schedule cards:

- (a) For each carriage or wagon to be repaired.
- (b) For each carriage or wagon construction order.

For repairs, these cards will be prepared in duplicate and one copy sent to the shops and fastened to the carriage or wagon, the other being retained in the scheduling office. For construction orders it will be necessary for the foreman of each shop concerned to have a copy of the card and sufficient copies will therefore be prepared to permit of this distribution.

355. When the work is started the retained copies of the cards will be distributed into compartments in the scheduling office under scheduled dates of completion, and as the carriages, wagons and construction orders progress through the shops as reported daily by the foremen, the cards will be moved to the next scheduled completion date. An index of the location of each carriage, wagon and construction order will be kept. An examination at any time of the cards in the scheduling office will show the progress of (1) each carriage and wagon, and (2) each construction order.

356. In the case of new construction orders the scheduling staff will prepare and forward requirement sheets, form 142, to the works stores. The stores procedure will be the same as for engines.

Engines and Carriages and Wagons.

357. *Preparation and issue of time sheets and booking of time.*—The general procedure will be similar to that already explained in dealing with the manufacturing shops. Time sheets, form 124, will be prepared and issued by the scheduling office for all jobs except repairs to wagons. The engine schedules will, so far as possible, show all the items of repair or new construction so that time sheets may be prepared in advance for all required work. They will be fastened in tin holders attached to (a) machines, (b) fitters' benches, or (c) located near the operations of each gang. Time will be booked by clerks under the control of the assistant workshop accountant to one or other of the following orders:—

<i>Locomotive Workshop Order Numbers.</i>		<i>Carriage and Wagon Workshop Order Numbers.</i>
1—2599	(1) Engine repair and construction order	..
..	(2) Construction and assembly of new carriages	1—999
..	(3) Construction and assembly of new wagons	1001—1999
..	(4) Standing orders for repairs to carriages—	
	(a) Upper Class passenger carrying vehicles	2001
	(b) Lower class passenger carrying vehicles	2002
	(c) Other passenger carrying vehicles	.. 2003
010—0799	(5) Overhead orders	.. .. 0101—0799

358. Time worked in the wagon repair shop will not be allocated to specific jobs, but the total hours and value thereof for the month will be transferred from the muster roll to the pay sheet and allocated in total to the wagon repair shop account number 2010 in the workshop ledger.

359. *Costing.*—The scheduling staff will notify the costing section of the completion of an order on form 135, and time sheets for completed work will be passed to the costing section as soon as a job is finished.

III.

Accounting Organisation.

360. The workshop accounting organisation of each railway will be as follows :

Workshop accountant.—This officer will be the chief accountant's representative and will be located at the principal workshop, but his supervisory duties will entail frequent visits to the other works. He must be thoroughly conversant with workshop procedure and accounting and will be charged with the supervision of all workshop accounts and accounting staffs. He will have an assistant workshop accountant at each workshop, who must be familiar with workshop costing and accounting and who will be in direct charge of the following sectional staffs :—

- (a) Time office ;
- (b) Labour ;
- (c) Material ;
- (d) Costing ;
- (e) Accounts.

361. The assistant workshop accountant will have as his assistants four head clerks in charge of :—

- (a) Time office ;
- (b) Labour and material ;
- (c) Costing and cost ledgers ;
- (d) Workshop ledger accounts.

IV.

Labour.

362. Workshop labour will be dealt with under the following heads :—

- (1) Recording of attendances, preparation of pay sheets and the make up and payment of wages ;
- (2) Booking of time to jobs, agreement of allocations to jobs in hours and value with the total of the pay sheets.

363. *Recording of attendances.*—The time office will record and account for the attendance of the entire workshop staff.

364. *Time clocks.*—It is thought that the use of time clocks throughout the workshops would be far more satisfactory than the present system of discs. Time clocks are in use already for the higher class of workmen, but there appears to be some difference of opinion as to whether they could be successfully brought into use for the rank and file. Various reasons have been advanced against their use, and owing to the peculiar conditions which exist in India, only practical experience can determine whether their complete use would be justified. Their desirability is evident, and every endeavour should be made to extend their use to all classes of labour in all workshops. There are two factors which the management must consider carefully :—

- (a) Time clocks provide the most reliable method of accounting for attendances.

- (b) Time clocks permit of a subsequent verification of recorded time which is impossible under the disc system.

When introduced, the clocks will be installed in the different shops and the card punching done under the supervision of the time keepers and the chargemen.

365. Until clocks are installed it will be necessary to continue the use of muster rolls, and it is necessary that these provide for the grouping of attendances in tri-monthly periods, viz., 10th, 20th, and last day of the month. A new muster roll, form 147, has been designed for this purpose, and in writing up these rolls the labour of each shop should be grouped under :—

- (a) Skilled.
- (b) Semi-skilled.
- (c) Overheads.

366. Within three days of each period the time office will prepare and send to the labour section a statement of day rate time in job shops, form 148, giving the totals for each shop for (a) and (b) above, and this statement will be used later by the labour section for the agreement of time booked, *vide* the muster rolls with time worked, *vide* the time sheets as explained in paragraph 383. At the end of each month the completed muster rolls will be sent to the labour section for the preparation of the monthly pay sheet.

367. *Preparation of pay sheets.*—All muster rolls, with the total wages column completed, and supported by the statement of Income Tax and Provident Fund deductions, must be received by the labour section from the time office not later than the second of each month in order that the preparation of the pay sheets, form 149, may be completed not later than the 6th of each month. To ensure accuracy in the completion of the muster rolls all additions and calculations must be made with the aid of a Dalton calculating machine and the Dalton strip gummed to each page as evidence.

368. Immediately they are received the total time and total wages shown on the muster rolls will be Dalton checked by the labour accounts staff, after which they will be passed to the machine staff for entry of total time and wages on the pay sheets.

369. In addition to the day rate wages there are also the bonus and/or piece-work earnings to be calculated. These calculations will be made in the labour office from the time sheets of completed jobs. For jobs completed during the month the bonus and/or piece work earnings will be Dalton machine calculated prior to the end of the month; leaving only the calculations to be done at the end of the month for those jobs finishing on the last two or three days of the month. These earnings will be entered on bonus and piece-work vouchers, form 150.

370. The actual pay sheets will be prepared with the aid of Remington accounting machines, and in preparing them the

- (a) Skilled,
- (b) Semi-skilled,
- (c) Overhead.

labour in each shop will be grouped so as to facilitate the subsequent allocations to job shop and overhead accounts. As much advance work as possible will be done in anticipation during the month, *e.g.*, all names and all pay sheet deductions (other than Income Tax and Provident Fund) will be entered. For this purpose, miscellaneous deductions will be calculated up to 15th of each month, instead of the last day, and entered in the "Total Deductions" column. With this advance work done it only remains to machine :—

- (a) The muster roll earnings ;
- (b) The excess over day rates earned by piece-workers, *vide* the bonus and piece-work vouchers ;
- (c) Income Tax and other deductions.

The Remington will automatically calculate and show the "net amount" payable and the operator by typing this total on the pay sheet will clear the "net amount" totaliser.

In addition, the machine will record in totalisers the total of each column of the pay sheet and the net cross total of these will agree with the grand total of the net amount payable. Each totaliser total will agree with the total of the prime documents from which the pay sheet has been prepared and thereby afford a proof of work. To appreciate fully the advantages to be derived from the use of these machines, it is recommended that their representatives be asked to give a demonstration on the lines indicated above.

371. After completion of the pay sheets the assistant workshop accountant will list them on "pay sheet statements," form 151, enter the allocations to the proper accounts and send the pay sheets and the "treasurer's copy" of the statement to the cashier for payment.

372. *Payment of wages.*—The make-up and payment of wages to the workshop staff will be made by clerks, under the control of the treasurer, who have taken no part in the preparation of the muster rolls and pay sheets. They will be assisted by shop chargemen.

373. Payment will continue to be effected under the pay-tube system; that is, the amount due to each workman will be placed in a tube with the ticket number painted thereon. Each amount will be made up by a pay clerk and checked by a chargeman, before being placed in a tube. When the make-up has been completed and the cash balanced, the tubes will be placed in trays divided into numbered sections by cross pieces, and immediately this operation is finished each tray containing the tubes will be locked with two dissimilar locks, one key being held by the pay clerk and the other by the chargeman. This procedure will necessitate the presence of both the pay clerks and the chargemen at the opening of the trays. To enable the workmen to know the amount of their wages, slips with ticket numbers and amounts due will be written up on Remington accounting machines and distributed to the workmen, through their foremen, prior to pay-day. The Remington totaliser total of these slips will agree with the net amount payable column of the pay sheet.

374. For payment the workmen will be marshalled in numerical order in their order of shops and the actual disbursement of the tubes will be made by pay clerks in the presence of a chargeman, each man being identified as he receives payment and at the same time surrendering his pay slip as a receipt for same.

375. A list of undelivered tubes will be prepared each pay-day by pay clerks, signed by them and the chargemen, and the cash handed to the head pay clerk and an acquittance obtained therefor. Absentees on pay-day will be paid later by the head pay clerk, after having been identified by their chargemen.

376. The pay sheets supported by all pay slips will be sent to the central accounting office as vouchers in support of the cashier's expenditure.

377. *Classification of pay sheets.*—From the completed pay sheets the labour section will prepare a summary of day rate expenditure, in duplicate, form 152, to show the day-rate earnings in each shop, i.e., a summary of the day rate wages column of the pay sheet, and when completed this will show the total hours worked and wages earned, and the figures will be classified under:—

- (1) Job shops:—
 - (a) Skilled.
 - (b) Semi-skilled.
 - (c) Overhead, subdivided into:—
 - (i) Shops overheads.
 - (ii) General workshop overheads.
- (2) Process shops.
- (3) Wagon repair shops.

For (2) and (3) above the total wages for each foundry, shop, etc., will be shown under the account number allotted to that foundry or shop, and no division of wages between skilled and unskilled will be made.

378. One copy of this summary will be sent to the workshop ledger accounts section and will form the basis of a journal entry, a specimen for which is annexed at Schedule A, No. 1, and from which the day-rate wages will be incorporated into the workshop ledger in the manner explained in paragraph 430.

379. There still remains the bonus and/or piece-work wages of certain shops which are shown in a separate column on the pay sheet. In respect of these the labour section will punch a Hollerith or Powers card, form 153, for each bonus or piece-work voucher, and send these cards, together with a total of the vouchers, to the costing section, where they will be tabulated to ensure agreement in total with the labour section vouchers total, *i.e.*, with the bonus and/or piece-work wages total of the pay sheet. The costing section will furnish the workshop ledger accounts section with a tabulation of bonus, etc., earnings against the jobs allocatable and from this the accounts section will summarise these bonus and/or piece-work wages under the cost ledger control accounts debit and then prepare the journal entry illustrated at Schedule A, No. 2. At this stage the workshop ledger accounts section will have been advised of the allocations of all the workshop wages for the month.

Costing and Allocation of Time.

380. *Process shops, wagon repair shops.*—The time worked and wages earned in these shops will not be allocated against specific orders and provision has already been made in paragraphs 377-378 for the necessary notification to be made to the workshop ledger accounts section of the wages earned in each foundry or shop.

381. *Job shops.*—For job shops the allocation of time to specific jobs is essential. It has already been explained in paragraphs 330-331 that all time will be entered on the time sheets by the assistant workshop accountant's time clerks, and this time will be chargeable to one or other of the following orders:—

<i>Locomotive Workshop Order Numbers.</i>		<i>Carriage and Wagon Workshop Order Numbers.</i>
1—2599	(1) Engine repair and construction orders .....	..
	(2) Construction and assembly of new carriages ..	1—999
	(3) Construction and assembly of new wagons ..	1001—1999
	(4) <i>Standing orders</i> :—	
2601	(a) Recoverable expenditure for work done not exceeding Rs. 200 on orders received from either other Government Departments or employees of the Home Railway.	2101
2611	(b) Irrecoverable expenditure for work done not exceeding Rs. 500 for other departments of the Home Railway, chargeable to expenditure abstracts.	211E
	(c) <i>Repairs to carriages</i> :—	
	(i) Upper class passenger-carrying vehicles	2001
	(ii) Lower class passenger-carrying vehicles	2002
	(iii) Other passenger-carrying vehicles ..	2003
0101—0799	(5) Overhead orders	0101—0799
2701—4999	(6) Sundry orders	2201—4999
5001 upwards	(7) Manufacturing orders to stores	5001 upwards

382. All time sheets will be sent to the labour section by the progressing and scheduling sections:—

- (a) immediately a job is finished;
- (b) on the day following the 10th, 20th and last day of each month in respect of incompleting jobs.

As soon as these are received the labour section clerks will enter the shop fixed wage rate per hour of the workers. It is explained in paragraph 431 why these fixed rates are necessary and how they will be determined by the workshop accountant.

Each labour clerk will have a Dalton calculating machine and with this he will machine-calculate the fixed rate value of the time sheet hours, initial his Dalton strip and gum it to the bundle of sheets as evidence. As each man completes a bundle, he will pass it to another clerk in the section with Dalton strip attached. The second clerk will verify all rates, check all the calculations on his Dalton machine and initial and attach his strip also to the bundle. From these checked time sheets the labour section will punch Hollerith or Powers cards, form 154, and send these, together with the checked time sheets, to the costing section, where the cards will be tabulated to ensure agreement in total with the total of the Dalton strips annexed to the bundles of time sheets.

383. Thereafter the whole of the Hollerith or Powers time sheet cards for the 10-day periods will be collected together and passed through sorting and tabulating machines, in order to obtain the total skilled and semi-skilled time worked in each shop. A copy of this tabulation will go to the labour section and there be agreed with the total hours shown by the time office statement of day rate time in job shops, form 148, as having been worked in the shops. This agreement in hours is absolutely essential as it affords a proof of the number of hours charged through the time sheets to jobs in job shops with the number of hours booked to men in those shops on muster rolls. It is therefore essential that all time sheets be collected on the 10th, 20th and last day of each month in order that this tri-monthly agreement may be effected quickly.

384. The total wages represented by those hours and charged to jobs in the costs ledger each month at the shop fixed rate per hour worked may differ slightly from the pay sheets total, but will be watched closely by the accounts section to see that they approximate to the total of the pay sheets as explained hereafter in paragraph 434.

385. Every ten days the cards for the skilled and semi-skilled wages, plus also the cards for the bonus and/or piece-work wages, will be tabulated to get a list of wages allocatable :

- (a) To jobs for which there will be an account in the costs ledger and to which account the necessary postings will be made by the costing section as explained in paragraph 433.
- (b) To overheads, being skilled and semi-skilled time appearing on time sheets, for which cards have been punched but which is not allocatable to a productive job.

A typical instance of (b) above will be the skilled and semi-skilled labour for (a) idle time, (b) repairs of machinery and equipment, and (c) other non-manufacturing work.

386. In the millwright shop all time will be recorded on time sheets but will be nonproductive and allocated to the relative shop overhead orders of the shops in which the millwrights were working; time sheet, form 124, will be used for this purpose. One copy of this tabulation will go to the workshop ledger accounts section and will be the document from which the journal entry illustrated at Schedule A. No. 3, will be prepared.

387. It will be necessary for the labour section to analyse the job shop and general workshop overhead labour shown on the pay sheet under the job shop and general workshop overhead accounts. To facilitate this, two forms have been designed :—

- (a) Details of pay sheet charges to shop overheads, form 155.
- (b) Details of pay sheet charges to general workshop overheads, form 156.

The overhead account numbers shown on these forms are explained fully in paragraph 395 dealing with overheads, and it is not thought necessary to repeat them here. When completed the totals of these analyses statements will agree with the totals of the shops and general workshop overheads respectively, as shown on the summary of day rate expenditure, form 152.

388. The labour section will next punch a card for each overhead account number for each shop and send these to the costing section, where they and the cards already punched in respect of overheads appearing on the time sheets will be included with the material, general and administrative overhead cards and tabulated in order to obtain for the works manager a monthly classified statement of the overheads of the workshops.

V.

Materials.

389. At the workshops the accounting for materials will fall into two broad divisions, *viz.* :—

(a) The custody, issue and receipt of stores and the maintenance of unpriced records of stores ;

(b) The pricing of all issues and receipts.

390. *Custody of stores.*—The works store, a branch of the general stores, will be in charge of an officer under the controller of stores, and the procedure to be adopted in connection therein is explained fully in Appendix V, dealing with stores.

391. *Pricing of issues to and returns from shops.*—It has been provided that the material section will receive daily one copy of :—

(a) Material delivery notes, form 99 ;

(b) Material returned to stores notes, form 107 ;

(c) Process shop consumption reports, form 123 ;

These documents will then be priced from the official price list, and the clerk, with the aid of a Dalton calculating machine, will next calculate the value of the material, and initial and attach his machine strip to each bundle of completed documents as evidence. The bundles will then be passed to a second clerk, who will verify all the prices and check all the calculations on his Dalton machine and initial and attach his strip also to the bundle. A Hollerith or Powers card, form 100, will next be punched for each document and these cards, together with the bundles with the two strips attached, will then be sent to the costing section, where the cards will be tabulated to ensure the agreement of their total with that of the Dalton strips.

392. The Hollerith or Powers cards for the day will next be passed through sorting and tabulating machines to obtain separate statements, form 157, showing in the serial order of price list numbers the unit quantities and values of :—

(1) Stores issues ;

(2) Material returned to stores.

A copy of these statements will be sent daily to the central accounting office, stores section, and will be the document from which the relative postings will be made to the priced stores ledgers.

As with wages, it will be necessary to tabulate the material cards at the end of each ten-day period in order to get :—

(a) the values allocatable to each account in the costs ledger, and to which account the necessary postings will be made by the costing section.

(b) the values allocatable to each shop overhead account.

This tabulation will be made on form 157, and the totals of (a) and (b) above must agree with the sum of the totals of the daily lists for the period sent to the stores section of the central accounting office. One copy of this ten-day list will be sent to the workshops ledger accounts section and will be the document from which the journal entry illustrated at Schedule A, No. 4, will be prepared. The cards for (b) above are the ones referred to in paragraph 388, and will be required for the monthly classified statement of overheads to be prepared for the works manager.

394. The procedure to be observed in dealing with the receipt and issue of works stores, the documents to be prepared on each occasion and their subsequent disposition is explained fully in Appendix V dealing with the stores system, and it is not considered necessary to repeat here these matters of detail.

VI.

Overhead Expenses.

395. Overhead expenses, or on cost, are those expenses which have been incurred in manufacture but cannot be allocated direct to any specific job or jobs. In the railway workshops this expenditure may be classified under :—

(a) *Shop overhead orders* which will be applicable to each job shop and sub-divided, *viz.* :—

0101 Foremen and assistant foreman.

0102 Charge men.

- 0103 Mistries.
- 0104 Shop foremen's clerical staff salaries and expenses.
- 0105 Tallymen.
- 0106 Labour and materials expended on repairs to machinery and equipment.
- 0107 Labour and materials expended on repairs to tools.
- 0108 Small shop tools and sundry stores.
- 0109 Repairs to furnaces.
- 0110 Tools, jigs and fixtures.
- 0111 Labour and materials for lubricating machinery and equipment.
- 0112 Fuel.
- 0113 Electric power consumed.
- 0114 Idle time.
- 0115 Spoilage (difference between the cost of bad work and the value of salvage.)
- 0116 Operation and maintenance of gas producers.
- 0117 Sundries.

The account of each shop will be numbered from the control account number, viz. Bolt and nut (101—117), Bolier (126—142), and so on.

(b) *General workshop overhead orders*, being the overheads incurred in the workshops generally, viz.—

- 0801 Planning, progressing and scheduling staff salaries and expenses (exclusive of general administration items, Abstract B).
- 0802 Laboratory staff salaries and expenses (exclusive of general administration items, Abstract B).
- 0803 Time office staff salaries and expenses.
- 0804 Watch and ward staff salaries and expenses.
- 0805 Sanitary staff salaries and expenses.
- 0806 Yard coolies, sweepers and bhisties.
- 0807 Shop messengers.
- 0808 Holiday pay.
- 0809 Sick allowances.
- 0810 Injury pay.
- 0811 Leave allowances.
- 0812 Grain compensation allowances.
- 0813 Provident Fund bonus.
- 0814 Gratuities for good service.
- 0815 Operation and maintenance of hydraulic power producing plant.
- 0816 Operation and maintenance of pneumatic power producing plant.
- 0817 Operation and maintenance of shop shunting engines.
- 0818 Operation and maintenance of stationery engines and boilers.
- 0819 Operation and maintenance of cranes, traversers, electric trucks, etc.
- 0820 Water.
- 0821 Repairs to shop buildings.
- 0822 Sundries.

(c) *General administration and depreciation charges (Abstract B)*, being workshop administration charges allocable to shops generally, viz.—

General Administration—

- 0901 Salaries of administrative and executive officers.
- 0902 Salaries of subordinate supervising staff.
- 0903 Salaries of office staff.
- 0904 Travelling and other allowances.
- 0905 Office expenses.

Depreciation of machinery and equipment—

- 0906 Depreciation.

396. In dealing with labour and materials, provision has been made for the costing section to be notified of all wages and materials chargeable to these overhead orders; and it has also been laid down that the costing section will punch and tabulate cards in respect of these apportionments.

397. In addition to the foregoing items, which represent expenditure within the workshops, there will also be certain expenses incurred by other workshops or departments, which will form part of the cost of workshop manufacture. Details of these expenses will be received by the assistant workshop accountant on debit notes through the central office, will be apportioned by him and a copy of this apportionment sent to the costing section, where the necessary cards will be punched. This being done, the total cards relative to overhead expenses will be tabulated in order to get:—

- (a) The total overheads of each shop detailed against the individual shop overhead orders.
- (b) The total general workshop overheads divided over the appropriate orders.
- (c) The total administrative overheads divided over the appropriate orders.

398. In the workshop ledger, the assistant workshop accountant will have debited each shop overhead account, the general workshop overhead account and the administrative overhead account respectively with the individual charges in respect of labour, material and miscellaneous items. He will now compare and agree the amounts debited with the totals shown against the various accounts on the tabulating machine lists received from the costing section.

399. The next step is to spread the total of these collected overhead expenses over the jobs to which they are allocable. There are several methods by which this may be done, but for the railway workshops it will be sufficient to adopt the simple method of adding a percentage to the direct labour expended on the jobs. To do this the procedure will be:—

- (a) To add on the cost sheet a percentage to the labour charges in each shop in order to clear the individual shop overhead accounts.
- (b) To add a percentage to the total wages expended in manufacture in order to clear the general workshop overhead account.
- (c) To add a percentage to the total wages expended in manufacture in order to clear the administrative overhead account.

400. In order to determine the rates to be adopted in the first instance, it will be necessary to take:—

- (a) The normal overhead expenses of each shop and divide these by the amount of the normal productive wage bill of that shop.
- (b) The normal general workshop overhead expenses and divide these by the sum of the normal productive wages of the workshop.
- (c) The normal administrative overhead expenses and divide these by the sum of the normal productive wages of the workshop.

The result of these calculations will be to ascertain the three percentage additions to be applied:—

- (a) To the productive wages of each shop for the shop overheads.
- (b) To the total productive wages on each job for the general workshop overheads.
- (c) To the total productive wages on each job for the administrative overheads.

401. These percentages will be subject to examination and verification by the workshop accountant at least twice in each year, and such adjustment will then be made as the ascertained results show to be necessary. In practice, it will be found that the application of fixed percentage additions will either over or under absorb the amount of the overhead expenses, and the subsequent accounting necessary to clear these under or over absorptions is dealt with in paragraphs 444 and 445.

VII.

Costing and Cost Ledger.

402. Labour and material expenditures chargeable to all orders, will, as already provided in sections iv and v of this Appendix, be tabulated on Hollerith or Powers machines and with the aid of these machines the accounting staff will be enabled to compile costs economically and at the same time with accuracy, neatness and speed.

403. The sorting and tabulating installations will be at the following locomotive workshops:—

East Indian Railway.—Jamalpur, Lunckow.

Eastern Bengal Railway.—Kanchrapara.

Great Indian Peninsula Railway.—Parel, Jhansi.

North Western Railway.—Moghalpura.

The machines will also be used as an aid to the compilation of the carriage and wagon and electrical accounts and costs at points where those workshops are adjoining or in close proximity to the locomotive workshops, viz., Lucknow, Kanchrapara, Matunga, Jhansi and Moghalpura.

404. The staff required for one Hollerith or Powers machine will be as follows:—

(1) Two key punch and two verification operators.

(2) One sorting machine operator.

(3) One tabulating machine operator.

(Note.—The cards for the carriage and wagon and electrical accounts will be punched at those workshops, sent by messenger to the machine room of the costing section at the locomotive workshop, where the sorting and tabulating will be carried out and the results then sent back to the originating workshop.)

405. At separate carriage and wagon workshops, e.g., Lilloah and the other small shops, the volume of work will not be sufficient to justify the use of Hollerith or Powers installations and for these places a combination of Burroughs' machines and Paramount cards (see Chapter XVII of the Main Report) is recommended. The time sheets and material notes will be printed on Paramount cards, sorted in the required order and tabulated on the Burroughs' machines.

406. *Cost ledger.*—The costing section of each workshop will keep a cost ledger in which will be maintained an account for every order issued to the shops. These orders have been specified earlier in this appendix, but for convenience they are again given:—

<i>Locomotive Numbers.</i>		<i>Carriage and Wagon Numbers.</i>
1-2599	(1) Engine repair and construction orders ..	—
	(2) Construction and assembly of new carriages	1- 999
	(3) Construction and assembly of new wagons	1001-1999
	(4) <i>Standing Orders</i> —	
	(a) Repairs to carriages:—	
	(i) Upper class passenger carrying .. vehicles.	2001
	(ii) Lower class passenger carrying .. vehicles.	2002
	(iii) Other passenger carrying vehicles	2003
	(b) Recoverable expenditure for work done not exceeding Rs. 200 on orders received from other Government Departments or employees of the Home Railway:—	
2601	(i) Labour	2101
2602	(ii) Materials	2102
2603	(iii) Overhead	2103

	(c) Irrecoverable expenditure for work done not exceeding Rs. 500 for other departments of the Home Railway chargeable to expenditure abstracts	
2611	(i) Labour	2111
2612	(ii) Materials	2112
2613	(iii) Overhead	2113
2701—4999	(5) Sundry Orders	2201—4999
5001—upwards	(6) Manufacturing orders for stores ..	5001—upwards.

407. *Labour and material charges to orders.*—These charges will be obtained from the respective tabulations referred to in paragraphs 380–388 and will be debited to the cost ledger accounts affected.

408. *Overhead charges to orders.*—The costing section will apply overheads :—

- (a) At the end of each month to each repair and construction order in progress.
- (b) To all other orders when completed.

The application will be made by means of a percentage addition to the productive labour charges of each shop and provision has been made for these labour charges to be tabulated on form 158, grouped under the orders of the shops, viz :

- (a) Repair and construction.
- (b) Standing.
- (c) Sundry.
- (d) Manufacturing.

The overheads (1) shops, (2) general and (3) administrative will then be added to these tabulated labour charges and the tabulation, with the calculated overheads added thereon, will then be passed to the accounts section for the preparation of the monthly journal entry illustrated at Schedule A, No. 5.

409. *Costing and transfer of process shop and work in progress orders.*—The costing section will receive through the progress section a “Manufactured Products of Stores Note,” form 106, for each completed manufacturing order for stores and will cost these notes at the official price list prices. A Hollerith or Powers card form 100, will then be punched for each note and

- (a) The official price list price, see paragraphs 440 and 442.
- (b) The actual cost as shown by the cost ledger will be punched on each card. These cards will be sorted and tabulated on form 157.

- (a) Daily in the serial order of price-list numbers
- (b) Monthly in job number order, grouped by control accounts.

Tabulation (a) above will be prepared in duplicate and a copy thereof sent daily to the central accounting office, stores section, and will be the document from which the necessary entries will be made in the priced stores ledgers. Tabulation (b) above will be passed to the accounts section for the preparation of the journal entries illustrated at Schedule A, Nos. 6, 7 and 8. Tabulation (a) must agree with the monthly total of tabulations (b).

410. The costing section will prepare the following monthly statement :—

- (1) Process shop orders which have been transferred to the following accounts :—
 - (a) Shop overheads.
 - (b) Standing orders.
 - (c) Sundry orders.
- (2) Work in progress orders shown below which have been transferred to general ledger and other accounts:—
 - (a) Repair and construction orders.
 - (b) Standing orders.
 - (c) Sundry orders.

These statements will be forwarded to the accounts section where the first will be used for the preparation of the journal entry illustrated at Schedule A, No. 6, and the second for the journal entries at Schedule A, Nos. 9, 10 and 11.

411. The details for statement No. 1 will be obtained from the costed process shop orders and for statement No. 2 from the cost ledger accounts, except in the case of standing orders for :—

- (1) Recoverable expenditure for work done not exceeding Rs. 200, on orders received from either other Government Departments or employees of the Home Railway.
- (2) Irrecoverable expenditure for work done not exceeding Rs. 500 for other departments of the Home Railway chargeable to expenditure abstracts.

These latter amounts will be obtained from the standing work orders, form 118, which will show estimated :—

- (a) Labour.
- (b) Material.
- (c) Overhead costs applicable to each order.

412. *Cost sheet tabulations.*—In addition to the tabulations already described in detail under the heads of “labour,” “materials,” and “overheads” the following cost sheet tabulations, on form 159, will be prepared by the costing section under :—

- (1) Repair and construction orders :—
 - (a) Cumulative cost of repair and construction orders in progress.
 - (b) Completed repair and construction orders.
- (2) Completed sundry orders.
- (3) Completed manufacturing orders for stores.

The details of the material figures shown at the foot of the form 159 will be tabulated first on form 157.

413. Costs sheets under 1 (a) above, will be prepared at the end of each month ; all other costs sheets will be prepared after each 10 days' work has been balanced.

414. To ensure that no cards have been omitted from the tabulations, these cost sheets will be compared with the cost ledger accounts and if in agreement therewith will be passed to the assistant works manager for his information.

415. *Process shop statements.*—A monthly statement of detailed costs will be prepared for each process shop account 060-081, by the costing section on the following lines :—

Statement of Iron Foundry Costs.

Month of192 .

				<i>Weight.</i>	<i>Amount.</i>	<i>Unit Cost.</i>
<hr/>						
<i>Outturn :—</i>						
Class I (Light)	..	..	..	—	Rs. A —	As. —
„ II (Medium)	..	..	..	—	—	—
„ III (Heavy)	..	..	..	—	—	—
„ IV (Special)	..	..	..	—	—	—
<hr/>						
Totals	..	..		Rs.	As.	
<hr/>						

	<i>Amount.</i>	<i>Unit Cost.</i>
<i>Metal Cost :—</i>		
1. Direct labour	Rs. —	As. —
2. Raw materials	—	—
3. Other manufacturing materials	—	—
4. Fuel	—	—
5. Repairs to couples and furnaces	—	—
6. Sundries	—	—
<hr/>		
<i>Less : Recoveries</i>	Rs. —	As. —
<hr/>		
<i>Metal Cost</i>	Rs. —	As. —
<hr/>		
	<i>Amount.</i>	<i>Unit Cost.</i>
<i>Floor Cost :—</i>		
1. New patterns and pattern maintenance..	Rs. —	As. —
2. Direct labour	—	—
3. Materials	—	—
4. Repairs to moulding machines and other equipment.	—	—
5. Sundries	—	—
<hr/>		
<i>Less : Salvage value of bad castings</i>	Rs. —	As. —
<hr/>		
<i>Floor Cost</i>	Rs. —	As. —
<hr/>		
<i>Totals</i>	Rs. —	As. —

Note.—

Wastage.....Cwt.....per cent.

The totals in the outturn and the cost statements must be in agreement.

416. The larger items entering into the headings of direct labour, materials and sundries, both metal and floor costs, should be set out on all statements, viz. :—

Direct Labour :—

Pattern makers.
Moulders.
Dressers.

—
—

Raw Materials :—

Pig iron, Bengal.
,, Tata.
Scrap, cast iron.

—
—

Sundries :—

Foreman.
Chargemen.

—
—

Separate cost statements will be prepared for each :—

1. Iron foundry.
2. Steel foundry.
3. Brass foundry (a) Principal mixture.
(b) Remaining mixtures in total.
4. Rolling mill.
5. Saw mill.

418. *Outturn*.—The unit costs of the different classes of castings will be arrived at by the use of the point method, illustrated below :—

<i>Classes.</i>	<i>Outturn (lbs.)</i>	<i>Allotted points.</i>	<i>Number of points.</i>
Heavy	10,000	1	10,000
Medium	15,000	1½	22,500
Light	10,000	1¾	17,500
Special	5,000	2	10,000
			60,000

Rs. 7,500 (Total foundry cost) :—60,000 (Points)=As 2 per point.

As applied to the outturn statement :—

<i>Classes.</i>	<i>Outturn (lbs.)</i>	<i>Unit Price.</i>	<i>Amount.</i>
Heavy	10,000	Rs. 0·2	Rs. 1,250
Medium	15,000	0·3	2,812
Light	10,000	0·3½	2,188
Special	5,000	0·4	1,250
			Rs. 7,500

As applied to one casting of each kind :—

<i>Classes.</i>	<i>Actual weight (lbs.)</i>	<i>Unit Price (lbs.)</i>	<i>Unit cost.</i>
Heavy	1,000	Rs. 0·2	Rs. 125
Medium	200	0·3	38
Light	55	0·3½	12
Special	50	0·4	12

The points to be assigned to each class will be fixed by the production engineer.

419. The outturn will be classified as follows :—

1. Iron foundries : as indicated in preceding paragraphs.
2. Steel foundries : one class.
3. Brass foundries : principal mixtures divided into :—
(a) Castings.
(b) Ingots.

Remaining mixtures in total similarly divided.

(Note.—The point method will be used.)

4. Rolling mill : one class.
5. Saw mill : first and second cuts.

420. *General*.—At the end of each month the costing section will prepare for the accounts section a trial balance of the cost ledger in control account order, and the balances must agree with the balances in the respective control accounts in the workshop ledger.

VIII

Workshop Ledger Accounts.

For purposes of explanation, the workshop ledger accounts are divided into six groups, *viz.* :—

- (1) The general ledger control account.
- (2) Bonus and/or piece-work losses.
- (3) Job shops labour paid for and charged to jobs.
- (4) Process shops actual costs and amounts charged to orders.
- (5) Shop overhead expenses incurred and applied to work orders.
- (6) Work in progress accounts controlling the cost ledgers.

422. A complete list of all these accounts will be found in paragraphs 450 and 451, and should be read in conjunction with the following explanatory memorandum and with the *pro forma* journal entries annexed hereto. These entries as drawn up refer only to the locomotive workshops. Those for the carriage and wagon workshops will be similar in form, the nomenclature of the accounts alone being different.

423. (1) *General ledger control account.*—The Principal monthly entries to this account will be as follows :—

Credits.—

- (1) For all labour on workshop pay sheets. (Journal entries Nos. 1 and 2 annexed.)
- (2) For materials issued from the works store. (Journal entry No. 4 annexed.)
- (3) For sundry expenditures such as (a) other workshops' and departments' charges, (b) stationery and printing, (c) labour expenditures chargeable to the workshop but carried on other than workshop pay sheets, and (d) other similar items all of which will be passed to the workshop by the central accounting office for inclusion in the workshop accounts. (Journal entries Nos. 12 and 13 annexed.)

Debits.—All transfers to the central accounting office, *viz.* :—

- (1) Orders chargeable monthly to abstract accounts. (Journal entries Nos. 9, 10 and 11 annexed.)
- (2) Orders for completed new construction. (Journal entry No. 9 annexed.)
- (3) Orders completed and debit notes therefor sent to the central accounting office either for collection or offset against deposits. (Journal entries Nos. 10 and 11 annexed.)
- (4) Orders for parts or assemblies completed and transferred to works store. (Journal entry No. 7 annexed.)

424. The general ledger in the central accounting office will contain a contra account for each workshop called "Workshop Ledger Control." All expenditures chargeable to a workshop will be entered as debits in this control account and the transfers from the workshop accounts to the central accounting office will be entered in this control account as credits. The monthly balances of each "Workshop Control" account in the general ledger and of the complementary "General Ledger Account" in the workshop ledgers should agree, and in the event of differences arising these will be investigated and adjusted in the following month. The balances themselves will represent :—

- (1) Bonus or piece-work losses to be recovered.
- (2) Under-absorbed balances in (a) job shop, (b) process shop, and (c) overhead accounts.
- (3) Construction orders in progress.
- (4) Manufacturing orders in progress.

Less :—

- (5) Over-absorbed balances in (a) job shop, (b) process shop, and (c) overhead accounts.

425. (2) *Bonus and/or piece-work losses.*—As day work rates of wages are guaranteed to bonus and piece-workers, it naturally follows that there will be losses to the railway in respect of those bonus and/or piece-workers whose actual outturn has not been sufficient to earn at piecerates their guaranteed day rates. As stated

in paragraph 379, Hollerith or Powers cards will be punched for bonus and/or piece work earnings, and tabulated to show the numbers of the gangs or individuals, and also:—

- (1) The debit to "Orders" and credit to "General Ledger Control Account."
- (2) The debit to "Bonus and/or piece work losses" and credit to "Orders."
- (3) The debit to "Orders" and credits to
 - (a) "General Ledger Control Account," and
 - (b) "Bonus and/or piece work losses."

426. Under the existing rules and regulations these losses are recoverable from subsequent profits of the gangs or individuals. Records will therefore be maintained for gangs and individuals showing:—

- (a) Earnings at bonus or piece work rates.
- (b) Payments to the workers, and
- (c) Losses to the Railway, recoverable from gangs or individuals in subsequent months.

427. An illustration is given herewith of a case involving:—

- (a) Profit to a gang or individual.
- (b) Loss to the railway, and
- (c) The recovery of the loss in subsequent months:—

	(First Month.) Pieces.	(Second Month.) Pieces.	(Third Month.) Pieces.
Equivalent outturn of the actual time worked calculated at day wage rates.	112	112	112
Actual outturn	312	80	312
Profits to gang or individual	200	..	200
Loss to the railway .. .. .	..	32	..
Profit or Loss at 2 annas per piece (charge or credit to orders Charges or credits to account, "Bonus and/or piece work losses."	Rs. 25	4	25
		4	4
Bonus or piece work amounts paid to gang or individual ..	Rs. 25	0	21

428. A further illustration of the three cases in journal entry form is appended:—

(1) Orders	Dr.	Rs. 25	
To General Ledger Control Account			Rs. 25
(2) Bonus and/or piece work losses	Dr.	4	
To Orders			4
(3) Orders	Dr.	25	
To General Ledger Control Account			21
To Bonus and/or piece work losses			4

429. The gang or individual records will be prepared as under:—

Month.	Gang or Individual.....						
	Bonus or piece work earnings.			Payments to employees.	Losses.		
	Date	Rate.	Profit or Loss.	Total.	Guaranteed day rate, or day rate plus profit.	To be recovered.	Recovered.
April	60	25	85	85	..	..
May	60	4	56	60	4	..	
June	60	25	85	81	..	4	

430. (3) *Job shops labour accounts.*—It has been explained in paragraph 377 that (1) skilled and (2) semi-skilled labour in each job shop will be grouped on the pay sheets and summarised therefrom on form 152 by the labour section. This summary will be used by the accounts section for the preparation of journal entry annexed at Schedule A No. 1, and the total wages earned in each shop *vide* the pay sheet will be debited to the appropriate “job shops labour accounts” and the sum of these debits credited in total to the “General Ledger Control Account.”

431. The next step necessary is to clear the debits from these job shops labour accounts by absorption over the jobs concerned of the wages expended in those shops. Owing to the fact, however, that the skilled and semi-skilled day rates paid to the shop workers are based on length of service, it follows that orders for similar articles or jobs will be executed from time to time by workman with different lengths of service and consequently earning different service rates. It is therefore recommended that fixed, or average, rates for (1) skilled and (2) semi-skilled labour be calculated for each job shop, and that these fixed rates be applied to orders, paragraphs 299, as they will reflect the true costs more correctly than would a debit of the actual wages of the operator.

432. The fixed rates for (1) skilled and (2) semi-skilled labour in each shop will be determined by the workshop accountant, and these rates, if carefully determined, should serve for a fiscal year. The workshop accountant will, however, correct any erroneous rates which may develop during the course of the year. At the end of each fiscal year the conditions will be reviewed and new rates fixed.

433. As explained in paragraphs 381 to 388, labour expenditure on orders calculated at the fixed rates will be punched on Hollerith or Powers cards by the costing section for periods ending on the 10th, 20th and last day of each month. These cards will be tabulated to get the fixed rate wage charges (1) to orders, and (2) to job shops, and from this tabulation the journal entry illustrated at Schedule A, No. 3, will be prepared debiting the orders control accounts and crediting the total for each shop to that job shop labour account.

434. *Over or under absorbed balances.*—Costing the time at “fixed” shop rates will result in a small rupee balance from month to month in each job shop labour account. Large balances arising from the use of erroneous rates will be written off by the workshop accountant at once, and the necessary correction made in rates. Small monthly balances may be allowed to remain on the books until the end of the fiscal year when they will be written off by a journal entry, *viz.* :—

Abstract B (workshop repairs)	..	..	Dr. Rs.
To job shops labour accounts :—			
Bolt and nut	..	..	Rs.
Brass finishing	..	..	....
Boiler, <i>et seq</i>	..	..	....

This entry will write off under-absorbed balances.

(Note.—It will be reversed if there has been an over-absorption.)

435. (4) *Process shop accounts.*—Process shops are as follows :—

Iron foundries.

Steel foundries.

Brass foundries.

Rolling mills.

Saw mills.

436. (i) *Labour.*—It has been provided, paragraph 377, that all day rate labour will be allocated from the pay sheets to the proper process shop accounts, 060-081, by the labour section and entered on form 152, which will then be passed to the accounts section for inclusion in the journal entry illustrated at Schedule A, No. 1, debiting process shops account and crediting general ledger control account.

437. (ii) *Materials*.—As explained in paragraph 393, material issues will be punched on Hollerith or Powers cards. A tabulation thereof by orders will be used by the accounts section for the preparation of the journal entry illustrated at Schedule A, No. 4, debiting process shops accounts and crediting general ledger control account.

438. (iii) *Sundries*.—An equitable proportion of the following general workshop overhead expenses will be added to the process shop accounts :—

- (1) Planning and progressing staff salaries and expenses.
(This has reference to the main progress office ; the shop progress offices will be allocated direct from the pay sheets to the process shop accounts).
- (2) Laboratory staff salaries and expenses.
- (3) Time office staff salaries and expenses.
- (4) Watch and ward staff salaries and expenses.
- (5) Sanitary staff salaries and expenses.
- (6) Yard coolies, sweepers and bhisties.
- (7) Provident fund bonus.
- (8) Any other general workshop overhead expense, a proportion of which is applicable to process shop accounts, 060—081.

439. The above items will be transferred from the general workshop overhead account to the process shop accounts by the monthly journal entry illustrated at Schedule A, No. 14 ; foremen, chagemen, holiday pay, sick allowances, injury pay, leave allowances, grain compensation allowances, and gratuities for good service will be allocated direct from the pay sheets to the process shop accounts.

440. (iv) *Process shop outturn*.—As explained in paragraphs 321 and 409, process shop orders will be costed at fixed prices. These fixed prices will be determined by the workshop accountant with the approval of the works manager and production engineer, and if carefully determined will serve for a fiscal year. The workshop accountant will correct any erroneous rates which may develop during the course of the year.

441. The accounts section will receive from the costing section monthly statements of process shop outturn, and from these will prepare the journal entry illustrated at Schedule A, No. 6. This has been dealt with in detail in paragraph 410 when dealing with costing.

442. *Over or under absorbed balances*.—Costing the outturn at fixed prices will result in a balance from month to month in each process shop account. Large balances arising from the use of erroneous rates will be written off by the workshop accountant at once. Small monthly balances will be allowed to remain on the books until the end of the fiscal year, when they will be written off by a journal entry, viz. :—

Abstract B (workshop repairs)	..	..	..	Dr. Rs.	.....
To process shops accounts—					
Iron foundry	..	..	..	..	Rs.
Steel foundry	..	..	..	..	.....

et seq.

This entry will write off under-absorbed balances.

(Note.—It will be reversed if there has been over-absorption.)

443. (5) *Overhead accounts*.—The routine procedure for the collection of charge to the overhead Accounts and the application of these overheads to the appropriate orders accounts has been dealt with in detail under the head of overhead expenses.

As explained in paragraph 408, the accounts section will receive from the costing section a tabulated statement of labour and applied overheads, form 158.

444. *Under or over absorbed balances.*—The absorption of overheads by an addition of a fixed percentage to the wages will result in balances appearing on the various overhead accounts which will represent overheads either under or over applied. Care must be taken to see that the amount of the overheads applied approximates closely to the actual overheads, and should large balances arise from the use of erroneous rates these balances will be written off during the year when disclosed and such adjustments made in the rates as may be necessary.

445. At the end of each year the balances on “shop overheads applied” accounts will be transferred to the relative “shop overhead expenses” account. When this transfer has been made, there will be small balances remaining on the books and these will be written off by a journal entry, *viz.* :—

Abstract B (workshop repairs)	..	..	..	Dr. Rs.
To shop overheads applied	..	..	..	Rs.
To General workshop overheads applied	..	..	..	Rs.
To General administration and depreciation, Abstract “B” applied	..	..	..	Rs.

This entry will write off under absorbed balances.

(*Note.*—It will be reversed if there has been an over-absorption.)

446. (6) *Work in progress accounts.*—*Debits.*—The statements necessary for the preparation of monthly journal entries debiting the work in progress accounts with labour, material and overheads and crediting the relative accounts have been dealt with in detail in sections IV, V and VI of this appendix.

Credits.—The next step is to clear the work in progress accounts. The necessary journal entries will be prepared from statements furnished by the costing section, and will be :—

Schedule A	No. 9	(a)	for engine repairs (monthly).
..	..	9	(b) for engine new construction orders (when completed).
..	..	10	(c) for standing orders (when completed).
..	..	11	(d) for sundry orders (when completed).
..	..	7	(e) for manufacturing orders for stores (when completed).

[*Note.*—The entries for carriage and wagon repair and construction orders will be similar to (a) and (b) above.]

447. The effect of these entries will be to clear all work in progress accounts. For all jobs covered by (a) to (d) above, the debit to the General Ledger Control Account will be the ascertained cost. In respect of manufactures for stores (e) above, the debit to the General Ledger Control Account will be the official price list value of the articles manufactured. It will happen that this official price list value will differ slightly from the ascertained cost of manufacturing the articles concerned. These small differences will be cleared from the work in progress order in the manner illustrated in the journal entry Schedule A, No. 8, *i.e.*, by debiting General Workshop Overhead Account and crediting Manufacturing Orders for Stores Account with the amount by which the ascertained cost exceeds the official price list value, and *vice versa*.

448. *Monthly balances in work in progress accounts.*—It will be the duty of the accounts section to see that the balances in the work in progress control accounts agree with cost ledger balances grouped accordingly.

449. (7) *Monthly reports.*—The accounts section will submit to the central accounting office not later than the 10th of each month a Summary of Workshop Transactions and Balances, form 160, with supporting schedules, forms 161 to 168. showing details of :—

- (a) Items taken into workshop accounts.
- (b) Transfers to the central accounting office (General Ledger Control Account).
- (c) Balances.

450. Card of accounts for workshop ledgers.—The following is the card of accounts for the workshop ledgers :—

(1) Locomotive Workshop Ledger Accounts.

General :—

- 001 General Ledger.
- 002 Bonus and/or piece-work losses :—

Shop overhead applied.

- 003 Bolt and nut.
- 004 Boiler.
- 005 Brass finishing.
- 006 Boiler mounting.
- 007 Chain.
- 008 Copper and tinsmith.
- 009 Electric arc welding.
- 0010 Erecting.
- 0011 Forge.
- 0012 Fitting.
- 0013 Machine (including tool room).
- 0014 Motion.
- 0015 Oxy-acetylene.
- 0016 Paint.
- 0017 Permanent way.
- 0018 Spring.
- 0019 Smithy.
- 0020 Tender.
- 0021 Wheel.
- 0022 Millwright.
- 0023 Pattern shop.
- 0031 General workshop overhead applied.
- 0032 General administration and depreciation, abstract B, applied.

Job shops, labour :—

- Bolt and nut :—
 - 01 Skilled.
 - 02 Semi-skilled
- Boiler :—
 - 03 Skilled,
 - 04 Semi-skilled.
- Brass finishing :—
 - 05 Skilled.
 - 06 Semi-skilled.
- Boiler mounting :—
 - 07 Skilled.
 - 08 Semi-skilled.
- Chain :—
 - 09 Skilled.
 - 010 Semi-skilled.
- Copper and tinsmith :—
 - 011 Skilled.
 - 012 Semi-skilled.
- Electric arc welding :—
 - 013 Skilled.
 - 014 Semi-skilled.
- Erecting :—
 - 015 Skilled.
 - 016 Semi-skilled.
- Forge :—
 - 017 Skilled.
 - 018 Semi-skilled.
- Fitting :—
 - 019 Skilled.
 - 020 Semi-skilled.

Job shops, labour :—continued.

	Machine (including tool room).
021	Skilled.
022	Semi-skilled.
	Motion :—
023	Skilled.
024	Semi-skilled.
	Oxy-acetylene :—
025	Skilled.
026	Semi-skilled.
	Paint :—
027	Skilled.
028	Semi-skilled.
	Permanent way :—
029	Skilled.
030	Semi-skilled.
	Spring :—
031	Skilled.
032	Semi-skilled.
	Smithy :—
033	Skilled.
034	Semi-skilled.
	Tender :—
035	Skilled.
036	Semi-skilled.
	Wheel :—
037	Skilled.
038	Semi-skilled.
	Millwright :—
039	Skilled.
040	Semi-skilled.
	Pattern shop :—
041	Skilled.
042	Semi-skilled.

Process shops :—

060-064	Iron foundries.
	(A separate account for each foundry.)
065	Steel foundry.
066-079	Brass foundry mixtures.
	(A separate account for each principal mixture, and one account for all minor mixtures.)
080	Rolling mill.

Shop overhead expenses :—

0100	Bolt and nut.
0125	Boiler.
0150	Brass finishing.
0175	Boiler mounting.
0200	Chain.
0225	Copper and tinsmith.
0250	Electric arc welding.
0275	Erecting.
0300	Forge.
0325	Fitting.
0350	Machine (including tool room)
0375	Motion.
0400	Oxy-acetylene.
0425	Paint.
0450	Permanent way.
0475	Spring.
0500	Smithy.

Shop overhead expenses :—continued.

- 0525 Tender.
- 0550 Wheel.
- 0575 Millwright.
- 0600 Pattern shop.
- 0800 General workshop overhead expenses.
- 0900 General administration and depreciation, abstract B, expenses.

Work in Progress Accounts :—

- 0 Engine Repair and Construction Orders.
- Standing Orders :—*
- 2600 Recoverable expenditure for work done not exceeding Rs. 200 on orders received from either other Government Departments or employees of the Home Railway.
- 2610 Irrecoverable expenditure for work done not exceeding Rs. 500 for other departments of the Home Railway, chargeable to expenditure abstracts.
- 2700 *Sundry Orders :—*
 - (a) For work similar to standing orders above but exceeding Rs. 200 and Rs. 500, respectively.
 - (b) For repairs to machinery and equipment exceeding Rs. 200 per unit, orders for which originate in the main progress office.
 - (c) All work done for other railways or individuals chargeable to them on completion and not otherwise provided for above.
- 5000 Manufacturing orders for stores.

*(2) Carriage and Wagon Workshop Ledger Accounts.**General :—*

- 001 General ledger.
- 002 Bonus and/or piece work losses.
- Shop overheads applied :—*
- 003 Bolt and nut.
- 004 Brass finishing.
- 005 Chain.
- 006 Copper and tinsmith.
- 007 Carriage erecting.
- 008 Carriage repair.
- 009 Electric arc welding.
- 0010 Forge.
- 0011 Machine (including tool room).
- 0012 Oxy-acetylene.
- 0013 Paint.
- 0014 Permanent way.
- 0015 Spring.
- 0016 Smithy.
- 0017 Train lighting.
- 0018 Upholstering.
- 0019 Wheel.
- 0020 Wagon erecting.
- 0021 Woodworking.
- 0022 Millwright.
- 0023 Pattern shop.
- 0031 General workshop overhead applied.
- 0032 General administration and depreciation, abstract B, applied.

Job shops, labour :—

- Bolt and nut :—
- 01 Skilled.
- 02 Semi-skilled.
- Brass finishing :—
- 03 Skilled.
- 04 Semi-skilled.

Job shops, labour :—continued.

	Chain :—
05	Skilled.
06	Semi-skilled.
	Copper and tinsmith :—
07	Skilled.
08	Semi-skilled.
	Carriage erecting :—
09	Skilled.
010	Semi-skilled.
	Carriage repair:—
011	Skilled.
012	Semi-skilled.
	Electric arc welding :—
013	Skilled.
014	Semi-skilled.
	Forge :—
015	Skilled.
016	Semi-skilled.
	Machine (including tool room) :—
017	Skilled.
018	Semi-skilled.
	Oxy-acetylene :—
019	Skilled.
020	Semi-skilled.
	Paint :—
021	Skilled.
022	Semi-skilled.
	Permanent way :—
023	Skilled.
024	Semi-skilled.
	Spring :—
025	Skilled.
026	Semi-skilled.
	Smithy :—
027	Skilled.
028	Semi-skilled.
	Train lighting :—
029	Skilled.
030	Semi-skilled.
	Upholstering :—
031	Skilled.
032	Semi-skilled.
	Wheel :—
033	Skilled.
034	Semi-skilled.
	Wagon erecting :—
035	Skilled.
036	Semi-skilled.
	Woodworking :—
037	Skilled.
038	Semi-skilled.
	Millwright :—
039	Skilled.
040	Semi-skilled.
	Pattern shop :—
041	Skilled.
042	Semi-skilled.

Process shops :—

- 060-065 Iron foundries.
(A separate account for each foundry.)
- 066-079 Brass foundry mixtures.
(A separate account for each principal mixture and one account for all minor mixtures.)
- 080-081 Saw mill.
(A separate account for first and second cuts.)

Shop overhead expenses :—

- 0100 Bolt and nut.
- 0125 Brass finishing.
- 0150 Chain.
- 0175 Copper and tinsmith.
- 0200 Carriage erecting.
- 0225 Carriage repair.
- 0250 Electric arc welding.
- 0275 Forge.
- 0300 Machine (including tool room).
- 0325 Oxy-acetylene.
- 0350 Paint.
- 0375 Permanent way.
- 0400 Spring.
- 0425 Smithy.
- 0450 Train lighting.
- 0475 Upholstering.
- 0500 Wheel.
- 0525 Wagon erecting.
- 0550 Wood-working.
- 0575 Millwright.
- 0600 Pattern shop.
- 0800 General workshop overhead expenses.
- 0900 General administration and depreciation, abstract B.

Work in Progress accounts :—

- 0 Construction and assembly of new carriages.
- 1000 Construction and assembly of new wagons.

Standing orders :—

- 2000 Repairs to carriages.
- 2010 Repairs to wagons.
- 2100 Recoverable expenditure for work done not exceeding Rs. 200 on orders received from either other Government Departments or employees of the Home Railway.
- 2110 Irrecoverable expenditure for work done not exceeding Rs. 500 for other departments of the Home Railway, chargeable to expenditure abstract.

2200 Sundry Orders :—

- (a) For work similar to standing orders above but exceeding Rs. 200 and Rs. 500 respectively,
- (b) For repairs to machinery and equipment exceeding Rs. 200 per unit, orders for which originate in the main progress office.
- (c) All work done for other railways or individuals chargeable to them on completion and not otherwise provided for above.
- 5000 Manufacturing orders for stores.

SCHEDULE A.

.....RAILWAY.

JOURNAL ENTRY.

No. 1.

Month.....192....

Nos.	Description.	Dr.	Cr.
		Rs. a. p.	Rs. a. p.
	JOB SHOPS :—		
	BOLT AND NUT—		
01	Skilled .. .. .	..
02	Semi-skilled .. .. .	..
	BOILER—		
03	Skilled .. .. .	..
04	Semi- killed .. .. .	..
	<i>et seq—vide card of accounts, paragraphs 450-451.</i>		
	PROCESS SHOPS—		
060	IRON FOUNDRY .. .. .	..
061	IRON FOUNDRY .. .. .	..
065	STEEL FOUNDRY .. .. .	..
	<i>et seq—vide card of accounts, paragraph 450—451.</i>		
	SHOP OVERHEADS—		
0100	BOLT AND NUT .. .. .	..
0125	BOILER .. .. .	..
0150	BRASS FINISHING .. .. .	..
0175	BOILER MOUNTING .. .. .	..
	<i>et seq—vide card of accounts, paragraphs 450—451.</i>		
0800	GENERAL WORKSHOP OVERHEAD ..	..
001	To GENERAL LEDGER CONTROL ACCOUNT		

. This entry to take up and allocate day rate pay sheets from the summary of day rate expenditure, form 152, received from labour section.

Prepared by.....Clerk.

Verified by.....Head Clerk.

Approved for entry by.....Assistant Workshop Accountant.

Posted by.....Clerk.

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 2.

Month.....192....

Nos.	Description.	Dr.	Cr.
		Rs. a. p.	Rs. a. p.
0	ENGINE REPAIR AND CONSTRUCTION ORDERS..		
2600	STANDING ORDER		
2610	STANDING ORDER		
2700	SUNDRY ORDERS		
5000	MANUFACTURING ORDERS FOR STORES ..		
002	BONUS AND/OR PIECEWORK LOSSES		
	(Difference between bonus or piece work earnings and guaranteed day rate wages subject to recovery).		
001	To GENERAL LEDGER CONTROL ACCOUNT ..		
002	To BONUS AND/OR PIECE WORK LOSSES .. (Recoveries).		

This entry to take up and allocate the bonus and/or piece work wages column of the pay sheets as per tabulation of voucher cards received from the costing section.

Prepared by.....Clerk.

Verified by.....Head Clerk.

Approved for entry by.....Assistant Workshop Accountant.

Posted by.....Clerk.

M421RD

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 3.

Month.....192..

Nos.	Description.	Dr.	Cr.
		Rs. a. p.	Rs. a. p.
	SHOP OVERHEADS—		
0100	<i>BOLT AND NUT</i>		
0125	<i>BOILER</i>		
0150	<i>BRASS FINISHING</i>		
0175	<i>BOILER MOUNTING</i>		
	<i>et seq—vide card of accounts, paragraphs 450—451.</i>		
	PROCESS SHOPS—		
060	<i>IRON FOUNDRY</i>		
061	<i>IRON FOUNDRY</i>		
065	<i>STEEL FOUNDRY</i>		
	<i>et seq—vide card of accounts, paragraphs 450—451.</i>		
0	ENGINE REPAIR AND CONSTRUCTION ORDERS..		
2600	STANDING ORDER		
2610	STANDING ORDER		
2700	SUNDRY ORDERS		
5000	MANUFACTURING ORDERS FOR STORES ..		
	To JOB SHOPS LABOUR ACCOUNTS :—		
	<i>BOLT AND NUT—</i>		
01	Skilled		
02	Semi-skilled		
	<i>BOILER—</i>		
03	Skilled		
04	Semi-skilled		
	<i>et seq—vide card of accounts, paragraphs 450—451.</i>		

This entry to allocate skilled and semi-skilled day rate labour to Work in Progress and overhead accounts.

Note.—There will be idle time on the part of skilled and semi-skilled labour; there may also be repairs to Machinery and Equipment and other overhead expenditure.

Prepared by.....Clerk.

Verified by.....Head Clerk.

Approved for entry by.....Assistant Workshop Accountant.

Posted by.....Clerk.

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 4.

..... Month.....192.....

Nos.	Description.	Dr.	Cr.
		Rs. a. p.	Rs. a. p.
	PROCESS SHOPS—		
060	IRON FOUNDRY		
061	IRON FOUNDRY		
065	STEEL FOUNDRY		
	<i>et seq—vide card of accounts, paragraphs 450—451</i>		
	SHOP OVERHEADS—		
0100	BOLT AND NUT		
0125	BOILER		
0150	BRASS FINISHING		
0175	BOILER MOUNTING		
	<i>et seq—vide card of accounts, paragraphs 450—451.</i>		
0800	GENERAL WORKSHOP OVERHEAD		
0	ENGINE REPAIR AND CONSTRUCTION ORDERS..		
2600	STANDING ORDER		
2610	STANDING ORDER		
2700	SUNDRY ORDERS		
5000	MANUFACTURING ORDERS FOR STORES ..		
001	To GENERAL LEDGER CONTROL ACCOUNT ..		

This entry to take up and allocate stores issues as per tabulation.

Prepared by.....Clerk.

Verified by.....Head Clerk.

Approved for entry by.....Assistant Workshop Accountant.

Posted by.....Clerk.

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 5.

Month.....192...

Nos.	Description.	Dr.	Cr.
		Rs. a. p.	Rs. a. p.
0	ENGINE REPAIR AND CONSTRUCTION ORDERS..		
2600	STANDING ORDER.		
2610	STANDING ORDER.		
2700	SUNDRY ORDERS		
5000	MANUFACTURING ORDERS FOR STORES ..		
	To SHOP OVERHEADS APPLIED—		
003	BOLT AND NUT		
004	BOILER		
005	BRASS FINISHING		
	<i>et seq—vide card of accounts, paragraphs 450—451.</i>		
0800	To GENERAL WORKSHOP OVERHEAD APPLIED		
0900	To GENERAL ADMINISTRATION AND DEPRECIATION, ABSTRACT B APPLIED.		

This entry to allocate overheads to engine repair and construction orders in progress (Item 1) and all other orders at completion (Items 2, 3, 4 and 5).

Prepared by.....Clerk.
 Verified by.....Head Clerk.
 Approved for entry by.....Assistant Workshop Accountant
 Posted by.....Clerk.

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 6.

Month192.....

Nos.	Description.	Dr.	Cr.
		Rs. a. p.	Rs. a. p.
001	GENERAL LEDGER CONTROL ACCOUNT ..		
	SHOP OVERHEADS—		
0100	BOLT AND NUT		
0125	BOILER		
0150	BRASS FINISHING		
0175	BOILER MOUNTING		
	<i>et seq—vide card of accounts, paragraphs 450—451.</i>		
2600	STANDING ORDER		
2610	STANDING ORDER		
2700	SUNDRY ORDERS		
	To PROCESS SHOPS—		
060	IRON FOUNDRY		
061	IRON FOUNDRY		
065	STEEL FOUNDRY		
	<i>et seq—vide card of accounts, paragraphs 450—451</i>		

This entry to transfer the completed outturn of process shops, viz.—

Castings, etc., for stores—to the General Ledger Control Account.

Overheads charged against job shops—to the Shop Overheads Accounts.

Castings, etc., for government departments, employees, etc., and other items not taken into stores—to the accounts 2600—2610, 2700.

Prepared by.....Clerk.

Verified by.....Head Clerk.

Approved for entry by.....Assistant Workshop Accountant.

Posted by.....Clerk.

M421RD

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 7.

Month.....192.....

Nos.	Description.	Dr.	Cr.
		Rs. a. p.	Rs. a. p.
0001	GENERAL LEDGER CONTROL ACCOUNT ..		
	PROCESS SHOPS—		
060	IRON FOUNDRY		
061	IRON FOUNDRY		
065	STEEL FOUNDRY		
	<i>et seq—vide card of accounts, paragraphs 450—451.</i>		
	SHOP OVERHEADS—		
0100	BOLT AND NUT		
0125	BOILER		
0150	BRASS FINISHING		
0175	BOILER MOUNTING		
	<i>et seq—vide card of accounts, paragraphs 450—451.</i>		
5000	To MANUFACTURING ORDERS FOR STORES ..		

This entry to transfer the cost of completed articles to stores (general ledger) and new pattern and new tool, jig and fixture orders to the respective process shop and shop overhead accounts as per tabulation.

Prepared by.....Clerk.

Verified by.....Head Clerk.

Approved for entry by.....Assistant Workshop Accountant.

Posted by.....Clerk.

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 8.

Month.....192....

Nos.	Description.	Dr.	Cr.
		Rs. a. p.	Rs. a. p.
0800	GENERAL WORKSHOP OVERHEAD		
5000	To MANUFACTURING ORDERS FOR STORES ...		

This entry to dispose of the difference between actual cost and official price of completed orders transferred to stores.

Note.—This entry may be the reverse of that illustrated, if the official price is higher than actual cost.

Prepared by.....Clerk.
 Verified by.....Head Clerk.
 Approved for entry by.....Assistant Workshop Accountant.
 Posted by.....Clerk.

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 9.

Month.....192....

Nos.	Description.	Dr.	Cr.
		Rs. a. p.	Rs. a. p.
001	GENERAL LEDGER CONTROL ACCOUNT		
0	To ENGINE REPAIR AND CONSTRUCTION ORDERS.		

¹ This entry to transfer monthly engine repairs in progress and completed construction expenditure to the general ledger control account.

Prepared by..... Clerk.

Verified by..... Head Clerk.

Approved for entry by..... Assistant Workshop Accountant.

Posted by..... Clerk.

RAILWAY.

JOURNAL ENTRY.

No. 10.

Month.....192....

Nos.	Description.	Dr.	Cr.
		Rs. a. p.	Rs. a. p.
001	GENERAL LEDGER CONTROL ACCOUNT ..		
2600	To STANDING ORDER		
2610	To STANDING ORDER		

This entry to transfer completed orders to the Central Accounting Office for (1) Collection of charges against Government departments and home line employees, and (2) Inclusion in the expenditure abstracts.

Note.—Deposits and advances will not be carried on the workshop ledger but on the general ledger. The Central Accounting Office, therefore will offset the cost of the work against deposit accounts.

Prepared by.....Clerk.

Verified by.....Head Clerk.

Approved for entry by.....Assistant Workshop Accountant.

Posted by.....Clerk.

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. II.

Month.....192....

Nos.	Description.	Dr.	Cr.
		Rs. a. p.	Rs. a. p.
001	GENERAL LEDGER CONTROL ACCOUNT ..		
	SHOP OVERHEADS—		
0100	BOLT AND NUT		
0125	BOILER		
0150	BRASS FINISHING		
0175	BOILER MOUNTING		
	<i>et seq—vide card of accounts, paragraphs 450—451.</i>		
2700	TO SUNDRY ORDERS		

This entry to transfer the cost of :—

- (1) Completed articles to the general ledger for collection or offset against deposits.
- (2) Repairs to machinery and equipment done on special orders to shop overheads accounts.
- (3) Orders from other departments now completed to the appropriate abstract accounts.

Prepared byClerk.

Verified byHead Clerk.

Approved for entry byAssistant Workshop Accountant.

Posted byClerk.

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 12.

Month.....192....

Nos.	Description.	Dr.	Cr.
		Rs. a. p.	Rs. a. p.
0900	GENERAL ADMINISTRATION AND DEPRECIATION ABSTRACT B		
001	To GENERAL LEDGER CONTROL ACCOUNT		

This entry to take up general administration and depreciation charges passed to the workshop ledger by the general ledger.

Prepared by.....Clerk.

Verified by.....Head Clerk.

Approved for entry byAssistant Workshop Accountant.

Posted by.....Clerk.

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 13.

Month.....192....

Nos.	Description.	Dr.	Cr.
		Rs. a. p.	Rs. a. p.
	PROCESS SHOPS—		
060	IRON FOUNDRY		
061	IRON FOUNDRY		
065	STEEL FOUNDRY		
	<i>et seq.—vide card of accounts, paragraphs 450—451.</i>		
	SHOP OVERHEADS—		
0100	BOLT AND NUT		
0125	BOILER		
0150	BRASS FINISHING		
0175	BOILER MOUNTING		
	<i>et seq.—vide card of accounts, paragraphs 450—451.</i>		
0800	GENERAL WORKSHOP OVERHEAD		
0	ENGINE REPAIR AND CONSTRUCTION ORDERS..		
001	To GENERAL LEDGER CONTROL ACCOUNT ..		

This entry to take up and allocate Sundry General Ledger charges.

Note.—In addition to Workshop pay sheets and stores issues there will be sundry charges which will be passed to the workshop for incorporation in the workshop accounts.

Prepared by.....Clerk.

Verified by.....Head Clerk.

Approved for entry by.....Assistant Workshop Accountant.

Posted by.....Clerk.

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 14.

Month... 192....

Nos.	Description.	Dr.	Cr.
		Rs. a. p.	Rs. a. p.
	PROCESS SHOPS—		
060	<i>IRON FOUNDRY</i>		
061	<i>IRON FOUNDRY</i>		
065	<i>STEEL FOUNDRY</i>		
	<i>et seq.—vide card of accounts, paragraphs 450—451.</i>		
0800	To GENERAL WORKSHOP OVERHEAD		

This entry to transfer a proportion of general workshop overhead to process shops.

Prepared by.....Clerk.

Verified by.....Head Clerk.

Approved for entry by.....Assistant Workshop Accountant.

Posted by.....Clerk.

M421RD

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 15.

Month.....192....

Nos.	Description.	Dr.	Cr.
		Rs. a. p.	Rs. a. p.
001	GENERAL LEDGER CONTROL ACCOUNT ..		
0	To ENGINE REPAIR AND CONSTRUCTION ORDERS		
2600	To STANDING ORDER		
2610	To STANDING ORDER		
2700	To SUNDRY ORDERS.. .. .		
5000	To MANUFACTURING ORDERS FOR STORES ..		

This entry to charge general ledger and credit orders with the value of materials returned to stores.

Prepared by.....Clerk.

Verified by.....Head Clerk.

Approved for entry by.....Assistant Workshop Accountant.

Posted by.....Clerk.

APPENDIX VI.

SECTION II.

SYSTEM OF ACCOUNTING FOR SUNDRY WORKSHOPS.

452. The sundry workshops are :—

- (1) Printing.
- (2) Uniform.
- (3) Bridge.
- (4) Signal.

At each of these the necessary accounting staff will be responsible to and under the control of the Workshop Accountant of the Railway concerned, and the principal clerk will receive the title of Assistant Workshop Accountant or Accountant-in-charge at.....Workshop, according to the size and importance of the undertaking.

453. The pay sheet procedure for Locomotive and Carriage and Wagon Workshops will be followed in all sundry workshops with the following modifications :—

- (a) at the small workshops Remington accounting machines will not be required,
- (b) when the workshops are located close to the central accounting office the pay sheets will be sent there for verification and make-up or wages.

Printing.

454. For costing purposes each workshop will be divided into the following principal shops :—

- (a) Composing.
- (b) Stereotyping.
- (c) Printing.
- (d) Binding.

455. The pay sheets will be grouped accordingly and the direct and indirect labour for each shop entered on a Statement of Workshop Transactions and Balances, form 169.

456. Material will be requisitioned, from the stores department only as required on Standard Material Requisitions, form 97. All material documents will be priced by the Assistant Workshop Accountant from the official price lists, and in respect of each class of document he will prepare a separate list on form 157 and send one copy of each list to the Central Accounting Office, Stores Section, so that the necessary entries may be made in the priced stores records.

457. A Schedule of Standard (or estimated) Costs for each kind of outturn will be prepared by the manager on form 170. All outturn will be costed accordingly and entered on a "Statement of Outturn," form 171, from which the total labour and material items for the month will be allocated on form 169, under "Outturn."

458. All outturn will be transferred to stores on Manufactured Products to Stores Notes, form 106. The notes will be costed by the Assistant Workshop Accountant and a daily list thereof, tabulated on form 157, will be sent to the Central Accounting Office.

459. The total monthly outturn costed at standard prices will not agree with the actual expenditure for the month. The statement of workshop transactions and balances will show the labour, overhead, and material balances at the end of each month, and these balances will represent the work in progress and over or under absorbed items. Twice in each fiscal year an estimate of the work in progress will be made by the manager, and any balance then remaining above or below the value of the work in progress will be written off by the Central Accounting Office.'

460. The following monthly reports will be passed to the Chief Accountant :—

(a) Statement of workshop transactions and balances, form 169.

(b) Manufactured products transferred to stores, form 166.

The latter statement is a summary of the daily reports of manufactured products to stores, form 157.

Uniform.

461. The accounting procedure outlined for the printing workshops will be used in the uniform workshops, the operations in this case being marking off, cutting, sewing, etc.

Bridge.

462. *Orders.*—Jobs exceeding Rs. 500 will be costed on special orders numbered from 101 upwards. Jobs not exceeding Rs. 500 will be charged to standing order 100.

463. *Labour.*—This expenditure will be classified under (a) direct and (b) in direct labour. The former will be charged to orders; the latter to overhead. The time of each direct worker will be booked twice daily to orders on the Time Sheet, form 172, and these sheets will also serve for the agreement of the booked and pay sheet times. The time tickets will be summarised on form 173.

464. *Material.*—The workshops store will be in charge of a representative of the stores department, and issues of material will be made on Material Delivery Notes, form 99. Returns to stores will be entered on form 107, and dealt with as detailed in Appendix V. The workshop accounting staff will price, from official price lists, the delivery and returned notes, and will prepare in duplicate daily statements thereof on form 157 and send one copy of each to the Central Accounting Office, Stores Section, the items on each statement being listed in the serial order of pricelist numbers.

465. *Overhead.*—These expenses will consist principally of workshop labour and stores issues. There will also be charges for sundry items such as power, fuel, etc., which will be passed to the workshop through the Central Accounting Office. The overhead expenses will be spread over orders by the use of a fixed percentage rate addition to the direct labour on each order as explained fully in Section I of this appendix, and any large balance arising from the use of the fixed rate will be written off at once and the rate corrected. Small balances may be allowed to remain on the books until the end of the year, when they will be written off by the assistant workshop accountant.

466. *Costing.*—During the course of the month each completed order will be costed and entered on Statement of work in progress, form 174. The labour will be taken from form 173, overheads will be added, as explained above, and the material will be obtained from an adding machine total of the material documents applicable to that order. All work in progress at the end of each month will also be entered on this statement.

467. *Transfer of completed orders to appropriate accounts.*—These transfers will be recorded on form 174. Completed jobs included in standing order No. 100 will be costed and transferred at standard (or estimated) cost. Manufactured products to stores notes will be prepared by the assistant workshop accountant for all transfers to stores and a daily statement thereof on form 157, arranged in the serial order of price-list numbers, forwarded to the Central Accounting Office, Stores Section.

468. *Accounts.*—Within ten days after the end of the month the assistant workshop accountant will prepare a statement of workshop transactions and balances, form 160, with the following supporting schedules :—

Items included in the monthly accounts.

Pay sheets form 161.

Workshops store, form 162.

Central accounting office charges, form 163.

Items transferred to General Ledger.

New construction completed, form 164.

Expenses, form 165.

Manufactured products to stores, form 166.

Work done for others, form 167.

Balances at the end of the month.

Work in progress, form 168.

469. At the end of each six months, the bridge engineer will prepare for the assistant workshop accountant a detailed estimate of the work in progress in standing order account No. 100. Any balance in this account over or under the estimated value of the work in progress will represent under or over absorbed expenses and will be written off, at once by the assistant workshop accountant by a debit or credit to account No. 226, and a relative adjustment of standing order account No. 100.

Signal.

470. *Labour.*—The wages will be allocated by the Accountant in charge on form 175. Separate statements will be prepared for the charges applicable to each division, and the sum of these statements must agree with the total of the monthly pay sheet. One copy of these statements will be sent to the Central Accounting Office for incorporation in the accounts.

471. *Material.*—Standard material requisitions, form 97, will be prepared and signed by the signal engineer and sent to the stores when the small stocks carried at the signal workshop require replenishing. All material requisitions will be priced in the workshop accounting office, the procedure being similar to that outlined in paragraph 456.

472. *Costing.*—Only jobs chargeable to asset accounts will be costed and form 176 will be used for the collection of these costs. At completion, the cost of these jobs will be credited to the abstract accounts previously charged and debited to the appropriate asset accounts.

473. *Accounts.*—The monthly reports to the Central Accounting Office will be as follows:—

(a) Allocation of pay sheets form, 175, referred to in paragraph 470.

(b) Monthly journal entry for transfer of cost of completed jobs from abstract accounts to appropriate asset accounts, referred to in the preceding paragraph.

APPENDIX VII.

SYSTEM OF ACCOUNTING FOR THE ELECTRICAL DEPARTMENT.

474. The Electrical Department Accounting Staff will be responsible to and under the control of the workshop accountant of the railway concerned. There will be an assistant accountant, electrical department, in charge of the books and records, and he will maintain detailed accounts for the following expenditure :—

- (1) (a) Generation and distribution of power, including maintenance of transmission systems.
- (b) Purchased power.
- (2) Maintenance of electrical equipment used in (a) service buildings, (b) offices., (c) stations, (d) yards, and (e) along the line.
- (3) Maintenance of electrical equipment used in workshops.
- (4) Repair work done in electrical shop.
- (5) New construction.

475. The detailed procedure will be as follows :—

Work Orders.—Work orders will not be issued for the routine items given under (1), (2) and (3) above. For items (4) repairs, and (5) new construction, the electrical engineer will issue a work order, form 177, in triplicate for each job and these orders will be numbered from 1,000 to 4,999 when for repairs, and from 5,000 upwards when for new construction. The repairs series of order numbers are for identification only, as electrical shop time on repair jobs will be charged from the pay sheets to Account No. 770. One copy of each order will be sent to the shop or line foreman, one copy to the assistant accountant, and one copy will be retained by the electrical engineer.

476. *Labour.*—The electrical shop muster rolls, form 147, will be prepared by the locomotive or carriage and wagon workshop time office. Those for gangs working permanently outside the shop will be prepared by timekeepers or foremen. All completed muster rolls will be sent to the assistant accountant for the preparation of monthly pay sheets, form 149. The method of preparing and checking the pay sheets and payment of wages is described in detail in Appendix VI. The time will be booked on form 172 by time clerks under the control of the assistant accountant. When the size of gangs working on the line or in generating plants does not warrant the services of a timekeeper, the booking will be done by foremen.

477. *Materials.*—Materials in the custody of the stores department will be issued to the electrical department on material delivery notes, form 99. Material returned to stores will be entered on form 107 and dealt with as detailed in Appendix V. All material notes will be priced from official price lists by the assistant accountant's staff.

478. *General Accounting Office Charges.*—The Electrical Department will receive debit notes from :—

- (a) The Central Accounting Office for general administration and depreciation expenses, Abstract H.
- (b) The Stores Department for stationery, forms, etc., received from the general stores,
- (c) Other departments and workshops for services, fuel, etc.

479. *Allocation of Expenditure.*—Expenditure will be charged to the following account numbers in the Electrical Abstract H :—

<i>Numbers.</i>	<i>Accounts.</i>
<i>General Administration.</i>	
	(a) Salaries—
750	(i) Administrative and Executive Officers.
751	(ii) Subordinate supervising staff.
752	(iii) Office staff.
753	(b) Travelling and other allowances.
754	(c) Provident Fund bonus.
755	(d) Gratuities for good service.
756	(e) Miscellaneous.

Numbers.

Accounts.

Ordinary Repairs and Maintenance.(1) *Electric Generating Stations* :—*Generating Plants—*

- 760 (a) Running repairs.
- 761 (b) Workshop repairs.
- 762 (c) Cables.

Sub-stations.

- 763 (a) Running repairs.
- 764 (b) Workshop repairs.
- 765 (c) Cables.
- 766 (d) Transformers.

Equipment—

- 767 (a) Machinery and tools.
- 768 (b) Sundries.

769 (2) *Transmission Lines.*(3) *Electrical Equipment—*

- 770 (a) In electrical workshop.
- 771 (b) In other workshops.
- 772 (c) In other departments.

*Operating Expenses.*775 (1) *Electric Power Purchased.*(2) *Electric Power generated.*

- 776 (a) Wages.
- 777 (b) Provident Fund bonus.
- 778 (c) Gratuities for good service.
- 779 (d) Fuel.
- 780 (e) Oil, waste, and other stores.
- 781 (f) Water.
- 782 (g) Miscellaneous expenses.

*Depreciation and Renewals**Electric Power Stations.*

- 790 (a) Buildings.
- 791 (b) Plant.
- 792 (c) Transmission lines.

5000 upwards

New Construction.

Pay sheet and material expenditures on the line chargeable to repairs under Account No. 772 will be allocated on time sheets and material notes to the appropriate account numbers in the various expenditure abstracts. In the case of charges to repairs, under Account No. 771, the particular workshop will be indicated on time sheets and material notes by a numerical prefix beginning with 01 and the amount will be charged out to those workshops on debit notes.

480. *Costing—Time sheets and material notes.*—The time sheets will be received by the assistant accountant from time clerks and foremen tri-monthly up to the 10th, 20th and last day of the month. Material delivery and returned to stores notes will be received currently from the stores department and the costing clerks will insert the rates or unit prices and calculate with a Dalton machine the money value applicable to each account or order. As each clerk completes a bundle of time sheets or material notes, he will pass them with the attached initialled Dalton strip to a second clerk, who will verify the rates, prices and calculations. The bundles with the two strips attached will then be passed to operators, who will punch a Hollerith or Powers card for the amounts applicable to each account or order as indicated on the time sheets and material notes. Each bundle of cards will then be check-punched, after which they will be sent by messenger to the machine-room at the locomotive workshop, where they will be tabulated and the tabulated results sent back to the electrical department to be agreed with the Dalton strips.

481. Thereafter, the cards will be passed through sorting and tabulating machines to obtain :—

- (1) Daily tabulation on form 157 of (a) material deliveries by and (b) returns to stores.
- (2) Monthly tabulation on form 158 total amount earned by each man.
- (3) Monthly tabulation on forms 127 and 157 of labour and material charges to each order.

The first tabulation above will be prepared in duplicate in the serial order of price list numbers and a copy thereof forwarded to the central accounting office so that the necessary postings may be made to the priced stores records.

The second tabulation will be used to agree the booked time with the pay sheets.

The third tabulation will give the labour and material allocations to :—

- (a) Account numbers in this abstract for generation and distribution of power accounts, viz., 760 to 769 and 776 to 782.
- (b) Other departments according to account numbers in the abstracts relating thereto.
- (c) New construction orders in the shops and on the line, Nos. 5,000 upwards.

482. *Repair work done in electrical shops.*—The completed work orders (series 1000 to 4999) will be costed at schedule costs prepared by the electrical engineer and allocated to :—

- (a) Accounts under (a), (b) and (c), in paragraph 481.
- (b) Stores for units or parts manufactured or repaired.
- (c) Work done for other workshops.

The accounts under (a) above will be combined with those of Tabulation No. 3 of the preceding paragraph.

483. *Apportionment of (a) general administration, and (b) depreciation expenses.*—This combined expense will be apportioned on the basis of direct labour costs over the following accounts and orders :—

- (1) Account numbers in this abstract for generation and distribution of power accounts, viz., 760 to 769 and 776 to 782.
- (2) Other departments according to account numbers in the abstracts relating thereto.
- (3) New construction orders in the shops and on the line. Nos. 5000 upwards.
- (4) Stores for units or parts manufactured or repaired.
- (5) Work done for other workshops.

484. *Manufactured products to stores and work done for other workshops.*—Manufactured products to stores notes, form 106, will be prepared by the electrical engineer, costed by the assistant accountant and dealt with as detailed in Appendix V. Debit notes form 178, for work done for other workshops, will be prepared in triplicate by the assistant accountant and one copy sent to the workshop concerned and one copy to the central accounting office with the monthly reports.

485. *Apportionment of cost of generation and distribution of power (Accounts Nos. 760 to 769 and 776 to 782).*—A rate per K. W. H. will be fixed by the workshop accountant with the approval of the electrical engineer and on this basis the cost of generation and distribution of power will be charged against the consuming departments and workshops. The assistant accountant will allocate departmental charges to the appropriate account numbers and the various expenditure abstracts, and prepare, in triplicate, debit notes, form 178, for workshop charges. One copy of the latter will be sent to the workshop concerned within five days after the close of the month; the second copy will go to the Central Accounting Office with the monthly reports and the third copy will be retained by the assistant accountant.

486. *Accounts.*—Within ten days after the close of the month, the assistant accountant will prepare and send the following statements to the central accounting office:—

- (1) Abstract "H".
- (2) Statement of workshop transactions and balances, form 160, with the following detailed schedules:—

Items included in the monthly accounts—

- Pay sheets, form 161.
- Workshop stores, form 162.
- Central accounting office charges, form 163.

Items transferred to general ledger—

- New construction completed, form 164.
- Expenses, form 165.
- Manufactured products to stores, form 166.
- Work done for other workshops, form 167.

Balances at the end of the month—

- Work in progress, form 168.

487. The use of schedule costs for the costing of repair work done by the electrical shops and fixed rates for power consumption charges against other departments may result in small monthly balances in the respective accounts. No detailed monthly statements of the repairs work in progress in the electrical shops will be prepared, but twice each year the electrical engineer will submit a detailed estimate of the work in progress to the assistant accountant. Any balance in this account above or below the value of the estimated work in progress will represent under or over-absorbed expenses and will be written off at once by the assistant accountant as either a debit or credit to the appropriate abstract accounts and a credit or debit to account 772. The use of a fixed rate for costing power consumption should result in negligible balances. If otherwise, the rate should be changed immediately and the excessive balance apportioned to abstract accounts.

APPENDIX VIII.

SYSTEM OF ACCOUNTING FOR DIVISIONS AND ENGINEERING DISTRICTS.

488. The accounting for expenditure on divisions and engineering districts will be dealt with under the following heads :—

- (1) Budgets and Estimates.
- (2) Accounting.

I.

Budgets and Estimates.

489. *Budgets.*—Each divisional superintendent will prepared in advance a detailed annual budget of the estimated establishment and other working expenses arranged in the order of abstract accounts. These budgets will be based on —

- (a) Detailed maintenance programmes which have received the approval of the chief engineer,
- (b) Estimated operating expenses.

The Central Accounting Office will furnish to each divisional superintendent within fifteen days after the close of each month a detailed statement of monthly expenditure which will so far as possible show units as well as amounts expended under each account. These statements will, with respect to maintenance, enable the divisional superintendent to compare the actual and the estimated cost of work done and keep a close watch on the progress of his maintenance programme.

490. The new construction budget will be compiled by the chief engineer of each railway from reports prepared by the divisional superintendents and district engineers. The estimated expenditure for each job will be classified under the following accounts :—

- (a) New Construction.
- (b) Depreciation Fund.
- (c) Abstract.

New construction work not exceeding a prescribed amount, fixed by the chief engineer, and applicable wholly to one division, will be carried out under the control of the divisional superintendent and the supervision of his divisional engineer. All other new construction work, exclusive of new lines, will be under the supervision of a district or construction engineer. New lines under construction will, as a general rule, be under the supervision of an engineer working directly under the Railway Board.

491. *Estimates.*—Before commencement of work on a new construction job, divisional or district engineers will prepare an estimate in the following detail :—

- (a) Estimate or job number.
- (b) Such description as will permit of its identification in the accounts at a later date.
- (c) Units, description, and cost of labour and material.
- (d) Allocation to accounts.

In the case of projects such as the construction of (a) new lines, and (b) new yards, the estimate will be prepared by the Railway Board's engineer and sub-divided as follows :—

- (1) Preliminary expenses.
 - (2) Land.
 - (3) Formation.
 - (4) Tracks :—
 - (a) First main.
 - (b) Second main.
 - (c) Third main.
 - (d) Sidings.
 - (5) Each bridge :—
 - (a) Masonry.
 - (b) Steel work.
 - (6) Each building.
 - (7) Fencing.
 - (8) Electric overhead.
- et seq.*

492. Each completed estimate with the supporting documents will be passed to the assistant accountant on the division or district for verification of the accounts, allocation. He will note his approval on all copies and return them to the engineer, who will retain one copy and send the remainder to the chief engineer for examination and the necessary approvals. After approval by the proper officers, signed copies of each estimate will be furnished to (a) engineers and operating officers concerned, (b) the chief accountant, and (c) the assistant accountant on the division or district.

493. The central accounting office will prepare detailed statements of expenditure on new construction jobs and send copies thereof monthly to the divisional superintendents and district engineers concerned. These statements and those referred to in paragraph 489 are described fully in Appendix IX dealing with the central accounting office.

II.

Accounting.

494. The accounting on each division and each district will be under the direct control of an assistant accountant. He will be the chief accountant's representative and will be located near the divisional superintendents, the district engineer, or the engineer in charge of new projects. His duties may be grouped as follows :—

- (1) To render general assistance to the divisional superintendent and engineers in the following accounting and staff matters :—
 - (a) Preparation of budgets and statements.
 - (b) Allocation of accounts.
 - (c) Questions arising in connection with (1) bonus deductions and settlements, (2) special pay allowances, and (3) miscellaneous deductions.
 - (d) Interim payments to employees in special cases.
 - (e) Payments to employees leaving the service.
- (2) Examination and verification of accounts allocation on new construction estimates referred to in paragraph 492.
- (3) Accounting for wages, bills and material.

495. The detailed accounting procedure for divisions and engineering districts will be explained under the headings of :—

- (1) Wages.
- (2) Contractors and sundry bills.
- (3) Stores material.

While the reference is to divisions the procedure for both will be similar with the following minor exceptions :—

- (a) Wages on engineering districts will be confined to (1) clerks in district offices, and (2) gangs on new construction under the control of the district engineer.
- (b) Municipal bills will be attended to by divisions.
- (c) Material consumption on engineering districts will be confined to new construction requirements.

496. *Wages.*—Divisional employees may be classified as follows :—

- (a) Clerks in divisional offices, viz. :—
 - (a) Superintendents.
 - (b) Engineers.
 - (c) Permanent-way inspectors.
 - (d) Running sheds.
- (b) Gangs engaged on maintenance of roadway, buildings, bridges and other structures, commonly referred to as roadway gangs.
- (c) Gangs engaged on new construction under the control of the divisional engineer.
- (d) Train examiners, running shed staffs, and all other employees engaged in the maintenance of rolling stock at points other than locomotive and carriage and wagon workshops.

(e) Transportation department employees, *viz.* :

- (i) Station staffs.
- (ii) Engine drivers and firemen.
- (iii) Guards.

497. The wages procedure will be dealt with in the following order :—

- (a) Recording of time worked and mileage run.
- (b) Calculation of wages.
- (c) Preparation and verification of pay sheets.
- (d) Payment of wages.
- (e) Allocation to accounts and orders.

498. *Recording of time worked and mileage run.*—The attendances of all employees, other than engine drivers, firemen, and guards, will be checked twice daily and their time recorded on muster rolls by head clerks and station masters in the case of a clerical and station staffs, and by foremen in the case of roadway gangs, train examiners and running sheds. The time and mileage of engine drivers, firemen and guards will be obtained from drivers and guards reports, which will be checked with train sheets before entry in the time books kept in the superintendent's office. Permanent-way inspectors should make frequent surprise checks of the number of men in roadway gangs and later compare their records with the muster rolls. Divisional engineers and rolling stock and transportation officers should also make occasional surprise checks of the number of men in roadway gangs, running sheds and stations.

499. *Calculation of wages.*—On the last day of each month the muster rolls will be sent to the divisional superintendent's office, where the time worked and the wages due to each man will be calculated and statements of provident fund and income-tax deductions prepared by the pay sheet staff. This work will be done with the aid of Dalton calculating machines, and the Dalton strips, initialled by the clerk, will be gummed to each muster roll and its supporting deduction statements as evidence. The timebook procedure will be similar to that of the muster rolls.

500. *Preparation and verification of pay sheets.*—The "Pay sheets," form 149, will be prepared by the pay sheet staff with the aid of Remington accounting machines. The procedure to be followed has been explained fully in Appendix VI, and it is not considered necessary here to repeat the detail.

501. After the pay sheet totals have been agreed with the totals of muster rolls, time books, and deduction statements, all the documents will be passed to the assistant-accountant for verification. He will record the pay sheets in the "Register of pay sheets and bills received," and proceed with the following verification :—

- (a) Rates of pay.
- (b) Number of men and amounts sanctioned.
- (c) Arithmetical accuracy of muster rolls, time books, and deduction statements.
- (d) Agreement of pay sheet totals with the totals of the supporting documents.
- (e) Scrutiny of approvals on muster rolls and time sheets.

502. The assistant accountant will keep registers of sanctioned (a) rates of pay, (b) number of men, and (c) amount of expenditure, and the pay sheets will be carefully checked with these registers. Unsanctioned rates will be corrected, and excessive staff and expenditure will be brought to the attention of the proper officer. After completion of the verification the assistant accountant will return the time books to the divisional superintendent's office, but will retain the muster rolls for use in connection with the allocation of wages to accounts and orders referred to in paragraph 510. The completed pay sheets will be submitted, within six days after the close of the month, to the divisional superintendent for examination and signature after which the assistant accountant will group them by departments, *viz.* :—

Roadway.

Rolling stock.

Transportation.

The pay sheets of each department will then be listed on separate "Pay sheets statements," form 151, thus :—

Roadway.

<i>Pay sheet No.</i>	<i>Description.</i>	<i>Amount.</i>
1	Sections 1-2 .. .. .	.. ..
2	Sections 3-4 .. .. .	.. ..
3	Bridge gang <i>et seq.</i>	.. ..

Rolling stock.

1	Running sheds .. .. .	.. ..
2	Train examiners <i>et seq.</i>	.. ..

503. The amounts and dates passed for payment will be recorded in the "Register of pay sheets and bills received," after which the pay sheets will be passed to the divisional cashier for payment. The pay sheets statement will consist of three copies, as explained in Appendix IX, and these will be disposed of by the assistant accountant as follows :—

- (a) The treasurer's copy signed by the assistant accountant will be sent with the pay sheets to the divisional cashier as a record of the documents transmitted.
- (b) The central accounting office will be sent to that office with the allocation statement, as explained in paragraph 510.
- (c) The office copy will be retained by the assistant accountant, and will be filed in a loose-leaf binder in numerical order.

504. *Payment of wages.*—The make-up and payment of wages will be under the direct control of the divisional cashier, and in this work he will be assisted by the divisional superintendent's pay sheet staff. The divisional cashier will draw a cheque for the net amount of wages payable, and thereafter the cash for the amount shown against each workman's name on the pay sheets will be counted by a clerk and checked and placed in an envelope by a pay clerk. These envelopes will show the workman's number and the amount of wages. The initials of the clerks making up the wages will be noted on each pay sheet. After the completion of the make-up, each pay clerk will be responsible for his batch of pay envelopes. The divisional cashier will prepare in duplicate a cash statement on form 179 and enter thereon the amount of wages delivered to each pay clerk for disbursement. Both copies will be signed by the divisional cashier and the pay clerk. The former will retain one copy as a receipt for the cash delivered, and one copy will be passed to the pay clerk for his record. Each pay clerk will then proceed to the section of the division assigned to him, where he will personally deliver the pay envelopes to the workers. Gang workers will be paid in the presence of their foreman, each man being identified as he receives his payment. Non-gang workers will be identified by station masters and running shed foremen. Each workman will sign his name or place his finger print on the pay sheet as a receipt for the wages and these signatures, and finger prints will be examined later in the establishment section at the central accounting office as explained in Appendix IX.

505. After completion of the payments on the line, each pay clerk will—

- (a) prepare in duplicate a statement of undelivered wages, form 180, and sign both copies.
- (b) enter on both copies of the a cash statement, form 179, the wages paid and the wages undelivered, and sign both copies.
- (c) deliver the statements under (a) and (b) and the undelivered pay envelopes to the divisional cashier.

If the documents and the cash are in order, the divisional cashier will sign the statements under (a) and (b) above, and

- (1) deliver one copy of each to the pay clerk for his record.
- (2) file one copy of each in a loose leaf binder.

Absentees on pay day will be paid later by the divisional cashier on receipt of identification slips from foremen and station masters, and payments will be noted on the statements of undelivered wages referred to above. Workers leaving the service during the month or requiring interim payments will be paid by the divisional

cashier on receipt of a pay order issued and signed by the divisional superintendent and countersigned by the assistant accountant.

506. The divisional cashier will be under the control of the treasurer and the cash records he will maintain have been outlined in Appendix I, dealing with the system of cash receipts and disbursements.

507. *Allocations to roadway accounts and orders.*—Each permanent way inspector or resident engineer will record daily in a day book a description of the work done and the time spent thereon by each gang under this control. Similar information will be entered in day books by bridge and building engineers for gangs under their control. The information will be obtained either :—

- (a) by the above road officials from memoranda of the work assigned to each gang, supplemented by a least tri-weekly visits to each gang.
- (b) by time clerks assigned to one or more gangs.
- (c) from daily reports from each foreman.

The method to be adopted on each railway, division or section will be dependent on the (a) length of line assigned to inspectors and engineers, (b) size of gangs and nature of work, and (c) clerical ability of the foremen. At the close of each month the permanent way inspectors and engineers will summarize in the day book the work of each gang and transfer the summary to work report, form 181. They will enter on form 181 only the description of the work done and time spent thereon by foremen and workmen, as illustrated hereafter :—

			Division		Hours.	
			or Job. No.	Foremen.	Workmen.	
<i>Maintenance and operation :—</i>						
Laying rails	..	..	..	1	40	400
Applying ballast	..	..	..	1	50	500
<i>et seq.</i>						
<i>New construction :</i>						
New siding at	..	..	..	100	100	1,000
<i>et seq.</i>						
<i>Work done for others :—</i>						
Repairing siding of	..	Company	—	—	40	400
Sundry work for	..	workshop	—	—	10	100
<i>et seq.</i>						

Work for another division will be entered under "Maintenance and Operation," and the division indicated. Work done for others will include only (a) recoverable expenditure and (b) amounts chargeable to workshops.

508. *Allocations to rolling stock accounts.*—Foremen in charge of train examiners and running sheds will similarly account for and report on form 181, the work done and the time spent thereon. Their maintenance allocations will be to running repairs for :—

- (a) Locomotives, steam.
- (b) Locomotives, electric.
- (c) Rail motors, steam.
- (d) Rail motors, electric.
- (e) Coaching vehicles.
- (f) Goods vehicles.
- (g) Foreign railway vehicles.

509. *Allocations to transportation accounts.*—It will not be necessary for transportation department officials to prepare a work report, form 81 as the wages allocation will be obtained by the assistant accountant from the pay sheets.

510. All work reports will reach the assistant accountant within three days after the close of the month and each will be dealt with as follows :—

- (a) the hourly rate of pay of the foreman and the average hourly rate of pay of the workmen will be inserted. These will be obtained from the gang muster rolls.
- (b) the amount applicable to each kind of work will be calculated with the aid of Dalton calculating machines. The clerk will gum his initialled Dalton strip to the work report as evidence.
- (c) the hours and amount on the work reports will be agreed with the respective muster rolls.
- (d) the abstract and new construction account numbers will be inserted;

After all the work reports have been costed and balanced, the assistant accountant will sort them in "Pay sheets statement" order. The allocations to

- (a) abstract
- (b) new construction accounts
- (c) work done for others

will then be summarised and the totals of each account entered on "Allocation of pay sheets," form 175. It has been mentioned in paragraph 507 that maintenance work done by one division for another division will be reported under maintenance and operation accounts and not as a charge against the division. The assistant accountant, therefore, will prepare a separate pay sheet allocation, form 175, for the expenses applicable to each division and agree the sum of these reports with the pay sheets total shown on form 151. He will then prepare in duplicate separate debit notes, form 178, against (a) each debtor, for recoverable expenditure, and (b) each workshop, and forward the pay sheets statement, form 151, pay sheets allocation, form 175, and both copies of each debit note, to the central accounting office, where the allocations will be entered in the "Pay sheets and bills allocation Register" in the manner outlined in Appendix IX.

511. *Contractors' and sundry bills.*—Contractors' bills will be principally for roadway department work. Sundry bills will be for :—

- (a) Municipal charges.
- (b) Travelling allowances.
- (c) Petty cash expenditures.

The divisional engineer will maintain measurement books, and from these he will prepare contractors' bills, which will show all the details required by the assistant accountant. All bills will be certified correct by the engineer in direct charge of the work, approved by the divisional engineer, and recorded in the measurement books. The assistant accountant will be furnished with a signed copy of every contract or agreement entered into by the officers of the railway in which he is interested as the disbursing official of the division.

512. The bills procedure in the assistant accountant's office will be as follows :—

- (1) All bills will be registered immediately upon receipt in the "Register of pay sheets and bills received."
- (2) The following verification will be carried out :—
 - (a) unit prices and other details will be checked with contracts and agreement.
 - (b) at frequent intervals the assistant accountant will make surprise visits to the divisional engineer's office and check contractor's bills with the entries in the measurement books. He will also call for the original documents from which the measurement book entries were made. Any irregularities will be reported immediately to the chief accountant.
 - (c) all bills be scrutinised for certifications and approvals.
 - (d) the arithmetical accuracy of all bills will be proved with the aid of Dalton calculating machines. The Dalton strip, bearing the clerk's initials, will be gummed to the bill as evidence.
- (3) After the above verification, all bills will be passed to the divisional superintendent for examination and comments or approval.
- (4) After return of bills by the divisional superintendent, the assistant accountant will group them by payees and list each lot on separate "Bills statements" form 182. The amounts and dates passed for payment will then be recorded in the "Register of pay sheets and bills received," after which the bills will be passed to the divisional cashier for payment. The bills statement will consist of four copies as explained in appendix IX and these will be disposed of by the assistant accountant as follows :—
 - (a) the treasurer's copy and the remittance advice, the former signed by the assistant accountant, will be sent with the supporting bills to the divisional cashier.
 - (b) the Central Accounting Office copy with the allocation noted thereon will be sent to that office and the allocations then entered in the Pay Sheets and Bills Allocations Register.

- (c) the office copy will be retained by the assistant accountant, and will be filed in loose-leaf binders in numerical order.
- (5) Contractors' and sundry bills will be chargeable to :—
- (a) Abstract accounts.
 - (b) New Construction and Depreciations Fund Accounts.
 - (c) Work done for others, viz. :—
 - (i) Recoverable expenditure.
 - (ii) Amounts chargeable to workshops.

Job numbers will be indicated on contractors' bills by the divisional engineer. Allocations to accounts will be made by the assistant accountant on the central accounting office copy of the "Bills Statement," form 182. Charges applicable to another division will be allocated direct to the appropriate abstract accounts and the division indicated. Charges for work done for workshops will also be entered on the debit notes referred to in paragraph 510. Cheques in payment of the bills will be drawn and accounted for by the divisional cashier.

513. *Stores material.*—The principal materials used on divisions are :—

- (a) Track, building and bridge materials used by the roadway department for maintenance and new construction.
- (b) Springs, bolts, journal bearings and similar light parts used in running sheds and by train examiners for running repairs to rolling stock.
- (c) Lubricants used as running sheds and by train examiners.
- (d) Station and train supplies.

514. *Roadway department material.*—The daily record of (a) material receipts and (b) material consumption and description of work on which consumed, the totals of which will be entered on forms 101 and 102 at the close of the month, will be kept by permanent-way inspectors or engineers in the day books described in paragraph 507 and the methods outlined for obtaining labour allocations will also apply to material. The procedure to be followed by :—

- (a) Permanent way inspectors or engineers in requisitioning material from stores and reporting monthly receipts and issues on forms 101 and 102.
- (b) The assistant accountant in the subsequent verification and reconciliation of these reports and allocation of consumption to accounts, has been explained in Appendix V dealing with stores, and repetition here is considered unnecessary.

After completion of the allocation to the accounts described in paragraph 512, the assistant accountant will send one copy of form 102 of the central accounting office for pricing and incorporation in the accounts.

515. *Material for light repairs to rolling stock, lubricants and station and train supplies.*—Stocks of these materials will be replenished monthly from travelling stores trains. In emergencies materials will be obtained from stores on Standard Material Requisitions, form 97. The travelling stores train issues will be :—

- (a) Recorded on form 104 by the train stores clerk.
- (b) Priced by the central accounting office (stores section).
- (c) Incorporated in the accounts by the central accounting office (expenditure section).

Form 104 will be designed to group, so far as possible, all materials chargeable to each account. There will, however, be running repair material such as bolts, journal bearings, etc., common to :—

- (a) Coaching vehicles.
- (b) Goods vehicles.
- (c) Foreign-line vehicles.

In such cases the common material will be grouped on form 104 and charged by the central accounting office to either coaching or goods vehicles. The train examiners will keep a daily record of consumption and allocation in a day book and at the close of the month will report to the assistant accountant the consumption under each account. The latter will summarise the material under the accounts to be debited and credited and will send copy of the summary to the central accounting office, where it will be priced and an adjusting entry prepared for incorporation in the accounts. The standard material requisitions form 97 will also be priced and incorporated in the accounts in the central accounting office.

APPENDIX XI.

SECTION I.

SYSTEM OF GENERAL ACCOUNTING.

516. At the Central Accounting Office of each railway, the Chief Accountant will maintain the financial books and records of that railway. The Chart of Accounting Department organisation given on page 22 of Chapter IV shows that the actual accounting will be divided into six sections :—

- (1) Traffic.
- (2) Stores.
- (3) Workshops.
- (4) Establishment.
- (5) Expenditure.
- (6) General book-keeping.

With the exception of "Establishment," which will be controlled by an Establishment Officer, each section will be under the immediate control of an accountant, who in turn will have assistant accountants in charge of sub-sections.

The detailed accounting procedure necessary for the first three of these sections is outlined in the relative appendices, *viz.* :—

Traffic	..	..	..	..	Appendix IV.
Stores	..	..	..	..	Appendix V.
Workshops	..	..	..	..	Appendices VI, and VII.

Establishment Section.

517. This section will be in charge of an official known as the "Establishment Officer," and will be responsible for :—

- (1) The preparation of officers' salary roll.
- (2) The verification of clerical staff pay sheets received from the agent; central accounting office, traffic accounting office, etc.
- (3) The verification of workshop and divisional pay sheets.

518 (1) *Preparation of officers' salary roll.*—A register of the sanctioned salaries and allowances of officers will be maintained and from it will be prepared the officers salary roll, which, after completion, will be sent to the Chief Accountant for verification of :—

- (a) Rates of pay.
- (b) Special compensation.
- (c) Arithmetical accuracy.

The pay sheet of the establishment section staff, when completed, will also be sent to the Chief Accountant for a similar verification.

519. (2) *Verification of clerical staff pay sheets received from the agent, central accounting office, traffic accounting office, etc.*—The pay sheets for the above clerical staffs will be prepared in the respective offices and the combined muster roll and pay sheet from will be used and sent to the establishment officer. When received, these will be recorded in the "register of pay sheets and bills received, after, which they will be verified in respect of :—

- (a) Rates of pay.
- (b) Number of men and amounts sanctioned.
- (c) Arithmetical accuracy of muster rolls, pay sheets and deduction statements.
- (d) Necessary approvals on the pay sheets.

To permit of this verification it will be necessary for the establishment section to keep registers showing for each office the sanctioned :—

- (a) Rates of pay ;
- (b) Number of men ;
- (c) Amount of expenditure.

Any unsanctioned rates appearing on the pay sheets will be adjusted to the sanctioned rate and excessive staff or expenditure will be brought to the attention, of the officer concerned. For checking, the arithmetical accuracy of the muster rolls, pay sheets and deduction statements, Dalton calculating machines will be used and the Dalton strips, initialled by the checking clerk, will be gummed to each pay sheet and supporting deduction statements as evidence. When the verification has been completed, the establishment officer will certify and then pass all documents to the Chief Accountant for his approval and payment.

520. (3) *Verification of workshop and divisional pay sheets.*—The verification of these pay sheets will be made after payment and will be confined to :—

- (a) Substantial tests of the arithmetical accuracy.
- (b) An examination of pay sheet signatures and finger prints ;
- (c) An examination of all special allowances.

Expenditure Section.

521. The accountant in charge of this section will have two assistant accountants :

- (1) One incharge of the pay sheets and bills sub-section.
- (2) One incharge of the accounts sub-section.

522. (1) *Pay sheets and bills.*—This sub-section will deal with :—

- (1) Pay sheets and bills received for payment.
- (2) Statements received from assistant accountants on divisions and engineering districts and at workshops.
- (3) Pay sheets and bills allocation register.
- (4) Monthly journal entry.

523. (1) *Pay sheets and bills received for payment.*—These will be as follows :—

- (a) Verified and approved pay sheets received monthly from the establishment section.
- (b) Verified and approved bills received currently from :—
 - (i) Stores section for materials and supplies.
 - (ii) Agent, chief engineer, chief operating and traffic officers, and others for sundry expenditure.
 - (iii) Commercial and traffic accounting departments for damages and overcharges. All claims will be certified by the officer in charge and supporting documents will be attached.

When received, these pay sheets and bills will be entered in the " Register of pay sheets and bills received," after which they will be verified as follows :—

- (a) Certification and approvals will be scrutinised to ensure that all documents have been examined by the proper officers.
- (b) Arithmetical calculations of all bills will be checked with the aid of Dalton calculating machines and the Dalton strip, initialled by the checker, gummed to each bill. Detailed checking of the pay sheets will not be necessary as these will have been verified in the establishment section.

524. After verification, all documents will be grouped according to departments or payees, and then entered on " Pay sheets statement " form 151, or " Bills

statement," form 182. These statements, which will also be used by assistant accountants on divisions, engineering districts and workshops, will be typewritten in sets of three and four respectively, and disposed of as under :—

- (a) The treasurer's copy, common to both, will be used as a record of documents transmitted by assistant accountants to the treasurer or his cashier.
- (b) The remittance advice, applicable to bills statements only, will serve as remittance advice to and receipt of payee.
- (c) The central accounting office copy, common to both, will contain the accounts allocation, which will subsequently be entered in the " Pay sheets and bills allocation registers " and posted therefrom to the detailed accounts in the expenditure ledgers.
- (d) The office copy, common to both, will be filed in the divisional district, and workshop accounting offices in numerical order and by the expenditure section in alphabetical order.

525. Each railway will establish a monthly pay day (or days) for bills, and will so far as possible, adhere to this date (or dates). This will enable the expenditure section to accumulate all the bills of each creditor on one bills statement and thereby reduce the number of statements, cheques and subsequent entries in the books. These bills statements, pending completion, will be filed in compartments in alphabetical order. When a statement is ready for payment the procedure will be as follows :—

- (1) The accounts allocation will be entered on the central accounting office copy.
- (2) Date passed for payment and entered in Pay sheets and Bills Allocation Register, and the amount of each document will be recorded in the " Register of pay sheets and bills received."
- (3) The statements with supporting documents attached will be passed to the chief accountant for examination. He will note his approval on all copies except the remittance advice.
- (4) After return by the chief accountant, each statement will be given a central accounting office number and entered and allocated to the proper accounts under that number in the " Pay sheets and bills allocation register."
- (5) The several copies of each statement will be separated and disposed of as follows :—
 - (a) The treasurer's copy and the remittance advice with the supporting documents will be passed to the treasurer for payment.
 - (b) The central accounting office copy showing the accounts allocations will be passed to the accounts sub-section for posting to the detailed accounts in the expenditure ledgers.
 - (c) The office copies will be filed in alphabetical order.

526. (2) *Statements received from assistant accountants on divisions and engineering districts and at workshops.*—As explained in Appendices VI, VII and VIII pay sheets statements and bills statements will be prepared by assistant accountants in divisional district and workshop accounting offices from which the central accounting office copies will be sent daily to the expenditure section. These copies will show the accounts allocations or have " allocation of pay sheets," form 175, attached, and when received will be given an expenditure section number and then entered and allocated to the proper accounts under that number in the " Pay sheets and bills allocation register." Thereafter the allocation statements will be passed to the accounts sub-section for posting in the expenditure ledgers.

527. (3) *Pay sheets and bills allocation register.*—This register, form 183, has been provided :—

- (a) To record the pay sheets and bills passed for payment.
- (b) To summarise under general ledger control accounts the allocations, shown on pay sheets statements and bills statements.

It has already been explained that all statements will be entered in this register in numerical order. The payment date of each statement will be recorded later from the list of paid statements received from the treasurer. The sum of the "open" or unpaid items at the close of the month will represent the recorded liability for pay sheets and unpaid bills and must agree with the balance in the Pay Sheets and Bills Allocation Register control account in the general ledger. A detailed list of the "open" items will be prepared at the end of each month to ensure this agreement. It will be necessary to add and balance this register at the close of each day, so that the expenditure ledger clerks may balance their daily postings with the respective control columns in this register and in the journal allocation register. The method of balancing the journal allocation register and the expenditure ledgers is described fully hereafter when dealing with accounts.

528. (4) *Monthly journal entry.*—A journal entry will be prepared at the close of the month debiting the summarised accounts shown in the register and crediting—

- (a) Pay sheets and bills register control account with the amount of the statement passed for payment.
- (b) Stores expenses account with the percentages added by the stores section to suppliers bills to cover handling and like charges.
- (c) Deposits ledger control account for retained percentages, etc.

This entry is illustrated in detail at Schedule A, No. 8 annexed, and will be passed to the book-keeping section for posting to general ledger accounts.

529. (2) *Accounts.*—This sub-section will deal with—

- (1) Debit notes against workshops and the electrical department.
- (2) Monthly reports received from assistant accountants on divisions and engineering districts and at workshops.
- (3) Lists of paid statements received from the treasurer.
- (4) Journal allocation register.
- (5) Expenditure ledgers.
- (6) Monthly journal entry.
- (7) Monthly abstracts and operating statement.

530. (1) *Debit notes against workshops and the electrical department.*—Immediately after the close of the month the expenditure section will prepare debit notes, form 178, in the necessary detail, charging each workshop and the electrical department with—

- (a) Its general administration expenses.
- (b) Its proper proportion of depreciation.
- (c) Provident fund bonuses.
- (d) Stationery and printing, fuel, etc., received from general stores.

These debit notes will be prepared in duplicate and summarised on form 167. One copy of each summary, with the detailed notes, will be sent to each workshop and the electrical department within four days after the close of the month for incorporation in the accounts. The other copy of each summary and the debit notes will be retained by the expenditure section for entry and allocation in the "Journal allocation register." Debit notes prepared by workshops and other departments are dealt with in the next paragraph.

531. (2) *Monthly reports received.*—The detailed monthly expenditure of departments and workshops will be reported by assistant accountants in the manner described in the appendices dealing with —

- (a) Electrical department.
- (b) Workshops—
 - (1) Locomotive.
 - (2) Carriage and wagon.
 - (3) Bridge.
 - (4) Printing.
 - (5) Uniform.
 - (6) Signal.
- (c) Divisions.
- (d) Engineering districts.
- (e) New engineering projects.

For ready reference and in order to describe the detailed procedure in the central accounting office the various reports are summarised hereunder—

- (a) Electrical department.
- (b) Workshops—
 - (i) Locomotive.
 - (ii) Carriage and wagon.
 - (iii) Bridge.

Description of Reports.

Form No.

160 Statement of transactions and balances, with the following detailed schedules :—

Items included in the accounts :—

- 161 Pay sheets.
- 162 Workshops stores.
- 163 Central accounting office charges.

Items transferred from workshop ledger to general ledger :—

- 164 New construction completed.
- 165 Expenses (abstract accounts).
- 166 Manufactured products to stores.
- 167 Work done for others, with debit notes, form 178, for each debtor and each workshop.

Monthly balances :—

- 168 Work in progress.
- 168 Under or over absorbed expenses.
 - (iv) Printing.
 - (v) Uniform.

Form No.

Description of Reports.

- 169 Statement of transactions and balances.
- 166 Manufactured products to stores.
 - (vi) Signal.

Form No.

Description of Reports.

- 175. Allocation of pay sheets.
Monthly Journal entry transferring cost of completed jobs from abstract accounts to appropriate asset accounts.
- (c) Divisions.
- (d) Engineering districts.
- (e) New engineering projects.

Form No.

Description of Reports.

- 175 \ Allocation of pay sheets.
- 101 Receipts from stores by permanent way inspectors and engineers.
- 102 Consumption of stores by permanent way inspectors and engineers.

Statements and summaries described in Appendix V will be received from the stores section for the following issues from the general stores and fuel stocks to :—

- (a) Train examiners and running sheds.
- (b) Signal workshops.
- (c) Train staffs.
- (d) Stations and offices.
- (e) Locomotives.
- (f) Sales of :—
 - (i) Home line employees.
 - (ii) Other Government departments.
 - (iii) Other railways.
 - (iv) Sundries.

532. Debit notes will be prepared by the expenditure section against each debtor under (f), summarised on form 167 and one copy thereof with one copy of each notes ent to the book-keeping section for preparation of debtors bills and subsequent entry in the debtors ledgers. The total of the summary must agree with the sum of the "Debtors Control" columns in the "Pay Sheets and Bills allocation Register" and the "Journal Allocation Register." The arithmetical accuracy of all reports will be proved with the aid of Dalton machines and the initialled Dalton strips gummed to the reports as evidence. The reports and schedules dealing with wages, stores and central accounting office charges included in the monthly accounts will be checked and agreed or reconciled with :—

For wages.

Pay sheets and bills allocation register entries.

For stores issues and returns.

- (a) The daily statements from the workshops and the electrical department to the priced stores section.
- (b) The daily summaries from the priced stores section to the expenditure section.

For central accounting office, charges.

- (a) Statements of central accounting office debit notes against each workshop and the electrical department for general administration, depreciation, provident fund bonuses, etc.
- (b) The monthly statements, form 167, received from the workshops and the electrical department with detailed debit notes for work done for other workshops and power furnished.

The reports and schedules dealing with manufactured products to stores will be checked and agreed or reconciled with :—

- (a) The daily statements from the workshops and the electrical department to the priced stores section.
- (b) The daily summaries from the priced stores section to the expenditure section.

533. The workshops and the electrical department will exchange debit notes and include the charges in the current month's accounts. It will therefore not be necessary for the expenditure section to send its copies of such debits notes to the departments concerned. Divisions, however, will not send copies of their debit notes for labour and bills direct to workshops and the electrical department, but will send two copies with their monthly reports to the expenditure section, where the material shown on consumption report, form 102, will be added. The expenditure section will then send one copy of each debit note to the department concerned for inclusion in its accounts. After the verification described, journal entries for each workshop statement will be prepared for entry in the "Journal Allocation Register." The latter register and the journal entries are dealt with in paragraph 535.

534. (3) *Lists of paid statements received from the treasurer.*—It has been mentioned in paragraph 525 that the treasurer will send lists of paid statements, and that these will be used by the expenditure section to record in the pay sheets and bills register the date of payment. These lists will be summarised at the end of the month and a journal entry prepared for entry in the "Journal Allocation Register." This entry is No. 7 of those outlined in paragraph 535.

535. (4) *General allocation register.*—This register, form 184, has been provided to summarise under general ledger control accounts the allocations shown on the journal entries. These journal entries will be prepared from the monthly statements and schedules described in preceding paragraphs for the accounts of :—

- (a) The electrical department.
- (b) Each workshop.
- (c) Each division.
- (d) Each engineering district.

The principal monthly entries will be as follows :—

Journal Entry No. 1.

Debits :—

- (a) Electrical department control account.
- (b) Each workshop ledger control account.

Credits :—

- (c) General administration expenses, Abstract B, absorbed in workshop costs.
- (d) Stores ledgers control account.

For :—

- (c) Self-explanatory.
- (d) Stationery, printing, fuel, etc., from the general stores.

Journal Entry No. 2.

Debits :—

- (a) Electrical department control account.
- (b) Each workshop ledger control account.

Credit :—

- (c) Stores ledgers control account.

For :—

Material deliveries by and returns to workshops store.

Journal Entry No. 3.

Debits :—

- (a) Electrical department control account.
- (b) Each workshop ledger control account.

Credits :—

- (c) Electrical department control account.
- (d) Each workshop ledger control account.

For :—

Inter-departmental transactions.

Journal Entry No. 4.

Debits :—

- (a) New construction accounts :—
 - (i) Structural engineering works.
 - (ii) Plant and machinery.
 - (iii) Rolling stock.
- (b) Abstract accounts :—
 - (i) Maintenance of structural works.
 - (ii) Maintenance of rolling stock.
 - (iii) Commercial expenses.
 - (iv) Transportation expenses.
 - (v) General departments.
 - (vi) Steamers and harbours.
 - (vii) Stores expenses.
- (c) Stores ledgers control account.
- (d) Debtors ledgers control account.

Credits :—

- (e) Electrical department control account.
- (f) Each workshop ledger control account.

For :—

- (a) New construction jobs completed and transferred to the general ledger.
- (b) Current month's expenses transferred to the general ledger for inclusion in the monthly abstracts.
- (c) The cost of manufactured products transferred to the stores.
- (d) Cost of work done for :—
 - (i) Home line employees.
 - (ii) Other government departments.
 - (iii) Other railways.
 - (iv) Sundries.

*Journal Entry No. 5.**Debits :—*

- (a) New construction account.
- (b) Depreciation fund.
- (c) Abstract accounts.
- (d) Electrical departmental control account.
- (e) Each workshop ledger control account.
- (f) Debtors ledgers control account.

Credit :—

- (a) Stores ledgers control account.

For :—

Stores material consumption reported by divisions and engineering districts on form 102.

*Journal Entry No. 6.**Debits :—*

- (a) Abstract accounts.
- (b) Debtors ledgers control account.

Credit :—

- (c) Stores ledgers control account.

For :—

- (a) Issues from the general stores and fuel stock to :—
 - (i) Train examiners and running sheds.
 - (ii) Signal workshops.
 - (iii) Train staffs.
 - (iv) Stations and offices.
 - (v) Locomotives.
- (b) General stores and fuel sales to :—
 - (i) Home line employes.
 - (ii) Other government departments.
 - (iii) Other railways.
 - (iv) Sundries.

*Journal Entry No. 7.**Debit :—*

- (a) Pay sheets and bills register.

Credit :—

- (b) Controller of currency, cash control.

For :—

Pay sheets and bills paid by the treasurer.

*Journal Entry No. 8.**Debits :—*

- (a) New construction accounts.
- (b) Debtors ledgers control account.

Credit :—

- (c) Abstract accounts.

For :—

Transfer of cost of completed jobs from abstract accounts to appropriate asset accounts.

*Journal Entry No. 9.**Debits :—*

- (a) Abstract accounts A to G.
- (b) Electrical departmental control account.

Credit :—

- (c) Accrued provident fund bonus.

For :—

Monthly proportion of accrued provident fund.

Note.—The monthly accrual and allocation thereof will be based on the monthly average of the preceding six months period : 31st March or 30th September.

An allocated statement of actual expenditure will be received from the provident fund section for the periods ending on the 31st March and the 30th September. The actual and the accrued amounts will be compared and a journal entry prepared to :—

Adjust for under or over accruals in each debited account.

Place on the books the actual bonus and adjust the accrued amount thereto.

Assuming an under accrual the adjusting entry each six months will be as follows :—

Debits :—

- (a) Accrued provident fund bonus.
- (b) Abstract accounts A to G.

Credit :—

- (d) Provident fund control account.

Journal Entry No. 10.

Debit :—

- (a) Each workshop ledger control account.

Credit :—

- (b) Abstract B.

For :—

Proportion of accrued bonus applicable to workshop employees debited to Abstract B in journal entry No. 9, now transferred as above.

Note.—After this entry there will remain in Abstract B, bonus applicable to :—

- (1) General administration.
- (2) Running Repairs.

Journal Entry No. 11.

Debits :—

- (a) Abstract accounts A to G.
- (b) Electrical department control account.

Credit :—

- (c) Depreciation fund.

For :—

Monthly provision for depreciation.

Journal Entry No. 12.

Debit :—

- (a) Each workshop ledger control account.

Credit :—

- (b) Depreciation, Abstract B, absorbed in workshop costs.

For :—

Depreciation on workshop plant and machinery.

Journal Entry No. 13.

Debits :—

- (a) Abstract accounts A and C to G.
- (b) Electrical department control account.
- (c) Each workshop ledger control account.

Credit :—

- (d) Casualty reserve.

For :—

Monthly provision for casualty claims.

In the above illustrations, the entries applicable to the electrical department and each workshop have been combined. In practice there will be separate journal entries for the electrical department and for each workshop.

536. After entry in the "Journal allocation register" the journal entries with the detailed allocations will be passed to the expenditure ledgers staff where the postings will be made to the detailed accounts. It will be necessary to add and balance this register at the close of each day so that the expenditure ledger clerks may balance their daily postings with the respective control columns in this register and in the "Pay sheets and bills register."

537. (5) *Expenditure Ledgers*.—The detailed abstract, new construction, and depreciation fund accounts will be kept in loose leaf ledgers, and the postings there-to will be made with the aid of Burroughs accounting machines. The accounts will be arranged in the following order:—

- (1) Control accounts for abstract A, maintenance of structural work.
 - (a) Total for all divisions.
 - (b) Total for each division.
- (2) Control accounts for abstract D, transportation expenses.
 - (a) Total for all divisions.
 - (b) Total for each division.
- (3) Control account and detailed accounts for each division, *viz.*:—
 - (a) Division No. 1 (control account).
 - (b) Detailed accounts under abstracts A and D.
 - (c) Division No. 2 (control account).
 - (d) Detailed accounts under abstracts A and D.

et seq.

- (4) Control account and detailed accounts for each of the following abstracts:—
 - (a) Abstract B. "Maintenance of rolling stock."
 - (b) Abstract C. "Commercial expenses."
 - (c) Abstract E. "General departments."
 - (d) Abstract F. "Maintenance and working of ferry steamers and harbours."
 - (e) Abstract G. "Stores expenses."
- (5) Control account and detailed accounts for each of the following new construction headings:—
 - (a) Structural engineering works.
 - (b) General equipment.
 - (c) Rolling stock.
 - (d) General charges.
- (6) Control account and detailed accounts for each of the following depreciation fund headings:—
 - (a) Engineering and electric.
 - (b) Locomotives, carriages and wagons.
- (7) Control account for total new construction expenditure, and a separate account for each new construction job.

538. After the statements and journal entries have been entered in the respective registers, they will be passed to the machine clerks for posting to the detailed accounts in the Expenditure Ledger, form 185. It is difficult to describe in a report how these machines will be used and it is suggested that the Burroughs representatives be asked to give a demonstration. Briefly, however, the procedure will be:—

The operator will strike up:—

- (a) The account number.
- (b) The date.
- (c) The statement or journal entry number in the "Reference" column.
- (d) The amount of debit or credit in the "Posting" column.
- (e) At this stage the amount of the previous "Accumulated balance" will be struck up on the machine, and
- (f) The machine will automatically add (d) and (e) above, and print the new "accumulated balance."

To prove that the postings have been made correctly the operator will next take a "Proof sheet," form 185, and will strike up—

- (a) In the "Subtract" column—
 - (i) The account No.
 - (ii) The previous "accumulated balance."

- (b) In the "Proof" column—
- (i) The amount of debit or credit posted under 1 (d) above.
 - (ii) The machine will now automatically record the subtraction of the sum of these two items from the "accumulated balance," and if the postings have been made correctly, the result will be—
 - (1) Under "account number"—nil.
 - (2) Under "posting"—amount of the debit or credit referred to in 1 (d) above.
- (c) In the "pick-up" column—
- (a) The "posting" will be in the machine, therefore the previous "monthly balance" from the ledger sheet will be picked up by entry in the "pick-up" column. The machine will add the two figures and print the sum in the "monthly balance" column on the ledger sheet.

After completion of (a), (b) and (c), the ledger sheet will show the "monthly" and "accumulated" balance to date. The above procedure will be carried out for each posting to an account.

539. A separate proof sheet will be used for each control account. In the case of abstracts A and D, apportionable to divisions, it will be necessary to use a proof sheet for each division and abstract thus—

Division No. 1, Abstract A.

Division No. 1, Abstract D.

Division No. 2, Abstract A.

Division No. 2, Abstract D.

et seq.

At the end of each day, the machine clerks will add the "Postings" in the "proof" column on each proof sheet and agree those totals with the sum of the totals in the respective control columns in the—

- (a) Pay seats and bills register.
- (b) Journal allocation register.

The agreed proof sheet totals will then be machine posted to the control accounts mentioned in preceding paragraphs.

The principal advantages accruing from the use of machines for this work are:—

- (a) The expenditure accounts will be kept in suitable ledgers instead of on loose abstracts.
- (b) The machine will automatically add and subtract thus ensuring first-time accuracy.
- (c) The proof sheet will show the account posted, together with a proof that it actually was that account by printing on the proof sheet the account number as shown in the heading of the ledger sheet and subtracting therefrom the account number posted on the ledger sheet which was posted from the document. If the latter posting was correct the result will be nil. If the debit or credit has been posted to the wrong account, it will be reflected, as the "account number" column on the proof sheet will show a remainder.
- (d) The monthly and accumulated expenditure will be shown in the respective balance columns at the close of each day, thus facilitating the preparation of the monthly accounts.

541. (6) *Monthly journal entry.*—The journal entry illustrated and annexed at Schedule A. No. 9 will be prepared at the close of the month debiting and crediting the accounts shown in the register, and will be passed to the book-keeping section for posting to the general ledger accounts affected.

542. (7) *Monthly abstracts and operating statements.*—After the expenditure ledgers control sheets have been balanced with the respective control accounts in the general ledger and in the :—

- (a) Pay sheets and bills register ;
- (b) Journal allocation register ;

the assistant accountant will prepare the monthly abstracts :—

- (a) A and D for each division.
- (b) A and D for the whole railway.
- (c) B, C, E, F and G.

He will next prepare for each divisional superintendent and each district engineer detailed statements of maintenance and operating expenses and new construction expenditure. The former statements will give a detailed analysis of the monthly expenses of each division under detailed account heads and will so far as possible show units as well as amounts expended. In respect of maintenance, these statements will enable the divisional superintendent to compare the actual and the estimated cost of work done and keep a close watch on the progress of his maintenance programme. The detailed statements of new construction expenditure, prepared for district engineers and divisional superintendents, will be under job numbers and also will show units as well as amounts expended. All the monthly statements must be furnished to the above operating and engineering officers within fifteen days after the close of the month.

543. *General Book-keeping.*

It will be convenient to divide this section into two parts :—

- (1) That relating to the general and subsidiary ledgers.
- (2) That relating to the provident and other funds ledgers.

I.

544. (a) *The general and subsidiary ledgers.*—The books and records to be maintained in this section will be :—

- (1) Journal.
- (2) General ledger.
- (3) Subsidiary ledgers :—
 - (a) Miscellaneous debtors.
 - (b) Loans and notes receivable.
 - (c) Working fund advances.
 - (d) English consignments.
 - (e) Deposits.

545. *Journal.*—This will be a loose leaf book into which will be incorporated the monthly journal entries prepared by the following departments and sections :—

- (a) Traffic accounts section for coaching, goods and miscellaneous traffic earnings, Nos. 1 to 7 annexed to appendix IV (see pages 63-69).
- (b) Expenditure section for wages and material expended, depreciation provided and accruing, Nos. 8 to 9 annexed hereto at Schedule A (see pages 176-177).
- (c) General book-keeping section for financial transactions and sundry accruals, Nos. 10 to 15, annexed hereto at Schedule A (see pages 178-183).

546. *General ledger.*—A list of general ledger accounts is appended at Schedule B, page 183. The journal entries mentioned above will be posted to the appropriate of these accounts and when all postings for the month have been made a trial balance of the ledger will be extracted.

547. *Subsidiary ledgers.*—These ledgers will contain the accounts with individuals and others for :—

- (a) Miscellaneous debtors for work done for and sales to :—
 - (i) Home line employees.
 - (ii) Other Government departments.
 - (iii) Other railways.
 - (iv) Sundries.

- (b) Loans and notes receivable in respect of house building, purchase of motor cars, passage and sundry advances.
- (c) Working fund advances to divisional workshop and other cashiers and petty cash in the hands of the executive and operating officers.
- (d) English consignments.

A separate account will be rendered by the India Office for each consignment and it will be supported by the invoices of the supplier. Each consignment will be entered under its number and will remain until the goods have been received and have had the required inspection as described in Appendix V. As the goods are distributed the relative consignment accounts will be credited and the proper stores ledgers and other accounts debited. When the Government of India takes up a debit from the India Office, in respect of consignments, an account will be rendered to the Railway concerned. This debit will be checked against the relative consignment account and if in order will be passed for payment and entered in the bills register as a debit to "English indents" in the miscellaneous creditors ledger and a cheque issued in due course.

(e) Deposits as follows:—

- (i) Surety of contractors and employees.
- (ii) Work for individuals, companies and public bodies.
- (iii) Amounts due to worked lines.
- (iv) Unclaimed wages and provident fund settlements.
- (v) Retained percentages due to contractors.

The entries to these detailed accounts will be obtained from the following records:—

548. *For miscellaneous debtors.*—

- (a) Monthly statement of debit notes received from the expenditure section.
- (b) Register of debtors' bills originating in the general book-keeping section.
- (c) "Pay sheet statement" for payments through wages deductions.
- (d) Treasurer's statement of cash receipts for all other payments.

549. *For loans and notes receivable.*—

- (a) "Bills statements" for cash advances.
- (b) "Pay sheets statements" for repayments through wages deductions.
- (c) Treasurer's statement of cash receipts for all other payments.

550. *For working fund advances.*—

- (a) "Bills statements" for advances.
- (b) Treasurer's statement of cash receipts for reduction in the amount or return of the advances.

551. *For English Consignments.*—

- (a) Debits for each consignment will be taken from the India Office statements which will be supported by suppliers' invoices.
- (b) Transfers from this account to appropriate stores ledgers accounts after receipt and inspection of goods will be made upon receipt of statements from the stores section.

552. *For Deposits.*—

- (a) Treasurer's statement of cash receipts for surety deposits, unclaimed wages and similar items.
- (b) "Bills statements" for retained percentages due to contractors.
- (c) "Pay Sheets statements" for employees deposits through wage deductions.
- (d) "Bills statements" for payments.

Assistant accountants will, whenever necessary, attach to "Bills statements" and "Pay sheets statements" detailed lists of the items entering into the control account debits or credits shown on the statements. After completion of all postings a trial balance of each subsidiary ledger will be prepared and the total thereof agreed with the respective control account in the general ledger.

553. All other subsidiary ledgers containing the detailed transactions and the detailed accounts of the general ledger controls will be kept by other sections and staffs. While they have been fully described in the respective appendices, they are summarised hereunder for ready reference:—

<i>Control Accounts.</i>		<i>Section in charge of subsidiary records.</i>		<i>Appendices.</i>
800/3	Road and equipment	Expenditure .. ..	.. ..	IX.
810	Stores ledgers	Stores accounts .. ..	.. ..	V.
812	Fuel ledgers	Stores accounts .. ..	.. ..	V.
813/27	Workshop ledgers	Workshops accounting staffs .. ..	.. ..	VI.
828	Electrical dept. (Abstract H.)	Electrical dept. accounting staff .. ..	.. ..	VII.
829	Miscellaneous earnings ledgers	Traffic accounts .. ..	.. ..	IV.
830	Voucher ledger	Traffic accounts .. ..	.. ..	IV.
831	Sundry stations	Traffic accounts .. ..	.. ..	IV.
836	Controller of currency cash	Cash .. ..	.. ..	I.
837	Treasurer's station cash	Traffic accounts .. ..	.. ..	IV.
		Cash .. ..	.. ..	I.
855/6	Depreciation fund	Expenditure .. ..	.. ..	IX.
860/3	Provident and other funds	Provident fund .. ..	.. ..	IX.
867	Pay sheets and bill register	Expenditure .. ..	.. ..	IX.
881/7	Traffic earnings accounts	Traffic accounts .. ..	.. ..	IV.
888/94	Abstracts A to G	Expenditure .. ..	.. ..	IX.
		Remodelling of abstracts .. ..	.. ..	III.

It has been explained in the various appendices that the subsidiary ledgers and records must at all times be in agreement with general ledger controls. It will, therefore, be the duty of the accountants in charge of the various sections to furnish the general ledger section with monthly trial balances as evidence of agreement.

554. The following schedules are appended either to this or to the particular appendix specified below:—

<i>Schedule.</i>	<i>Description.</i>
A.	General ledger Journal entries. Nos. 8 to 15 (see pages 178-186). (Note:—Nos. 1 to 7 deal with traffic accounts and are annexed to Appendix IV, Traffic, see pages 65-71.)
B.	General ledger accounts. Nos. 800 to 899 (see page 186).
C.	Details of construction accounts. Nos. 000 to 144 (see pages 187-189).
D.	Detailed depreciation fund accounts. Nos. 150 to 182 (see page 190).
E.	Detailed earnings accounts, Abstracts I, II, III, are annexed to Exhibit I, Appendix III (see pages 16-17).
F.	Detailed working expenses accounts, Abstracts A, B, C, D, E, F, G, H, are annexed to Exhibit I, Appendix III (see pages 21-34).

The general book-keeping section will receive monthly statements and abstracts for the accounts in Schedules C, D and F from the expenditure section and for those in Schedule E from the traffic accounts section. It will prepare from the trial balance of the general ledger a balance sheet and income accounts in the required detail as explained in Chapter VII and pass the latter exhibits and the statements and abstracts to the chief accountant.

II.

555. *Provident and other funds ledgers.*—In this sub-section members' ledgers will be kept for each of the following general ledger control accounts :—

- (a) State railway provident fund.
- (b) General provident fund.
- (c) Civil engineers provident fund.
- (d) Cemetery endowment fund.

These ledgers will contain an account with each member and the detailed procedure is outlined hereunder :—

556. Provident fund contributions and repayments will be reported to this section on "Provident fund deduction lists" form 187, and will be received from the assistant accountants at workshops, divisions, etc. Immediately after receipt the lists will be recorded in the "Register of provident fund deduction lists" form 188, as follows :—

- (a) Departmental description of the ledger.
- (b) Pay sheets statement number.

The arithmetical accuracy of each list will then be proved with the aid of Dalton calculating machines after which the verified lists with initialled Dalton strips gummed thereto will be passed to the assistant accountant for entry of the amounts in the "Register of deduction lists." The lists will then be distributed among the machine clerks for posting to the accounts, which will be kept on loose leaf sheets or cards, form 189.

557. Remington accounting machines will be used for the postings of deposits, withdrawals and interest, and the machining procedure will be as follows :—

- (a) The amount of the "opening balance" and the "deposits" will be typed on the ledger sheet.
- (b) The machine will automatically calculate the sum of the above postings, and the clerk will obtain the amount thereof from the cross adder. He will then type this figure in the "monthly balance column" and retain the amount in the cross adder for further use as explained under (c).
- (c) The clerk will next type in the "pick-up" column the previous "accumulated balance" and this amount with the "monthly balance," still in the cross adder, will give the "accumulated balance."
- (d) Withdrawals will be posted from the "Register of provident fund payments to members," form 190 and the procedure will be similar to that described above for "deposits."
- (e) The Remington machines will be equipped with totalisers, one for each of the following columns :—
 - (i) Deposits.
 - (ii) Withdrawals.

After a clerk has completed the posting of all the applicable items on the deduction lists under one statement number, he will refer to the "deposits" totaliser, and from it obtain the sum of his postings and enter this amount :—

- (a) On a posting record, form 191.
- (b) On the "contribution" control sheet.

He will initial the posting record, attach it to the appropriate batch of deduction lists and pass both to another clerk who will repeat the operation for his accounts. The machine clerk making the final postings and the final entry on the posting record will pass both to the assistant accountant who will check the amounts shown thereon as posted to each ledger with the amounts shown in the "register of deduction lists." If the two amounts agree, the assistant accountant will initial both records. In the event of disagreement it will be necessary to check the postings and make the required corrections.

558. Each ledger will contain two control sheets, one for contributions and one for bonuses. In the former will be entered the sum of the postings under each statement number as explained in the preceding paragraph. Withdrawals will also be entered on this control sheet and the balance thereon should at all times represent the sum of the monthly balances in the members' accounts. The bonus control sheet will be dealt with later.

559. After the completion of the monthly postings, each clerk will furnish to the assistant accountant a trial balance of each ledger under his control and the totals thereof must agree with the respective control sheets. The assistant accountant will check the totals with the control sheets after which he will summarise them and compare that total with the general ledger control balance. It will be the duty of the assistant accountant to see that this procedure is carried out monthly and that immediate investigation and adjustment is made of any differences. At frequent intervals, and at least four times each year, the assistant accountant will check each trial balance with the ledger accounts.

560. The semi-annual bonus due to each member will be calculated with the aid of Dalton calculating machines, and verified by a second clerk, after which the bonus amounts will be posted to members' accounts. The Dalton strips initialled by each clerk, will be delivered to the assistant accountant as evidence. The machining procedure will be similar to that described for contributions. Each clerk will obtain the sum of the above postings from his "deposits" totaliser and he will enter this amount on his "bonus" control sheet and on a posting record, which he will pass to the assistant accountant. The latter will check all the posting records with the control sheets, summarise them, and then prepare a statement allocating the bonus to the proper accounts in abstracts A to H. This statement will be used by the expenditure section for the preparation of the adjusting journal entry described under the caption of "Expenditure section."

561. The "accumulated balance" on each ledger sheet has been provided to facilitate the annual interest calculation. The accumulated balance will be divided by twelve to obtain the average monthly balance, and on this principal sum the interest will be calculated by each clerk with the aid of tables. A second clerk will verify each calculation after which the amounts will be posted to the members' accounts. The "deposits" totaliser will accumulate the postings and each clerk will post these sums to the control sheets and report the amounts to the assistant accountant on posting records. He will summarise these posting records and report the amount of interest to the expenditure section where the necessary journal entry will be prepared.

SCHEDULE A.**ILLUSTRATIONS OF JOURNAL ENTRIES Nos. 8 to 15.**

(Note : Nos. 1 to 7 deal with Traffic Accounts and are annexed to Appendix IV Traffic. See pages 72-77).

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 8.

Month

192 .

No.	Description.	Folio.	Dr.			Cr.		
			Rs.	As.	Ps.	Rs.	As.	Ps.
800	Structural Engineering Works							
801	General Equipment							
802	Rolling Stock							
803	General Charges							
810	Stores Ledgers Control							
812	Fuel Ledgers Control							
813/27	Workshop Ledger Controls							
828	Electrical Department							
830	Voucher Ledgers Control							
833	Miscellaneous Debtors and Creditors Ledgers Control ..							
834	Loans and Notes Receivable Ledgers Control ..							
835	Railway Board Deposits							
840	Working Fund Advances Ledgers Control ..							
841	Unadjusted Balances							
842	Prepaid Expenses							
843	Other Deferred Assets							
850	Loans							
851	Government of India							
855	Depreciation Fund—Engineering and Electric ..							
856	" " —Rolling Stock Dept. ..							
860	State Railway Provident Fund							
861	General Provident Fund							
862	Civil Engineers Provident Fund							
863	Cemetery Endowment Fund							
864	Fines Fund							
868	Interest due and unpaid, or (869) Interest accrued ..							
870	Other Accrued Liabilities							
871	Casualty Reserve							
872	Deposits Ledgers Control							
881/7	Traffic earnings accounts							
888	Abstract A.							
889	" B.							
890	" C.							
891	" D.							
892	" E.							
893	" F.							
894	" G.							
899	Betterments							
860	To State Railway Provident Fund							
861	General Provident Fund							
862	Civil Engineers Provident Fund							
863	Cemetery Endowment Fund							
864	Fines Fund							
867	Pay Sheets and Bills Register Control							
873	Deposits Ledgers Control							
894	Stores expenses, Abstract G.							

Allocation of pay sheets and bills passed for payment month of.....192..as per "Pay sheets and bills allocation register."

Prepared by.....Clerk.
 Verified by.....Assistant Accountant.
 Approved for entry by.....Accountant.
 Posted by.....Clerk.

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 9.

Month

192

No.	Description.	Folio.	Dr.		Cr.	
			Rs.	As. Ps.	Rs.	As. Ps.
	Sundries :—					
	To Sundries :—					
800	Structural engineering works		—			
801	General equipment		—			
802	Rolling stock		—			
803	General charges		—			
833	Miscellaneous debtors and creditors ledgers control.		—			
867	Pay sheets and bills register control ..		—			
888	Abstract A.		—			
889	„ B.		—			
890	„ C.		—			
891	„ D.		—			
892	„ E.		—			
893	„ F.		—			
894	„ G.		—			
810	Stores ledgers control				—	
812	Fuel ledgers control				—	
813/27	Workshop ledger controls				—	
828	Electrical department				—	
836	Controller of currency cash control ..				—	
841	Unadjusted balances				—	
842	Prepaid expenses				—	
843	Other deferred assets				—	
	<i>Depreciation Fund.</i>					
855	Engineering and Electric				—	
856	Rolling stock department				—	
	<i>Other Accrued Liabilities.</i>					
870	Accrued Provident Fund Bonus, et seq. ..				—	
871	Casualty Reserve				—	
889/1	General Administration, abstract B, absorbed in workshops costs				—	
889/2	Depreciation, abstract B, absorbed in workshops costs				—	

Summary of expenditure section journal entries for:—

- (a) Stores and fuel issued to workshops, electrical department, divisions and engineering districts.
- (b) Monthly provision for :—
 - (1) Provident Fund Bonus.
 - (2) Depreciation.
 - (3) Casualties.
 - (4) Other items.
- (c) General administration and depreciation, abstract B, transferred to workshops accounts for inclusion in costs.
- (d) Allocation of workshops and electrical department outturn.
- (e) Allocation of the treasurer's payments.

Prepared by..... Clerk.

Verified by..... Assistant Accountant.

Approved for entry by..... Accountant.

Posted by..... Clerk.

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 11.

Month

192 ..

No.	Description.	Folio.	Dr.		Cr.	
			Rs.	As. Ps.	Rs.	As. Ps.
833	Miscellaneous debtors' ledgers control ..			—		
895	To other income					—

Other income less payments as follows :—

- (a) Haulage of trains and shunting at joint stations.
- (b) Hire of rolling stock.
- (c) Traffic expenses at joint station and rent of stations jointly occupied.
- (d) Payments for running power.
- (e) Conference hire, penalties on interchanged stock and other payments in respect of traffic.

Prepared by..... Clerk.

Verified by..... Assistant Accountant.

Approved for entry by Accountant.

Posted by..... Clerk.

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 12.

Month

192 .

No.	Description.	Folio.	Dr.			Cr.		
			Rs.	As.	Ps.	Rs.	As.	Ps.
896	Payments to worked lines							
872	To Deposits ledgers control							

-Being the amount due to worked lines for the month of.....192.....

Prepared by..... Clerk.

Verified by..... Assistant Accountant.

Approved for entry by..... Accountant.

Posted by..... Clerk.

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 13.

Month

192 .

No.	Description.	Folio.	Dr.		Cr.	
			Rs.	As. Ps.	Rs.	As. Ps.
836	Controller of currency cash control ..					
	To Sundries :—					
829	Miscellaneous earnings ledger control ..					—
830	Voucher ledger control					—
833	Miscellaneous debtors and creditors ledgers control					—
834	Loans and notes receivable ledgers control ..					—
837	Treasurers stations cash control					—
840	Working fund advances ledgers control ..					—
850	Loans					—
851	Government of India					—
872	Deposits ledgers control					—

Allocation of cash receipts by the treasurer, month of.....192....., as per summary of daily statements received from the treasurer.

Prepared by.....Clerk.

Verified by.....Assistant Accountant.

Approved for entry by.....Accountant.

Posted by.....Clerk.

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY.

No. 14.

Month

192 .

No.	Description.	Folio.	Dr.			Cr.		
			Rs.	As.	Ps.	Rs.	As.	Ps.
811	English consignments							
833	To Miscellaneous creditors ledgers (English in- dents Nos. to)							

English consignments as reported by the India Office.

Prepared by..... Clerk.

Verified by..... Assistant Accountant.

Approved for entry by..... Accountant.

Posted by..... Clerk.

SCHEDULE A.

RAILWAY.

JOURNAL ENTRY,

No. 15.

Month

192

No.	Description.	Folio.	Dr.			Cr.		
			Rs.	As.	Ps.	Rs.	As.	Ps.
810	Stores ledgers control							
811	To English consignments (By numbers)							

Transfer of received and inspected goods distributed to stores and taken into stores ledgers month of.....192.....as reported by the stores section.

Prepared by..... Clerk.

Verified by..... Assistant Accountant.

Approved for entry by..... Accountant.

Posted by..... Clerk.

SCHEDULE B.

CLASSIFICATION OF GENERAL LEDGER ACCOUNTS.

*Assets.**Construction of Road and Equipment :—*

- 800 Structural engineering works.
- 801 General equipment.
- 802 Rolling stock.
- 803 General charges.

Working Assets :—

- 810 Stores ledgers control.
- 811 English consignments.
- 812 Fuel ledgers control.
- 813-827 Workshops ledger control. (A separate account for each workshop.)
- 828 Electrical department.
- 829 Miscellaneous earnings ledgers control.
- 830 Voucher ledger control.
- 831 Sundry stations control.
- 832 Sundry stations in suspense.
- 833 Miscellaneous debtors and creditors ledgers control.
- 834 Loans and notes receivable ledgers control.
- 835 Railway Board deposits.
- 836 Controller of currency cash control.
- 837 Treasurers stations cash control.

Miscellaneous deferred Accounts :—

- 840 Working fund advances ledgers control.
- 841 Unadjusted balances.
- 842 Prepaid expenses.
- 843 Other deferred assets.

*Liabilities.**Capital Contributions :—*

- 850 Loans.
- 851 Government of India.

Depreciation Fund :—

- 855 Engineering and electric.
- 856 Locomotives, carriages and wagons.

*Provident and other Funds :—**Ledger Controls.*

- 860 (a) State railway provident fund.
- 861 (b) General provident fund.
- 862 (c) Civil Engineers provident fund.
- 863 (d) Cemetery endowment fund.
- 864 Fines fund.

Working Liabilities :—

- 867 Pay sheets and bills register control.
- 868 Interest due and unpaid.
- 869 Interest accrued.
- 870 Other accrued liabilities.
- 871 Casualty reserve.
- 872 Deposits ledgers control.

Income Account :—

- 880 Income account.
- 881 Goods earnings, including demurrage.
- 882 Miscellaneous goods earnings.
- 883 Passenger traffic earnings.
- 884 Parcels traffic earnings.
- 885 Telegraph earnings.
- 886 Miscellaneous coaching earnings.
- 887 Miscellaneous traffic earnings.
- 888 Abstract A.
- 889 Abstract B.
- 889/1 General administration, abstract B, absorbed in workshops costs.
- 889/2 Depreciation, abstract B, absorbed in workshops costs.
- 890 Abstract C.
- 891 Abstract D.
- 892 Abstract E.
- 893 Abstract F.
- 894 Abstract G.
- 895 Other income.
- 896 Payments to worked lines.
- 897 Interest on provident and other funds.
- 898 Interest on capital outlay.
- 899 Betterments.

SCHEDULE C.
CLASSIFICATION OF CONSTRUCTION ACCOUNTS.*Structural Engineering Works :—*

- 000 Preliminary expenses.
- 001 Land.
- 002 Formation.

Major Bridges—Units :—

- 003 (a) Steel work.
- 004 (b) Masonry.
- 005 Major bridges—Non-units.

Minor Bridges—Units :—

- 006 (a) Steel work.
- 007 (b) Masonry.
- 008 Minor bridges—Non-units.
- 009 Fencing.
- 010 Electric instruments.
- 011 Telephones.

Main Line :—

- 012 (a) Rails and fastenings.
- 013 (b) Sleepers, wood.
- 014 (c) Sleepers, cast iron and ferro concrete.
- 015 (d) Sleepers, steel trough.
- 016 (e) Ballast.
- 017 (f) Electric overhead equipment—Units.
- 018 (g) Electric overhead equipment—Non-units.

Sidings :—

- 019 (a) Rails and fastenings.
- 020 (b) Sleepers, wood.
- 021 (c) Sleepers, cast iron and ferro concrete.
- 022 (d) Sleepers, steel trough.
- 023 (e) Ballast.
- 024 (f) Electric overhead equipment.
- 025 Points and crossings.

Stations and offices—Units :—

- 026 (a) Masonry.
- 027 (b) All others.
- 028 Stations and office—Non-units.

Workshop and Store Buildings—Units :—

- 029 (a) Masonry.
- 030 (b) All others.
- 031 Workshop and store buildings—Non-units.

Electric Power Stations and Sub-stations—Units :—

- 032 (a) Masonry.
- 033 (b) All others.
- 034 Electric power stations and sub-stations—Non-units.

Residential Buildings—Units :—

- 035 (a) Masonry.
- 036 (b) All others.
- 037 Residential buildings—Non-units.
- 038 Station machinery—Units.
- 039 Station machinery—Non-units.
- 040 Shore connection at ferries.
- 041 Plant construction—Units.
- 042 Plant construction—Non-units.

General Equipment :—

- 100 Engineering plants—Units.
- 101 Engineering plants—Non-units.
- 102 Locomotive plants—Units.
- 103 Locomotive plants—Non-units.
- 104 Carriage and wagon plants—Units.

- 105 Carriage and wagon plants—Non-units.
- 106 Electric plants—Units.
- 107 Electric plants—Non-units.
- 108 Miscellaneous plants—Units.
- 109 Miscellaneous plants—Non-units.
- 110 Station and office furniture.
- 111 Motors, lorries, boats, etc., required for general purposes—Units.
- 112 Motors, lorries, boats, etc., required for general purposes—Non-units.

Rolling Stock :—

- 120 Locomotive engines and tenders—Units.
- 121 Locomotive engines and tenders—Non-units.
- 122 Locomotive boilers—Units.
- 123 Locomotive boilers—Non-units.
- 124 Electric locomotives—Units.
- 125 Electric locomotives—Non-units.
- 126 Coaching vehicles—Units.
- 127 Coaching vehicles—Non-units.
- 128 Goods vehicles—Units.
- 129 Goods vehicles—Non-units.
- 130 Motor vehicles—Units.
- 131 Motor vehicles—Non-units.
- 132 Road motor vehicles—Units.
- 133 Road motor vehicles—Non-units.
- 134 Steam boats—Units.
- 135 Steam boats—Non-units.
- 136 Barges and minor crafts—Units.
- 137 Barges and minor crafts—Non-units.

General Charges :—

- 140 Salaries and allowances.
- 141 Office expenses.
- 142 Residential quarters.
- 143 Instruments.
- 144 General charges on stores.

SCHEDULE D.

CLASSIFICATION OF DEPRECIATION FUND ACCOUNTS.

Engineering and Electric :—

- 150 Bridges—Steel work.
- 151 Bridges—Masonry.
- 152 Electric telegraph, instruments and telephones.
- 153 Rails and fastenings, including points and crossings.
- 154 Sleepers, wood.
- 155 Sleepers, cast iron and concrete.
- 156 Sleepers, steel trough.
- 157 Electric overhead equipment.
- 158 Buildings, masonry.
- 159 Buildings, all others.
- 160 Electric power and sub-station buildings.
- 161 Station machinery.
- 162 Engineering plants.
- 163 Electric power and sub-station plants.

Locomotives, Carriages and Wagons :—

- 175 Plant.
- 176 Ferries.
- 177 Locomotive engines and tenders.
- 178 Locomotive boilers.
- 179 Coaching vehicles.
- 180 Goods vehicles.
- 181 Motor vehicles—Rail.
- 182 Motor vehicles—Road.

APPENDIX IX.

SECTION II.

SYSTEM OF ACCOUNTING FOR THE RAILWAY BOARD.

562. The following books will be kept by the Chief Accountant, Railway Board :—

- (1) Cash books.
- (2) Journal.
- (3) General ledger.

The cash books will be similar to those used by the railways except in the titles of the columnar headings. The receipts book will require headings for only the more important items and the remainder will be entered in a miscellaneous column. The disbursement book allocation headings will be :—

- (a) Budget Demand No. 1.
- (b) „ „ „ 2.
- (c) „ „ „ 3.
- (d) „ „ „ 11.
- (e) Miscellaneous.

Any further details required will be obtained by a monthly analysis of the receipts and disbursements. The totals of the allocation columns and the individual items in the miscellaneous column will be posted direct from the cash books to the general ledger accounts affected. The non-cash transactions will be entered in the journal, and then posted to the accounts concerned in the general ledger. Annexed at Schedule A (page 192) is a list of the principal of the accounts which will be maintained in the general ledger.

563. At the end of each month the Chief Accountant, Railway Board, will receive from the Chief Accountant of each railway a balance sheet and income account with explanatory schedules as explained in Chapter VII of the main report and illustrated in Appendix III. The accounts of the Railway Board will be built up by a consolidation of the balance sheets of the separate railways, whether state or company managed, and the balance sheet of the Railway Board. This consolidating statement will be in the following form and order :—

- (a) The account numbers and names down the side.
- (b) The names of the individual railways and of the Railway Board across the top with a column for each.
- (c) A column for the sum of each account for all balance sheets.
- (d) A column for the elimination of inter-railway balances and off-setting balances of railways and the Railway Board.
- (e) A column for net amount of each account.

564. In addition the Chief Accountant will prepare the pay sheets of the clerical staff and the salary roll of the officers. Both these documents will be passed to the representative of the Auditor-General, Railways, for verification and approval before payment.

SCHEDULE A.

CLASSIFICATION OF RAILWAY BOARD GENERAL LEDGER ACCOUNTS.

*Assets.**Debtors :—*

1. Government of India.
2. Railways.
3. Miscellaneous.

Investments :—

8. Depreciation Fund.
9. General.

Cash :—

12. Controller of currency cash control.
13. In hand.

*Liabilities.**Creditors :—*

18. Government of India.
19. Railways.
20. Miscellaneous.
25. Depreciation accounts of company worked lines.
26. Reserve account.

Income Account.

30. Government share of surplus profits.
31. Sale of land.
32. Contribution for government supervision, audit and control, recoverable from companies.
33. Interest on balance of reserve fund.
34. Interest on balance of depreciation fund.
35. Interest and dividend on securities purchased on the reserve fund investment account.
36. Miscellaneous interest.

Expenditure.

37. Demand No. 1.
38. Demand No. 2.
39. Demand No. 3.
40. Demand No. 11.

APPENDIX X.

SYSTEM OF ACCOUNTING FOR STATE RAILWAYS COLLIERIES.

565. In Chapter XII I have recommended that the operating control and financial accounts of the collieries be separated from the railways and grouped as a separate entity in a department of collieries, which will be controlled by a director of collieries stationed in Calcutta and responsible to the Railway Board. To facilitate their convenient operation, the mines will be divided into two groups, viz. :—

- (1) Giridih, to control the Serampore and Kurhurbaree collieries, and the coke ovens, workshops and power plant at Giridih.
- (2) Bermo, to control the Bokaro, Kargali, Jarangdih, Religara, Sawang, Kedla and Bhurkunda collieries, and the power plant at Kargali.

566. The director of collieries will have, in addition to such technical officers as may be necessary, a staff which will be located as follows :—

- (a) A general superintendent at each group centre, who in turn will have under him :—
 - (i) A manager for each mine.
 - (ii) A workshop superintendent for each workshop.
 - (iii) One superintendent for each power plant.
 - (iv) A cashier at each group centre.
 - (v) A storekeeper at each place where stores are kept. This man will be responsible to the controller of stores for the custody of stocks and keeping the necessary quantity records relating thereto, but will be under the general superintendent for the purposes of discipline.
- (b) A chief accountant of collieries, who will be located at Calcutta and will be appointable and removable only by the Railway Board. He will be directly responsible to the director of collieries, retaining, however, the right of access to the Railway Board in the event of disagreement. He will be in charge of all accounting functions, including the internal check of all the colliery accounts. At each group centre he will have a mine accountant, to whom will be delegated the responsibility of keeping all accounts for the collieries, workshops, etc., controlled from that centre. For the purpose of discipline the mine accountant will, however, be under the general superintendent.

567. Each mine accountant will keep a mine ledger in which will be maintained the operating accounts of the mine, and, in the case of Giridih, a control account for the Giridih workshop. It will be convenient to have this ledger in loose leaf form, and, when more than one colliery is controlled from the group centre, to sectionalise the ledger so that the accounts of each colliery may be kept separate.

568. In many respects the accounting system necessary for the collieries will be similar to that required for the railways, and reference is given hereafter to the appendices in which these accounting details will be found. There are, however, certain matters in which a slightly different procedure will be necessary. These are dealt with below ; those affecting the collieries are taken first and those for the head office of the chief accountant in Calcutta follow later in this appendix.

Wages.

569. In section 1 of Appendix VI will be found a detailed wages accounting system, and, except as modified or amended hereafter to meet the special requirements of the collieries and colliery workshops, it will apply in full. A record of all workers showing their names and rates of pay will be maintained in the office of each colliery and workshop manager, and entries concerning the engagement or dismissal of employees, increases and decreases in rates of pay will be initialled by the manager.

There are two classes of labour :—

- (a) The time workers.
- (b) The coal-cutting contractors.

570. *Time workers*.—A record of all men working will be kept :—

(a) At the time office on muster rolls which will later become the pay sheets.

(b) By foremen in charge of time sheets showing the name of each worker.

The muster rolls and the foremen's sheets will both be prepared as far as possible with the aid of typewriters in the time offices and all names will be shown in English and Hindi. On the muster rolls the timekeepers will record daily all attendances of time workers. On the morning of the first day of each week the foremen will receive their time sheets and will daily enter thereon the allocation of each man's time to jobs; and as collusion between timekeepers, foremen and workmen is always possible, these foremen's sheets must be inspected frequently during the week by an overman and occasionally by senior officials. On the evening of the last day of each week these sheets will be given to the overman or junior official, who is responsible for verifying the attendances as shown on the muster rolls, and the hours shown as worked on the foremen's sheets must be reconciled with the hours paid for, *vide* the pay rolls, as explained in paragraph 575. A specimen for a time worker's combined muster roll and pay sheet is given at form 192.

571. *Coal cutting contractors*.—At the open quarries coal is cut, hauled and loaded by contractors, who are responsible for all labour employed and who are paid a fixed rate per ton of coal. These contractors render bills which are certified by senior officials and are paid after audit. At present, coal contractors' bills are prepared on a form which is more suitable for the settlement of engineering work, and form 193 is a specimen intended to supersede the one at present in use.

572. At the collieries at Giridih, coal cutters are paid on contract rates. Generally, the contractor is an individual workman, and only occasionally is he an employer of men. The amounts due to contractors are paid weekly before audit and are shown on a coal cutter's pay sheet, an amended specimen for which is given at form 194. The present procedure of recording coal weights at the pit heads or at sidings will be continued, and at the end of each month the total quantity of coal raised (upon which coal cutters and contractors have been paid) must be reconciled with the coal despatched. In certain cases, cutters are paid special rates for work other than coal cutting—driving hard headings, turning faults, etc. These special rates are fixed by the colliery managers after consulting the superintendent, and the measurements of work done are verified by overmen.

573. For accounts purposes there is no necessity to maintain a record of hours worked by men engaged at contract rates, but as such a record is necessary in order to conform with the Mines Act it can conveniently be maintained at the pit heads.

574. *Make up of pay sheets*.—As there are separate muster rolls for the time and contract workers, there will also be separate pay sheets. The time workers' pay sheets will be prepared in the manner prescribed for railways. For the contract workers the pay sheet will be a summary of the coal contractor's bills, form 193.

575. *Allocation of time*.—In respect of the time workers, the hours shown as worked on the foremen's time sheets will be summarised on form 195, under the colliery and workshop job and accounts heads debitable and agreed in total with the total hours shown as worked on the time workers' muster rolls. The wages debitable to each of these jobs and account heads will next be agreed with the total of the gross wages payable as shown on the pay sheets. The gross wages payable to the coal cutters and contractors will next be summarised under the account heads debitable and form 195 will also be suitable for this summarising. One copy of these summaries will be sent to the chief accountant in Calcutta, and the other will be the document from which the mine accountant will make the necessary postings to the debit and credit of the accounts affected in the mine and workshops' ledgers respectively.

576. *Salaries*.—In addition to the salaries of officers, the wages paid monthly to certain workers are designated as salaries and included under that head. Muster rolls and pay sheets must be maintained for these in the same way as those kept for weekly paid labour, and on the first day of each month they will be passed in to the group office for verification. As the amount involved is not considerable, it is suggested that monthly wages be paid before audit.

577. It is understood that considerable delay occurs in some cases before the monthly salaries of officers are paid. These delays are apparently caused by the collieries having to wait for details of the deductions to be made from salaries and it

is suggested that with regard to institute dues and other items, the details of which cannot be known at the colliery offices at the end of each month, instructions be issued to make up the bills to the 15th of each month. Establishment sheets, form 196, will be prepared at the colliery in duplicate on typewriters a few days before the end of each month and sent to Calcutta by the 28th or 29th. Salaries can then be paid on the first day of every month, and any adjustments found necessary through absence or any other reason can be made in the following month. At all collieries considerable time is taken in writing out lists of deductions made. This appears to be a duplication of work as all deductions are shown on the establishment sheets, and if details of provident fund deductions, income tax, etc., are required, they should be prepared in Calcutta after audit from the Chief Accountant's copy of the establishment sheet.

Stores.

578. Except as modified below, the system of stores receipt, issue and accounting necessary for the collieries will be as set out in Appendix V for Railways.

There are certain phases of Railway stores accounting which will not arise at the collieries and all references to these will, therefore, not apply, viz. :—

English stores.

Issues to subsidiary depôts.

Issues to permanent way inspectors and engineers.

Monthly recoupments from stores trains.

In other matters certain differences will arise in points of detail and these will be treated as follows :—

579. *Stock recoupment.*—The stock recoupment will be signed by the General Superintendent and one copy sent to the director of collieries.

580. *Delivery notes.*—The detailed priced stores records will be kept by the Mine Accountant at each group centre and this organisation will necessitate the preparation of an extra copy of the delivery notes by the supplier, who will then send Part 6 to the General Superintendent who signed the stock recoupment, and the remaining four copies with the goods to their destination. After the goods have been received and inspected, the inspecting officer will dispose of the four copies as under :—

(a) Return Part 7 to the supplier to be attached to the bill.

(b) Send Part 8 to the Chief Accountant of Collieries, Calcutta, as a warning that the suppliers' bill will be presented for payment.

(c) Send Part 9 to the mine accountant who will then write up the detailed priced stores records.

(d) Send Part 10 to the storekeeper receiving the goods, who will then write up his quantity records.

The volume of colliery stores will not be sufficient to warrant the appointment of an inspecting officer and inspections will, therefore, be conducted by colliery managers or other officials delegated by the superintendent.

581. *Issues.*—As a general rule, all issues from stores will be for consumption :—

(a) In the mine, coke ovens, or power plants.

(b) In the workshops.

582. *Issues to mine, coke ovens, or power plants.*—It is not considered necessary to have a planning and progress section at the collieries, and stores issues will be made on a material delivery sheet, form 197, prepared in triplicate and signed by the mine manager or power plant superintendent. Two copies will go to the foreman requiring the stores and the triplicate will remain in the book as a record. When the stores are drawn the foreman will surrender both copies to the storekeeper, who will retain one for the purpose of writing up his unpriced stores records and will send the other to the mine accountant. On his copy the mine accountant will insert the prices and calculate the value of the stores issued, and the quantities

and values will then be posted to the credit of the various accounts in the detailed priced stores ledgers. At the end of each month the values of all issues will be analysed and summarised, in duplicate, under the account heads debitabe. One copy of this analysis of material issues, form 198, will be sent to the Chief Accountant in Calcutta, and from the other the mine accountant will make the postings to the debit and credit of the accounts affected in the mine ledger. In the ordinary course of events, the accounts to be debited will be coal cutting, haulage, stonework, timber work and loading and the sum of these debits will be credited to Head Office Ledger Control Account.

583. *Issues to workshops.*—Issues to workshops will be made on a material delivery sheet signed by the workshop superintendent, and the mine accountant will price and summarise these also on an analysis of material issues, form 198. The summarising procedure will be similar to that for issues to mines and from the summary the necessary entries will be made debiting the value of the issues to the job numbers against which they were drawn, and to which they have been allocated and crediting the total to the mine ledger control account. In the mine ledger the total of the summary will be debited by the mine accountant to the workshop ledger control account and credited to the Head Office Ledger Control Account.

Cash at Collieries.

584. As at present, each colliery or group of collieries will be furnished with an imprest for such an amount, as may be necessary and from which the cashier will pay wages, small contractors' bills and petty disbursements under Rs. 100 each. All colliery cashiers will be under the control of the general superintendent at each group centre. On a fixed day of each week a telegram will be sent to the Chief Accountant in Calcutta stating the net amount disbursed out of the imprest and this amount will be reimbursed immediately to the cashier.

585. All cash transactions will be entered in one of two cash books—one for payments made before audit and the other for payments made after audit. In the second cash book there will be few entries apart from those relating to monthly salaries and wages. Whenever possible, all post-audit payments should be made by cheque from the Chief Accountant's Office and when these cheques are sent to payees through a colliery office a receipt form will be attached to each cheque and in addition a memorandum form will be enclosed giving particulars of all cheques. The colliery office will return the receipts to the Chief Accountant as obtained and will send the memorandum form with the last receipt.

586. Normally no monies other than reimbursements received from the Chief Accountant, will be received by a colliery cashier. It is inevitable, however, that small sums will occasionally be received and these, when in cash, will be taken to debit in the imprest account, but when received by cheque will be sent to the Chief Accountant in Calcutta and no entries made in the colliery cash books. Few payments, if any, apart from weekly wages, will be made out of imprest.

587. Both cash books will be kept in a simple form and carbon copies thereof, certified by the mine accountant and supported by all vouchers, together with an analysis of the imprest account, form 199, allocating all disbursements to the account heads debitabe, will be sent to the Chief Accountant the day after the telegram requesting a reimbursement has been sent. A copy of this summary of imprest expenditure will be retained by the mine accountant and from it he will make the necessary postings to the debit and credit of the accounts affected in the mine ledger.

Mine Ledgers.

588. A mine ledger will be kept for each group of collieries and in it will appear under appropriate account heads all items of income and expenditure of each colliery. The form of the ledger will be simple and it will be ruled with columns for :—

- (a) Date.
- (b) Particulars.
- (c) Folio column to show book and folio from which posting is made.
- (d) Three money columns for debit, credit and balance.

The principal accounts to be kept in a mine ledger will be :—

- (a) An account for each operating expense head.
- (b) Sinking Fund.
- (c) Depreciation.
- (d) Colliery consumption and free supplies.
- (e) Calcutta office expenses (for which a debit will be received once a year)
- (f) Sundry income (sub-divided if necessary).
- (g) Head office ledger control account.
- (h) Workshop ledger control account.
- (i) Advances.
- (j) Fines.
- (k) Loans.

589. Journal vouchers will be prepared for all entries in the mine ledger additional to those coming from the summaries of wages, stores, imprest expenditure, etc. Opening, closing and adjusting entries will always be made through the journal. Journal vouchers should be prepared on good paper of a design suitable for being filed in a permanent binder, and will always be prepared in draft and passed by a senior clerk before being written on the voucher for posting and subsequent permanent filing.

590. The expense accounts in the mines ledger will not necessarily be the same for all collieries. At Kargali and Bokaro, for instance, one account called "coal contractors" will be sufficient because at these collieries there are contractors who are paid a fixed rate for all the operations involved in cutting coal and loading into wagons. For Giridih, however, this account will have to be sub-divided under several headings because the labour is paid for each separate operation.

591. The head office ledger control account should agree at any time with the balance appearing in the mine ledger control account in the head office ledger, and must be agreed therewith at the end of every month. Similarly, the workshop ledger control account must be agreed monthly with the balance appearing on the mine ledger control account in the workshop ledger. Each mine ledger will be self-balancing and a trial balance will be extracted at the end of every month and sent to the chief accountant in Calcutta supported by all relative summaries and documents.

Workshops.

592. For all workshops other than the one at Giridih, all expenditure will be charged to one workshop repair account in the mine ledger and jobs as completed credited thereto and charged out in accordance with the manager's estimates. These estimates will have to be checked frequently and this can be done by valuing work in progress and any stores held in the workshops and such valuation must agree with the balance of the "workshop repair account" in the ledger.

593. This Giridih workshop is of sufficient size to warrant a separate accounting and costing system, and although the system outlined in Appendix VI will not be required in full, it should be read in conjunction with the modified workshop system now outlined. It is necessary that the cost of all work executed in the Giridih workshop be ascertained and for this purpose the following books and forms will be maintained :—

- (a) Workshop journal.
- (b) Workshop ledger.
- (c) Order ledger, form 200.
- (d) Workshop order, form 201.
- (e) Workshop record, form 202.
- (f) Analysis of wages, form 195.
- (g) Analysis of material, form 193.
- (h) Workshop debit notes, form 203.
- (i) Workshop completed work sheet, form 204.

594. The workshop ledger which, with the journal, will be kept by the mine accountant will be self-balancing and the accounts to be kept therein, will be :—

- (a) Mine ledger control account, the balance of which must be agreed monthly with the balance of the workshop ledger control account in the mine ledger, which will be debited with cost of work completed and credited with all wages, salaries, materials, etc.
- (b) Standing and special orders, the balance of which must be agreed monthly with the balances appearing in the order ledger. Debits will be posted from analysis of wages and materials sheets, and journal vouchers (for overhead expenses) and credits will be posted from completed work sheets.
- (c) Overhead expenses—debits will be posted from the analysis of wages and materials sheets and journal vouchers and credits from journal vouchers.

595. The order ledger will record the cost of every job done in the workshop. Special or standing order numbers will be given to jobs of a recurring nature and each separate job will be given, where necessary, a subsidiary number or letter. This repetition work may roughly be grouped under the following heads :—

- Capital Expenditure (sub-divided into the particular capital accounts).
- Coke oven repairs.
- Power house repairs.
- Bungalow repairs.
- Repairs over ground (for each colliery).
- Repairs under ground (for each colliery).
- Rollers and pulleys.
- Underground crossings.
- Coal tubs and wagons.
- Firebars for boilers.
- Plates.
- Brass bushes.

For all other work special orders will be issued and these will be given special numbers.

596. An order, form 201, will be issued to the shop in which the work is to be done. All workshop order books will be in the possession of the workshop superintendent who will have the form prepared in triplicate, giving details of the work. These orders will be countersigned by the general superintendent and two copies sent to the workshop where the foreman in charge will complete the columns "date of completion" and "approximate cost," return one copy to the general superintendent's office and send the other to the workshop superintendent who issued the order. Before returning these orders, the workshop foreman will see that all particulars shown on the forms are entered in the workshop order record, form 202, and this record will then show at any time the position of all unexecuted orders. When the workshop superintendent wishes to employ his men in making standard articles not specifically ordered, he will prepare an order form on himself and have it countersigned by the general superintendent.

597. The analysed summaries of wages will show the amounts debit to each job and the necessary postings will be made therefrom to the debit of the accounts affected in the order ledger, the grand total being credited to wages account and to the mine ledger control account.

598. The analysis of material issues will show the value of stores issued to each job for the month and these values will be posted therefrom to the debit of the individual jobs concerned in the order ledger, the grand total being credited to stores account and to the mine ledger control account.

599. The next step will be to debit completed jobs with their proportion of overhead expenses and this debit will be a fixed percentage of the productive wages. There entries will be made through the journal, the grand total of the debits being credited to overhead expenses account and to the mine ledger control account. Care must be exercised to see that the balance on the overhead expenses account to be absorbed by uncompleted jobs does not exceed the fixed percentage of the wages charged to those jobs.

600. With the exception of :—

- (a) manufactures to be transferred to stores,
- (b) work done for outside parties, the cost of which will be recovered in cash,
- (c) capital expenditure,

all completed work will be for repairs, etc., and will be written off at the end of each month. For this purpose the cost clerk will prepare debit notes, form 203, in triplicate and have them signed by the workshop superintendent. Two copies will then be sent to the General Superintendent for whom the work was done, and he will retain one copy and pass it to the mine accountant to ensure that the debit will be taken up in the mine ledger. The other he will sign and return to the workshop superintendent as an acknowledgment of the debit.

Although the three items specified at the opening of this paragraph will not be written off, debit notes will be prepared when an order is completed and the workshop cost clerk will then dispose of these in the same manner as for the repair work.

The workshop cost clerk will next prepare, in duplicate a completed work sheet, form 204, on which will be shown the details of all these debit notes, the total expenditure thereon and the account heads, firms or persons debitable. A journal entry will next be passed debiting each account head and crediting each job number, viz. :—

Mine Ledger Control Account (being debited with the total)	Dr.	Rs.
Each Repair Account Head (for its amount) .. .. .	..	.. Dr. Rs.
Stores (for the value of stores manufactured) .. .. .	..	.. Dr. Rs.
Sundry Persons (for the value of the work done for sundry persons) .. .. .	..	.. Dr. Rs.
Each Capital Account Head (for its amount) .. .. .	..	.. Dr. Rs.
To job numbers (each job number being entered separately) ..		Rs.

A copy of this completed work sheet will be sent to the Chief Accountant in Calcutta.

Electric Power Stations.

601. The power station at Kargali is under the charge of the colliery superintendent but the one at Giridih is not. It is only right that a power station built and maintained for a colliery should be considered as part of the colliery. In a separate section of the mine ledger detailed operation accounts will be kept for the power houses, and the postings thereto will be made from the analysis of wages and materials, summary of imprest expenditure, etc. In practice the following operating accounts should be sufficient :—

General Charges.

- Coal and fuel.
- Oil waste and engine room stores.
- Proportion of salaries.
- Wages at generating station.
- Repairs—Buildings.
 - Engines and boilers.
 - Dynamos.
 - Sundries.

Distribution charges.

- Proportion of salaries.
- Distribution wages.
- Repairs and maintenance.

Depreciation.

- Buildings.
- Plant, machinery, etc.

602. At the end of each month total expenditure will be transferred to a power house revenue account and from there charged off to colliery consumption accounts in the ratio of units consumed. Credit will also be given to the revenue account for such amounts as will be recovered from employees or others in cash ; in the latter cases the rate per unit charged should be fixed and should not vary from month to month in accordance with cost of production.

603. Statistics as at present kept at Giridih with regard to units generated, and power used in haulage, pumping, etc., should be introduced at Kargali and both power stations must make a return to the mine accountant at the end of each month showing units produced and consumed. The return will differentiate between units used throughout the colliery for power purposes, and those used for lighting.

Coke Oven.

604. The mine accountant will also keep detailed accounts of the Giridih coke oven plant in his mines ledger and the details of expenditure will be obtained from the analysis of wages and materials, summary of imprest expenditure, etc. Statistics will be prepared at the end of each month showing the quantity of coal consumed and the quantities of coke, coal tar, sulphate of ammonia, etc., produced during the month.

Sales of Coal, Coke, etc.

605. The present practice at Giridih and Kargali is that daily invoices, showing quantities only of coal despatched, are made out and sent to the Railway or other parties to whom the coal has been sent. At the end of each month these daily consignments are summarised under consignees, the coal delivered to each division of the East Indian Railway being shown first, that sent to the various other departments of that railway being shown next and finally the outside sales. A copy of this summary, together with an amplified statement is sent to the East Indian Railway accounts office at Calcutta. In this amplified statement the coal supplied to the East Indian Railway is divided over eight different departments of that Railway. It is understood that this sub-division is of no use to the Railway and as it would seem that a colliery is only concerned with its customers and not with their departments, this sub-division should be discontinued unless the East Indian Railway asks for it. Before being despatched the coal is all weighed at the pit head or railway siding under the supervision of a railway official so that the weights are in fact accepted at that point and all that remains is to bill the customer for total despatches made.

606. It is recommended that all billing be done from the office of the Chief Accountant in Calcutta and that in future the collieries confine themselves to sending monthly to the Chief Accountant.—

- (a) A statement of despatches, form 205 showing the details of weights and grades of coal sent to each consignee during the month.
- (b) A summary of all despatches, form 206.

At collieries and quarries a certain amount of coal is used for boiler consumption and a quantity is issued free of charge to employees. A record of these quantities, and also of those used at the power house or coke ovens must be maintained, and a statement prepared under each head at the end of each month. These quantities consumed or issued free must also be shown in the summaries of coal despatched form 206. The weights of each grade shown in Summary (b) must be reconciled with the total weight of coal raised for the month.

607. Each colliery will continue to send a modified invoice, in effect a delivery note, to each consignee with each consignment. It is recommended that this invoice be standardised and the only particulars necessary to be shown thereon will be :—

- (a) Date.
- (b) Number of wagon.
- (c) Number of railway receipt.
- (d) Grade and weight of coal.

Six copies of each invoice will be typewritten at one operation and disposed of as follows :—

- (a) The first three copies together with the railway receipt will be sent to the consignee and the first two copies will contain a space at the foot for a receipt signature and for remarks. The consignee will receipt and send one copy to the Chief Accountant in Calcutta as soon as the coal has been received.
- (b) The fourth copy will be sent to the Chief Accountant of the receiving railway.
- (c) The fifth copy will be sent direct to the Chief Accountant of collieries at Calcutta.
- (d) The sixth copy will be retained as the colliery record.

Head Office.

608. The Chief Accountant in Calcutta will receive from each colliery and workshop the following returns together with the necessary supporting vouchers :—

- (a) Summary of imprest expenditure.
- (b) Analysis of materials issued.
- (c) Completed work sheet showing all work completed by the workshop.
- (d) Summary showing weights of coal raised.
- (e) Statements of despatches to consignees and the weights and grades of coal consigned to each.
- (f) Summary of all despatches for the month.
- (g) An allocation of the electric power consumed.
- (h) A trial balance of each mine ledger.

609. With the exception of the summary of imprest expenditure which will be received weekly these returns will all be received monthly and from them the necessary entries will be made in the financial accounts and books of all collieries. The principal books will be :—

Cash Books. Receipts, form 207, Payments, form 207.

Head Office Ledger.

Journal.

Bill Register (with a cash column), form 209.

Subsidiary Ledgers of Capital Expenditure.

Sundry Debtors Ledger for sales of Coal and other items.

The Head Office Ledger and the journal will be bound books and all others will be loose leaf.

610. From each imprest summary the expenditure will be journalised, debited in the Head Office Ledger to the account heads debitible and the total thereof credited to the colliery imprest petty cash account and also to mine ledger control account.

611. The total of the analysis of materials issued will be credited to the appropriate colliery stores control account and debited to the appropriate mine ledger control account in the general ledger. If stores are sold at the collieries to employees or outside parties, the value will be recovered in cash at the colliery and credited through the imprest account—any profit realised on the sale being credited to sundry receipts in the mine ledger. Stores sales will be shown on the analysis of material issues. The book value of these sales plus the profits thereon, if any, must be agreed with the amount shown as cash received in the imprest account. To simplify this agreement, it will be advisable to insist upon the requisitions for sales of stores at the collieries being made out at the group offices, the cash collected at the same time, and one copy of the requisition annexed to the Chief Accountant's copy of the analysis of material issues.

612. Work done at the colliery workshops, the cost of which will be recovered in cash, will be dealt with in a similar manner to sales of stores.

613. *Cash and Cash Books.*—At present the East Indian Railway Collieries are considered part of that Railway, and there is no separate accounting depart-

ment for colliery cash. The colliery wages, etc., are paid through the cash organisations of the Railway and no cash collections are made for the sales of coal to railways, the settlements being effected by transfers. For the State Railway Collieries, however, a credit has been opened by the Government of India (for such sum as is voted) with the Accountant General of Bengal who in turn has opened an account with the Imperial Bank in the name of P. L. Das Gupta, and the latter has power to sign cheques on this account up to the limit of the grant. Except for small amounts received from outside parties and some civil departments no cash is paid into this account in respect of sales of coal as the settlements with the State Railways and other government departments are made by transfers through the audit offices of the respective departments.

614. The Chief Mining Engineer makes inspections of qualities of coal and for these inspections fees are charged and accounted for through the Colliery Department. These inspections are made at the request of consumers or shippers of coal, a fee of one anna per ton being charged and in the aggregate these total about three lakhs per annum.

615. The system of settlement by transfer, for which there appears to be no good reason, and which is cumbersome and expensive, should be stopped and a cash system introduced similar to that outlined for the railways in Chapter V, a separate account for the Colliery Department being maintained with the Controller of Currency. This being done, the record of all colliery cash will be maintained in two cash books, one for receipts and one for payments. All cash received in Calcutta on account of coal sales, or under any other head will be paid as soon as received into an account with the Imperial Bank for the credit of the Department of Collieries. All payments, except for petty items, will be made from Calcutta by cheques drawn on an account opened in the name of the Department of Collieries and these cheques will be signed by the Chief Accountant and by the Director of Collieries. Petty items will be paid from a petty cash account kept on the imprest system and the total petty disbursements will be refunded weekly (or monthly), the details being charged off through the Cash Book.

616. *Head Office Ledger.*—In this Ledger will be kept one capital expenditure account for each colliery and all details of buildings, plant, machinery, etc., will be kept in a "Buildings, Plant and Machinery Register," form 210. At the newer quarries and collieries it should be possible to obtain the actual cost of all buildings, etc., but at Giridih a proper division of original costs may be difficult to ascertain and if this is so a valuation should be made. The Buildings Register will be kept in the Calcutta Office, and each colliery manager must report whenever anything is scrapped, dismantled or altered in any way. Once a year an inventory will be prepared from the register and sent to the managers for verification. The total amount chargeable for depreciation for one year will be ascertained and a proportion thereof charged in the accounts every month.

617. The head office ledger will also contain a control account for each colliery which will be agreed monthly with the complementary account in the mine ledger. There will also be a control account for sundry creditors, the balance of which will be agreed monthly with the unpaid items appearing in the bill register, and a control account for sundry debtors, the balance of which will be agreed monthly with the sum of the balances in the debtors ledger. An account will also be maintained for the Calcutta Office expenses and these will be detailed in a subsidiary book. At the end of each year a transfer will be made to the debit of each colliery account of such proportion of these head office expenses as it is considered the colliery should bear. There will be an imprest petty cash account with each group of collieries and the balance on these accounts will remain unchanged unless the imprests are altered.

618. *Bill Register.*—In the Bill Register, form 209, will be entered all accounts received for payment, and the amount of each will be analysed across the page under the heads provided. An additional column has been left blank to permit of further sub-division should it be required for any purpose. When an account is paid, the posting will be made from the cash book to the payments column on the extreme left of the register, and the monthly total of the bill register items in the cash book will be debited to the Sundry Creditors Control Account in the head office ledger.

At the end of each month the register will be ruled off and cast, and the necessary postings made to the accounts affected in the head office or subsidiary ledgers :—

- (a) The total of the total column to the credit of the sundry creditors' control account.
- (b) The individual capital expenditure items to the debit of the capital expenditure accounts.
- (c) The total of each colliery stores accounts column to the debit of the respective colliery stores control accounts.
- (d) The total of each colliery control account column to the debit of the colliery group control account, *i.e.*, mine ledger control account.
- (e) The sundries column will be analysed and the postings then made to the debit of the accounts affected.

At the end of each month the unpaid items in the register will be carried down to the next month, and will be entered in detail in the "Total" column, but will not be extended across the page. The total of these unpaid items will agree with the balance of the sundry creditors control account in the head office ledger.

619. *Debtors' ledger.*—In addition to the monthly summaries of coal despatches rendered by the collieries, the chief accountant will also be receiving daily :—

- (a) Copies of invoices sent to consignees by the collieries.
- (b) Copies of receipted invoices from consignees.

These invoices must be paired when received so that the coal in transit can be readily ascertained. To simplify this pairing of invoices, those received from a colliery should be filed in a guard book and those received from consignees filed immediately opposite in the same guard book. Colliery invoices not paired against consignees' copies will represent coal in transit, and these items must be closely watched to ensure that there is no delay in the accounts' office in following up any consignment which would appear to have gone astray. At the end of each month the summaries and supporting statements of coal despatches, form 205, received from the collieries will be checked against the invoices received from the collieries, whether paired or not. This being done, the statements of weights and grades of coal despatched to consignees will be priced by the chief accountant and the necessary bills prepared and issued. These bills will be entered in a coal sales day book and posted therefrom to the debit of the account of the customer concerned in the debtors' ledger, the total being debited to the debtors' ledger control account in the head office ledger.

620. The chief accountant will next take the summary of all despatches for the month, price each grade, calculate the values and agree the total values of all despatches with the total of all coal bills. This agreement having been effected he will then post from the summary to the credit of the appropriate coal sales accounts in the revenue subsidiary ledger the value of each grade of coal sold. These credit postings will complete the double entry, as the debits have already been made to the accounts of the customers who received the coal.

621. *Power generated and consumed.*—All charges for electric consumption, with the exception of those charges which will be recovered in cash and which will be deducted from employee's salaries and credited through the cash book or journal, will be debited to appropriate accounts through the journal, the journal vouchers being prepared from the return of units generated and consumed furnished by the electrical engineer.

622. *Monthly revenue accounts, profit and loss account, balance sheet, and cost statements.*—When all postings for the month have been completed, the chief accountant will extract a trial balance from his books. Thereafter, he will prepare and submit to the Railway Board not later than the fifteenth of each month :—

- (a) A collieries revenue account, form 211.
- (b) A collieries profit and loss account, form 212.
- (c) A collieries balance sheet, form 213.
- (d) A statement showing the cost of production of coal and sales of coal, form 214.
- (d) A statement showing the cost of production of coke and sales of coke, etc., form 215.

APPENDIX XI.

RESOLUTION REGARDING THE SEPARATION OF RAILWAY FROM GENERAL FINANCES, ADOPTED BY THE LEGISLATIVE ASSEMBLY ON THE 20TH SEPTEMBER 1924. (Published in the Report by the Railway Board on Indian Railways for 1925-6, Volume I.)

623. This Assembly recommends to the Governor General in Council that in order to relieve the general budget from the violent fluctuations caused by the incorporation therein of the Railway Estimates and to enable railways to carry out a continuous railway policy based on the necessity of making a definite return to general revenues on the money expended by the State on Railways.

- (1) The railway finances shall be separated from the general finances of the country and the general revenues shall receive a definite annual contribution from railways which shall be the first charge on the net receipts of railways.
- (2) The contribution shall be based on the capital at charge and working results of commercial lines, and shall be a sum equal to 1 per cent. on the capital at charge of commercial lines (excluding capital contributed by companies and Indian States) at the end of the penultimate financial year plus one-fifth of any surplus profits remaining after payment of this fixed return, subject to the condition that, if in any year railway revenues are insufficient to provide the percentage of 1 per cent. on the capital at charge surplus profits in the next or subsequent years will not be deemed to have accrued for purposes of division until such deficiency has been made good. The interest on the capital at charge of, and the loss in working, strategic lines shall be borne by general revenues, and shall consequently be deducted from the contribution so calculated in order to arrive at the net amount payable from railway to general revenues each year.
- (3) Any surplus remaining after this payment to general revenues shall be transferred to a railway reserve ; provided that if the amount available for transfer to the railway reserve exceeds in any year three crores of rupees only two-thirds of the excess over three crores shall be transferred to the railway reserve and the remaining one-third shall accrue to general revenues.
- (4) The railway reserve shall be used to secure the payment of the annual contribution to general revenues ; to provide, if necessary, for arrears of depreciation and for writing down and writing off capital ; and to strengthen the financial position of railways in order that the services rendered to the public may be improved and rates may be reduced.
- (5) The railway administration shall be entitled, subject to such conditions as may be prescribed by the Government of India, to borrow temporarily from the capital or from the reserves for the purpose of meeting expenditure for which there is no provision or insufficient provision in the revenue budget subject to the obligation to make repayment of such borrowings out of the revenue budgets of subsequent years.
- (6) A Standing Finance Committee for Railways shall be constituted consisting of one nominated official member of the Legislative Assembly, who should be chairman, and eleven members elected by the Legislative Assembly from their body. The members of the Standing Finance Committee for Railways shall be ex-officio members of the Central Advisory Council, which shall consist, in addition, of not more than one further nominated official member, six non-official members selected from a panel of eight elected by the Council of State from their body, and six non-official members selected from a panel of eight elected by the Legislative Assembly from their body.

The Railway Department shall place the estimate of railway expenditure before the Standing Finance Committee for Railways on some date prior to the date for the discussion of the demand for grants for railways and shall, as far as possible, instead of the expenditure programme

revenue show the expenditure under a depreciation fund created as per the new rules for charge to capital and revenue.

- (7) The Railway Budget shall be presented to the Legislative Assembly if possible in advance of the general budget and separate days shall be allotted for its discussion, and the Member in charge of railways shall then make a general statement on railway accounts and working. The expenditure proposed in the Railway Budget, including expenditure from the depreciation fund and the railway reserve, shall be placed before the Legislative Assembly in the form of demands for grants. The form the Budget shall take after separation, the detail it shall give and the number of demands for grants into which the total vote shall be divided shall be considered by the Railway Board in consultation with the proposed Standing Finance Committee for Railways with a view to the introduction of improvements in time for the next budget, if possible.
- (8) These arrangements shall be subject to periodic revision, but shall be provisionally tried for at least three years.
- (9) In view of the fact that the Assembly adheres to the resolution passed in February, 1923, in favour of State management of Indian Railways, these arrangements shall hold good only so long as the East Indian Railway and the Great Indian Peninsula Railway and existing State-managed railways remain under State management. But if in spite of the Assembly's resolution above referred to, Government should enter on any negotiations for the transfer of any of the above railways to company management, such negotiations shall not be concluded until facilities have been given for a discussion of the whole matter in the Assembly. If any contract for the transfer of any of the above railway to company management is concluded, against the advice of the Assembly, the Assembly will be at liberty to terminate the arrangements in this Resolution.

624. Apart from the above convention, this Assembly further recommends :—

- (i) That the railway services should be rapidly Indianised, and further that Indians should be appointed as members of the Railway Board as early as possible ; and
- (ii) That the purchases of stores for the State railways should be undertaken through the organization of the Stores Purchase Department of the Government of India.

APPENDIX XII.

SECTION I.

STATISTICS.

625. *Method of obtaining engine performance and consumption and vehicle performance.*—In Chapter XV, paragraph 319, a method of obtaining these statistics is outlined and the details and particulars required for the purpose are now set out, viz. :—

From engine driver's report :—

Engine hours and/or miles on each run.

- (1) Shed to station and reverse.
- (2) Standing in steam.
- (3) Shunting at stations *en-route*.
- (4) Train.

626. Miles are not appropriate for items (1), (2) and (3) and hours only are required. The report must also show the duty on which the engine was employed, viz. :—

Passenger train.

Goods train.

Mixed train.

Departmental train—

- (1) Engineers.
- (2) Transportation.
- (3) Stores.

Light—

Assisting required .. { Goods.
Passenger.
Mixed.

Assisting not required .. { Goods.
Passenger.
Mixed.

Yard shunting goods.

Yard shunting passenger.

Yard shunting mixed.

From the guard's report should be supplied :—

Number of engine and name of driver.

Number and class of vehicles put on or taken off train at each station, together with weight of vehicle and contents ;

and from this information vehicle miles and traction ton miles for each engine run are obtainable by the density method. A change of engine should be treated for the purpose of these figures as a new train, but not an additional engine which should be entered on the report as assisting required or not required with number of engine and name of driver.

627. Reports of issues of coal, etc., by one division to engines of another should be sent daily by the issuing division to the engine division. The issue notes should bear the division number and shed number and should be machine numbered for each shed. Each division officer should see that all the numbers run consecutively, and, in addition to sending daily to other divisions the notes that concern them, should send a monthly statement of the distinctive numbers sent to ensure that none are lost *en route*.

628. The engine driver's report forms at present in use contain a column for fuel and oil taken on. Enquiries have elicited the fact that these spaces in the form are usually filled in by the shed foreman and not by the engine driver. The shed foreman also fills up forms similar to form 105, and it has been the practice to have these checked against the engine driver's report. As both are prepared by the same person, this proceeding is quite useless. The specimen form 105 has a space for signature of driver, and is in effect similar in principle to stores issue note. For

this reason the space on the engine driver's report for coal and oil is unnecessary. Moreover the new suggested form specifies the quality of coal and oil, which, in view of varying prices, is important. It may be noted that the requirement that the issue note be signed by the driver in itself constitutes some guarantee of accuracy in the quantities entered on the form.

629. In each division office will be collected each day the engine drivers' reports from each shed in the division, the guards' journal from all trains on the division and the issues by engine sheds (whether on the home division or some other) to division engines. From these reports a summary will be made up in the division office giving for each engine run the following information :—

Date.	Traction ton miles
Duty.	Vehicle miles.
Enginer number.	Hours, shed to station and reverse.
Driver's name and number.	Hours shunting <i>en route</i> .
Weight of engine.	Hours on train.
Fuel consumed, quality and cwt.	Hours standing in steam.
Lubricant consumed, quality and lbs.	Train engine miles
	Train engine hours.

A carbon copy of the summary will be sent direct to the assistant accountant (statistics) and therefrom a card, form 216, will be punched for each engine run or duty.

630. The machine sorting and tabulating of these cards will give for each engine and driver on the division the gross and traction ton miles, the fuel and oil consumed, the vehicle miles run, and the engine miles or hours under each engine duty. Shed to station and train engine shunting miles could be assumed at the usual arbitrary five miles per hour, but it seems better to use only hours both for the principal and the derived statistics. Yard shunting engine hours and number of vehicles shunted can be obtained from similar tabulations by using a code number for that duty and for each shunting yard and by punching number of vehicles instead of vehicle miles in that column.

631. A compilation by shed numbers will give figures for all engines attached to that shed, and a shed average or shed standard with which each individual engine's performance and consumption can be compared. A further compilation by divisions will give the corresponding figures for the engines attached to each division and so for the whole railway undertaking.

632. Incidentally, the gross ton miles for the whole railway will be also obtained. A comparison of these figures with the more accurate ones obtained from the traffic audit section, as already explained, will show the extent of the error involved in the figures compiled from guards' journals, and should be a stimulus to ever increasing accuracy in these reports.

633. The guards' journals summary will also show vehicle miles on each engine run for each class of vehicle, as well as time taken in shunting or consumed by detention. From these figures for each report will be punched a card, form 217 ; the tabulations of all these cards will give the following summary information :—

Vehicles on and off and up or down at each station :—

Passenger—Upper class.

„ Lower class.

„ Other.

Wagons loaded and empty.

Brake vans.

Shunting time at each station.

Detention time at each station.

From the vehicles on and off at each station up and down total vehicle miles are readily obtainable by Mr. Scott's Density Method.

634. There are minor details in connection with the methods here outlined to which it is not necessary to refer. These and others which would no doubt appear when the plan is tried in practice may well be left to the transportation and statistical officials of the railways.

APPENDIX XII.

SECTION II.

STATISTICS PUBLISHED BY THE RAILWAY BOARD AND INDIVIDUAL STATE RAILWAYS.

635. The Railway statistics are contained in the following documents :—

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- (2) The monthly compilation of the Railway Board.
- (3) The annual compilation of each separate State Railway.
- (4) The monthly compilation of each separate State Railway.

The first two are a compilation of the figures furnished by the separate Railways monthly and annually. The two latter vary considerably on the different railways, and I have selected those published by the North Western Railway as typical of a complete set. Dealing firstly with the Railway Board annual statistics, these are published in two sections, A and B.

636. Section A contains the following summary tables :—

Table 1 which shows—

- (1) Capital at charge.
- (2) Net revenue receipts.
- (3) Percentage of (2) to (1).
- (4) Payments on account of share of surplus.
- (5) Interest payments.
- (6) Gain or loss.
- (7) Percentage of (6) to (1).

These are given for—

- (a) State lines worked by the State.
- (b) State lines worked by companies or Indian States.
- (c) Miscellaneous items.
- (d) Total divided into Central Government and Provincial Governments.

637. Miscellaneous items produce no revenue but represent expenditures incurred on abandoned projects, etc., which form part of the capital at charge on which interest is payable to the Government of India. Provincial lines included in this table are not, in the finance accounts of the Railway Department, treated as State-owned railways ; nor are any privately-owned railways included in this table. Figures for all the individual lines comprised in this table are given in Section B, Table 1.

638. Table II (A) which in turn is supported by section B, Table 2 (a), shows under the same main divisions a statement of the capital outlay during the year divided between (a) works, (b) rolling stock, (c) general charges, and (d) stores, and the total at the end of the year agreeing with the capital at charge in Table 1.

639. Table II (B) is supported in detail by section B, Table 2 (b), and shows the same information for all railways other than those in Table II (A). These are divided into the following 12 classifications :—

- (1) Branch line Companies' Railways under Guarantee Terms :—
 - (a) Worked by the branch line company.
 - (b) Worked by the main line.
- (2) Branch line Companies' Railways under rebate terms worked by the main line.
- (3) Branch line Companies' Railways under guarantee and rebate terms.
- (4) Companies' lines subsidised by the Government of India.
- (5) Companies' lines subsidised by local Governments.
- (6) Unassisted Companies' lines.
- (7) District Board lines.
- (8) Companies' lines subsidised by District Boards.
- (9) Indian State lines worked by Indian States.
- (10) Indian State lines worked by the main line.
- (11) Companies' lines guaranteed by Indian States.
- (12) Lines in Foreign territory worked by British Indian Railway Companies.

640. Table III is supported in detail by Section B, Table 4, and shows the interest charges for all State and provincial owned railways under the three headings of :—

- (a) Sterling debt.
 (b) Sterling share capital
 Sterling debenture debt } contributed by companies.
 (c) Government outlay.
 (d) Rupee debt,

and agrees with the interest payments figures in Table I.

641. Table IV gives the summary of gross revenue receipts, working expenses, and net revenue receipts of State-owned railways, percentage of working expenses to earnings under the same classification as Table I, and agrees with net revenue receipts as stated therein. In section B, Table 3, there is given a statement which is evidently intended to support in detail the figures summarised in Section A, Table IV. The figures of net revenue receipts in the two tables are identical, but the gross receipts and working expenses both differ and no explanation of these differences is given.

642. Table V gives a summary of capital at charge, revenue earnings and expenses of all railways, divided as follows :—

- (a) Class I with gross earnings over Rs. 50 lakhs.
 (b) Class II with gross earnings less than Rs. 50 lakhs and over Rs. 10 lakhs.
 (c) Class III with gross earnings under Rs. 10 lakhs.

These are again divided into :—

Total State Railways.

Total other Railways.

643. The figures for State Railways given in Table V should agree with those published in Tables I and IV, but the following differences occur, the explanation of which is not published :—

<i>State Railways.</i>	<i>Table V.</i> <i>Thousands of</i> <i>Rupees.</i>	<i>Tables I</i> <i>and IV.</i> <i>Thousands of</i> <i>Rupees.</i>
Capital at charge	6,70,58,22	6,75,23,11
Gross earnings	99,20,02	99,72,77
Working expenses	63,41,36	64,43,98
Net earnings	35,78,66	35,28,79

There is a further difference between the figures for all other railways as given in Table II (B) and Table V respectively, viz. :—

	<i>Table V.</i> <i>Thousands of</i> <i>Rupees.</i>	<i>Table II(B)</i> <i>Thousands of</i> <i>Rupees.</i>
Capital at charge	83,73,30	87,85,42

Table V is supported in detail by Section B, Table 5, so that the latter table in turn disagrees with Section B, Tables 1, 2 and 3. An attempt to agree these tables in detail disclosed differences in every traceable figure, and in many cases, owing to different descriptions of the lines, it was impossible to trace corresponding figures.

644. Table VI gives capital at charge, revenue earnings and working expenses, and route mileage for all Railways, classified as in Table II (A) and II (B). The capital at charge shown here is Rs. 7,54,31,52,000 and should agree with the sum of that shown in

- (a) Table II (a) for State Railways .. Rs. 6,75,23,11,000
 and
 (b) Table II (b) for all other Railways.. Rs. 87,85,42,000

Rs. 7,63,08,53,000 Rs. 7,54,31,52,000

The difference between these two sets of published figures is Rs. 8,77,01,000 of which no explanation is given unless some notes (without figures) at the foot of Table VI contain the solution of the discrepancy.

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The first two are a compilation of the figures furnished by the separate Railways monthly and annually. The two latter vary considerably on the different railways, and I have selected those published by the North Western Railway as typical of a complete set. Dealing firstly with the Railway Board annual statistics, these are published in two sections, A and B.

636. Section A contains the following summary tables :—

Table 1 which shows—

- (1) Capital at charge.
- (2) Net revenue receipts.
- (3) Percentage of (2) to (1).
- (4) Payments on account of share of surplus.
- (5) Interest payments.
- (6) Gain or loss.
- (7) Percentage of (6) to (1).

These are given for—

- (a) State lines worked by the State.
- (b) State lines worked by companies or Indian States.
- (c) Miscellaneous items.
- (d) Total divided into Central Government and Provincial Governments.

637. Miscellaneous items produce no revenue but represent expenditures incurred on abandoned projects, etc., which form part of the capital at charge on which interest is payable to the Government of India. Provincial lines included in this table are not, in the finance accounts of the Railway Department, treated as State-owned railways ; nor are any privately-owned railways included in this table. Figures for all the individual lines comprised in this table are given in Section B, Table 1.

638. Table II (A) which in turn is supported by section B, Table 2 (a), shows under the same main divisions a statement of the capital outlay during the year divided between (a) works, (b) rolling stock, (c) general charges, and (d) stores, and the total at the end of the year agreeing with the capital at charge in Table 1.

639. Table II (B) is supported in detail by section B, Table 2 (b), and shows the same information for all railways other than those in Table II (A). These are divided into the following 12 classifications :—

- (1) Branch line Companies' Railways under Guarantee Terms :—
 - (a) Worked by the branch line company.
 - (b) Worked by the main line.
- (2) Branch line Companies' Railways under rebate terms worked by the main line.
- (3) Branch line Companies' Railways under guarantee and rebate terms.
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- (5) Companies' lines subsidised by local Governments.
- (6) Unassisted Companies' lines.
- (7) District Board lines.
- (8) Companies' lines subsidised by District Boards.
- (9) Indian State lines worked by Indian States.
- (10) Indian State lines worked by the main line.
- (11) Companies' lines guaranteed by Indian States.
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640. Table III is supported in detail by Section B, Table 4, and shows the interest charges for all State and provincial owned railways under the three headings of :—

- (a) Sterling debt.
 (b) Sterling share capital
 Sterling debenture debt } contributed by companies.
 (c) Government outlay.
 (d) Rupee debt,

and agrees with the interest payments figures in Table I.

641. Table IV gives the summary of gross revenue receipts, working expenses, and net revenue receipts of State-owned railways, percentage of working expenses to earnings under the same classification as Table I, and agrees with net revenue receipts as stated therein. In section B, Table 3, there is given a statement which is evidently intended to support in detail the figures summarised in Section A, Table IV. The figures of net revenue receipts in the two tables are identical, but the gross receipts and working expenses both differ and no explanation of these differences is given.

642. Table V gives a summary of capital at charge, revenue earnings and expenses of all railways, divided as follows :—

- (a) Class I with gross earnings over Rs. 50 lakhs.
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 (c) Class III with gross earnings under Rs. 10 lakhs.

These are again divided into :—

- Total State Railways.
 Total other Railways.

643. The figures for State Railways given in Table V should agree with those published in Tables I and IV, but the following differences occur, the explanation of which is not published :—

<i>State Railways.</i>	<i>Table V.</i> <i>Thousands of</i> <i>Rupees.</i>	<i>Tables I</i> <i>and IV.</i> <i>Thousands of</i> <i>Rupees.</i>
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There is a further difference between the figures for all other railways as given in Table II (B) and Table V respectively, viz. :—

	<i>Table V.</i> <i>Thousands of</i> <i>Rupees.</i>	<i>Table II(B)</i> <i>Thousands of</i> <i>Rupees.</i>
Capital at charge	83,73,30	87,85,42

Table V is supported in detail by Section B, Table 5, so that the latter table in turn disagrees with Section B, Tables 1, 2 and 3. An attempt to agree these tables in detail disclosed differences in every traceable figure, and in many cases, owing to different descriptions of the lines, it was impossible to trace corresponding figures.

644. Table VI gives capital at charge, revenue earnings and working expenses, and route mileage for all Railways, classified as in Table II (A) and II (B). The capital at charge shown here is. Rs. 7,54,31,52,000 and should agree with the sum of that shown in

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636. Section A contains the following summary tables :—

Table 1 which shows—

- (1) Capital at charge.
- (2) Net revenue receipts.
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637. Miscellaneous items produce no revenue but represent expenditures incurred on abandoned projects, etc., which form part of the capital at charge on which interest is payable to the Government of India. Provincial lines included in this table are not, in the finance accounts of the Railway Department, treated as State-owned railways ; nor are any privately-owned railways included in this table. Figures for all the individual lines comprised in this table are given in Section B, Table 1.

638. Table II (A) which in turn is supported by section B, Table 2 (a), shows under the same main divisions a statement of the capital outlay during the year divided between (a) works, (b) rolling stock, (c) general charges, and (d) stores, and the total at the end of the year agreeing with the capital at charge in Table 1.

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and agrees with the interest payments figures in Table I.

641. Table IV gives the summary of gross revenue receipts, working expenses, and net revenue receipts of State-owned railways, percentage of working expenses to earnings under the same classification as Table I, and agrees with net revenue receipts as stated therein. In section B, Table 3, there is given a statement which is evidently intended to support in detail the figures summarised in Section A, Table IV. The figures of net revenue receipts in the two tables are identical, but the gross receipts and working expenses both differ and no explanation of these differences is given.

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These are again divided into :—

- Total State Railways.
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<i>State Railways.</i>	<i>Table V.</i> <i>Thousands of</i> <i>Rupees.</i>	<i>Tables I</i> <i>and IV.</i> <i>Thousands of</i> <i>Rupees.</i>
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Capital at charge	83,73,30	87,85,42

Table V is supported in detail by Section B, Table 5, so that the latter table in turn disagrees with Section B, Tables 1, 2 and 3. An attempt to agree these tables in detail disclosed differences in every traceable figure, and in many cases, owing to different descriptions of the lines, it was impossible to trace corresponding figures.

644. Table VI gives capital at charge, revenue earnings and working expenses, and route mileage for all Railways, classified as in Table II (A) and II (B). The capital at charge shown here is.. .. . Rs. 7,54,31,52,000 and should agree with the sum of that shown in

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Rs. 7,63,08,53,000 Rs. 7,54,31,52,000

The difference between these two sets of published figures is Rs. 8,77,01,000 of which no explanation is given unless some notes (without figures) at the foot of Table VI contain the solution of the discrepancy.

645. Section B, Table 3, gives in detail the similar figures as in Section A, Table VI, for the separate railways for State-owned and provincial lines only, but none of the figures in the two tables agree.

646. Such differences as these suggest that the statements are prepared by different people from separate sources and that no attempt has been made to agree them. It is probably another instance of the complications arising from the absence of a proper system of bookkeeping, under which no such discrepancies could arise.

647. Table VII gives a summary of route and track mileage of Classes I, II and III Railways divided into the different gauges. The total agrees with a corresponding total in the first column of Table VI and is supported in detail by Section B, Table 8.

648. Tables VIII and IX contain a summary of equipment and agree with and are supported by Section B, Table 10.

649. Table X contains summaries of passenger and goods statistics by Classes I, II and III and under different gauges.

650. Table XI contains summaries of revenue earnings and expenses worked out per train mile and per mean mile worked per week and based on the figures in Table V, also worked out by Classes I, II and III and different gauges.

651. Table XII contains track and engine miles for Classes I, II and III railroads and different gauges.

652. Table XIII contains a summary of gauges of the most important operating Statistics.

The last four tables are supported by detailed figures for each Railway in Section B, Tables XII, XIII and XIV.

653. Tables I to VI call for considerable amendments, with the objects of :—

- (1) Condensing the space.
- (2) Securing accuracy.
- (3) Avoiding duplication.

For this purpose I suggest that each table be so arranged as to give all the classifications required, with the main headings for the different methods of working as in Table VI, but shortened as hereafter suggested, and with sub-headings under each for Classes I, II and III Railways. This method of arrangement is much simplified by the fact that with the exception of the Aden Railway (Class III) all the State-owned Railways are Class I ; and that in addition to the State-owned Railways there are only three others classified as Class I, viz : Bengal and North Western, Nizam's State and Rohilkund and Kumaon.

654. There are a number of small lines owned by independent states or companies which form part of and are worked by larger systems, and which do not appear separately in Table B.7 (Revenue) of Railways by Classes I, II and III. They do, however, appear separately in Section B, Table II (b), Capital. A separate table should be prepared to show for these worked lines the usual revenue figures. This table will be quite independent of any other and will not be included in the summaries in Section A.

655. On the lines indicated the following summaries tables will be prepared for Sections A and B.

Section A—Table I.—Capital at Charge, containing columns for :—

(a) Total Capital Outlay to end of preceding year :—

Original purchase.

Works.

Rolling stock.

General charges.

Total.

(b) Outlay during financial year :—

- Original purchase.
- Works.
- Rolling stock.
- General charges.

(c) Total at end of year :—

- Original purchase.
- Works.
- Rolling stock.
- General charges.

(d) Total capital at charge :—

- Contributed by the State.
- Contributed by companies or other authorities.

The amount to be entered under the heading "Original Purchase" will be the excess of the cost to the Government over the actual capital outlay at date of purchase, the latter being distributed over the other three headings. Stores will no longer figure in this statement, as they will be treated as a working capital asset under the new system of accounts. These figures will then conform to those in the Railway Board Consolidated Balance Sheet (see Chapter VII of the main report).

656. Table II, income account, containing columns for :—

- (1) Capital at charge, totals from Table I.
- (2) Gross earnings.
- (3) Working expenses (including depreciation).
- (4) Net earnings.
- (5) Percentage of 4 to 1.

The amount of payments on account of shares of surplus profits and of interest relates only to State lines, and will be found in total and in detail in the Consolidated Income Account of the Railway Board (see Chapter VII of the main report) which will appear in Volume I of the annual report and need not be repeated in Volume II.

657. Table III, gross earnings, containing columns for :—

- (1) Earnings from passengers carried.
- (2) Other coaching earnings.
- (3) Earnings from goods carried.
- (4) Other goods earnings.
- (5) Steamboat earnings.
- (6) Telegraph earnings.
- (7) Other miscellaneous earnings.
- (8) Total gross earnings.

The total of Table III will agree with column 2 of Table II.

658. Table IV, working expenses, containing columns for :—

- (a) *By abstracts* :—
 - (i) Maintenance of structural works.
 - (ii) Maintenance of equipment.
 - (iii) Commercial.
 - (iv) Transportation.
 - (v) General.
 - (vi) Total working expenses.

And giving for each the percentage to gross earnings. This will be a summary of a similar table to Section B, Table VII, but corresponding to the new form of abstract.

(b) *By budget headings* :—

- (i) Administration.
- (ii) Repairs and maintenance.
- (iii) Operating.
- (iv) Depreciation.
- (v) Total.

Both the above totals will agree with the total of working expenses in column 3 of Table II.

659. The side headings in all these tables will be as follows :—

- (1) State lines worked by the state.
 - Class I.
 - Class III.
- (2) State lines worked by companies.
 - Class I.
- (3) Branch line companies railways under guarantee and/or rebate terms worked by the branch line company.
 - Class II.
 - Class III.

Under this heading will come all such companies except those worked by main lines as noted above. In the relative detailed Tables in Section B. the distinction between the various kinds of guarantee or rebate can be indicated by footnotes.

- (4) Subsidised and Guaranteed Companies Lines.
 - Class I.
 - Class II.
 - Class III.

In the relative table in Section B. the distinction between subsidies by the Government of India and Local Governments and District Boards or Indian States will be indicated by footnotes.

- (5) Unassisted Companies Lines.
 - Class III.
- (6) District Board Lines.
 - Class III.
- (7) Indian State Lines worked by Indian States.
 - Class I.
 - Class II.
 - Class III.
- (8) Lines on foreign territory worked by British Indian Railway Companies.
 - Class II.
 - Class III.

Some difficulty arises in tabulating the capital and revenue figures of Independent State and Company lines worked by State-owned Railways. So far as Capital is concerned, I recommend that these lines be gathered together in a separate side heading.

- (9) Independent State and Company lines worked by State-owned Railways, and that they be grouped under the name of the State line by which they are worked. The totals of Group 9 will in these capital tables be included in the grand total.

660. So far as revenue is concerned they can still be grouped under the same side heading 9, and under the name of the State Railway working them. In this case, however, as all the figures are included in those of the lines working them, the total of this side heading 9 will not be included in the grand total, and a note to this effect and the reason therefor will be made at the foot of the side heading.

661. Columns 6 to 11 in Section A, Table 1 ; Section A, Table III ; and Section B, Table 4, which deal with interest, will be discontinued for reasons already given.

662. The Tables numbered VII to XIII are the most useful in this section, and, subject to the following slight modifications will be continued as at present but re-numbered V to XI respectively. It is recommended that columns be added to each of these tables showing :—

- (a) For Locomotives.—Unexpired tractive power, *i.e.*, tractive power multiplied by number of years of unexpired life.
- (b) For Passenger Coaches.—Unexpired capacity, *i.e.*, number of passengers for whom accommodation is provided multiplied by unexpired life of coach.
- (c) For Freight Wagons.—Unexpired tonnage capacity, *i.e.*, capacity multiplied by unexpired life.

663. In Section B, Tables 1 to 4 will follow exactly the amended Tables I to IV in Section A giving each individual railway under the different sections in each table. At the foot of Tables I to IV in Section A and Tables I to IV in Section B the totals will be given for all Class I, II and III Railways, and the grand totals below these will be the totals of these three sections as also of the eight sections representing different methods of working. Figures for the previous year, if required, should be printed as at present in these tables in italics. Each table in Section A will contain a reference to the corresponding detail table in Section B. In section B, tables from 8 onwards should be renumbered to run from 5 onwards.

664. It remains to note certain matters in connection with the remaining tables in Section B.

Table 15 gives a division of earnings and expenses between passenger and goods traffic. This method of division has been discussed in paragraphs 320-324 of the Main Report, and it is only necessary here to add that this table should be revised on the principle there laid down.

665. There is some confusion between the terms train miles, train engine miles and engine miles. I suggest that the standard terms train engine miles and hours, other engine miles and hours (specifying class) and total engine miles and hours be used in all tables relating to engine mileage and hours. This will make Table 20 more intelligible, as columns 5 and 6 will read "Train Miles per Train Engine Hour" and "Train Miles per Total Engine Hour" respectively. The difference between train hours and train engine hours would be the time trains were standing without engines.

666. Table 22 contains in column 18 "Engine Miles per day per Engine on Line," which includes engines laid up or in shops. If a column be added between 5 and 6 to show average number in shops, I suggest that all information about engines on line and in use will be available without continuing the somewhat meaningless figures in column 18.

667. In Table 25 there is some confusion between gross ton miles, including or excluding engines. As both these terms are much used, I suggest that there should be three classifications of ton miles, *i.e.*,

Traffic ton miles, being ton miles of goods only.

Traction ton miles, being ton miles of vehicles and contents, *i.e.*, train load.

Gross ton miles, being traction ton miles *plus* engine ton miles.

668. In Table 27 (*b*), if, as already suggested, coal consumption per gross ton mile is adopted as a regular unit, consumption per engine mile should be discontinued. Coal for shunting and siding engine duty should be given per engine hour on this duty, as neither miles nor ton miles are obtainable.

669. Table 29 gives total tons carried and total earnings for a number of selected commodities. I suggest that the really important figure is not tons carried, which has no regard for distances, but ton miles, and these figures for each commodity should be substituted for tons. They are readily obtainable by a sorting of the traffic punched cards. A third column should also be added to give earnings per ton mile in pies.

670. Table 30 appears to be too voluminous, and it is a question whether it is really of much use for operating purposes. In any case, the number of per unit columns should be materially reduced and the accounts should follow the new form of abstracts. All these figures and their percentage to gross earnings are also given in Table 7 (new Table 4).

671. The remaining tables in section B call for no comment.

672. On the volume of statistics published monthly by the Railway Board, the following comments are made and the references quoted are to the volume for October and November, 1926, published on 1st February, 1927.

Tables 1 to 4 in Part I are largely duplicated in the same numbers in Part II, which gives the information in a more detailed form. A slight re-arrangement would enable these tables to be combined into three new ones, giving—

- (1) Engine mileage
- (2) Engine hours and speed of trains.
- (3) Coaching and wagon miles.

673. As already suggested in Chapter XV of the Main Report, it is better to use the terms train engine miles and hours, other engine miles and hours and total engine miles and hours, leaving train hours to represent train time including halts without an engine (if this is required, which appears doubtful). I would also suggest that the terms coaching and wagon be used to denote passenger and goods vehicles respectively, and the term vehicles to denote both passenger and goods combined.

674. In Table 3, the column train miles per engine hour should be omitted. It is only another and more vague indication of the ratio of train engine miles to total engine hours which is given in direct form in another table.

675. Tables 6 and 7 in Part II contain statistics of marshalling yards which, besides the basic figures of wagons detached and dealt with in number, and per shunting engine hour, also gives the cost of engine time and cost per wagon. This figure of cost is of doubtful accuracy; it includes interest on capital, depreciation, average cost of running all engines and average wages paid, plus certain arbitrary percentages. The method has been laid down by the Railway Board for certain yards only, and for other yards individual railways have adopted a fixed cost of Rs. 5 per engine hour. The really important statistics for these yards would appear to be—

Wagons moved per shunting engine hour.

Wagons moved per yard shunting staff (numbers and cost).

Wagons awaiting shunting.

It has been suggested to me that the foremen in charge of yards would pay more attention to figures in money, than to numbers or proportions. If this is so, I would suggest that an approximate cost of a shunting engine hour based on tests should be adopted which would be at least as accurate as that arrived at by the complicated formula at present in use and would be much simpler to compile. It has further been suggested that an expensive class of engine may be in use in a yard. If this be so, it should be stopped, without having to wait for statistics, by requiring periodically from each yard the number and class of each engine so used.

676. In Table 8, lubricating oil consumption should preferably be given for (1) passenger, (2) goods, and (3) mixed trains separately, instead of as at present or (1) passenger and mixed, (2) goods.

677. In Table 9, quantities of coal consumed per engine hour might be omitted, as figures per gross ton mile for passenger, mixed goods and per shunting engine hour for shunting engines will be available and are given in part in Table 14. Quantities of coal consumed might well be omitted, as unless related to some unit it gives no information.

678. In Table 14, the figure of net ton mile per shunting engine hour hardly seems a useful figure, a much better one being the proportion of shunting engine hours per 100 train engine miles which is given in Table 8.

679. In Part III, Tables 1, 2, 4 and 5 are expanded forms of Part I, Tables 5 and 6, and Table 3 is an expanded form of Part I, Table 7. I suggest that these forms be amalgamated and made to conform to the new forms of abstract referred to in Chapter VII of the Main Report. In general, all the tables are prepared for broad gauge, metre gauge and narrow gauge, and sometimes for main branch lines separately.

680. In addition to the Railway Board Statistics, I have examined particularly those of the North Western Railway which appear to be the most voluminous, and a summary of my notes thereon is attached at Section IV of this Appendix. As a result of this examination I make the following recommendations.

681. The statistics prepared by individual railways should be strictly limited for both monthly and annual figures to those contained in the monthly and annual volumes of the Railway Board, subject to the following remarks :—

- (a) Each table may, at the discretion of the agent, be prepared separately for such divisions or sections of divisions as he may think useful.
- (b) Where, as in the case of the North Western Railway, the narrow gauge lines are a small proportion of the whole, it should not be necessary to prepare statistics for each narrow gauge section ; one set for all narrow gauge lines combined should be sufficient.
- (c) In place of the voluminous passenger and goods statistics published annually for every station on the line, there should be published for a selected list of the principal stations :—

Number of passengers forwarded by each ; tonnage of principal commodities received at and forwarded by each,

Number of passengers and goods tons originating on the division or section,

and, in addition, the total number of passenger miles and net ton miles carried over selected sections of each division. Each division should select the stations and sections for which these figures are desired, and the selection should be approved by the agent and his director of statistics.

The summary tabulations from the sorting and tabulating machines giving station to station figures for passenger and goods density should be bound up and filed for say five years so that any additional statistics of this nature that may be required at any time for special purposes may be easily and quickly obtained.

- (d) The division of Abstracts A to G over divisions should be limited to salaries, wages and stores issued to the division over which alone the divisional superintendent has any control. These expenses should be tabulated as follows :—

Running repairs (sheds) and

Running Staff

per 100 total engine miles.

Train Staff

per 100 train engine miles.

Station Staff

per passengers forwarded, *plus* goods tons received and forwarded.

This seems a better unit than that adopted at present, *viz.* : Route Miles.

- (e) Route and Track Miles for each Division.—This is practically a constant figure and its publication should be limited to once a year, subject to a special note if there has been any material change in mileage.
- (f) Commodity Statistics by Divisions should be limited in any month to the principal commodities moved in that month up and down respectively and should be give ton miles on the division in each case.
- (g) Earnings and Expenses on Divisions between Passenger and Goods. The whole of these tables are based on estimates of doubtful value, and they embody elements such as head office expenses and passenger and goods rates over which a divisional superintendent has no control. They should be discontinued.

682. If the suggestions in this Appendix are carried out, the volume of statistics published will be materially reduced without any sacrifice of efficiency.

APPENDIX XII.

SECTION III.

DIVISION OF WORKING EXPENSES BETWEEN PASSENGER AND GOODS TRAFFIC.

683. The following is an application of the methods adopted by the Interstate Commerce Commission of the United States to which reference is made in paragraphs 323 and 324, Chapter XV of the Main Report.

684. *Abstract " A " Maintenance of Structural Works.*

(a) Rails.	Tunnels.
Ties.	Engineers' tools and plant.
Track material.	Service motor cars and trollies.
Track laying.	
Ballast.	
Bridges.	

and depreciation on all these items.

Divide in proportion to the cost of fuel used by passenger and goods engines respectively, except that maintenance of trucks in yards where a separate shunting service is maintained should be divided as far as possible direct, and where they are joint passenger and goods yards in proportion to shunting engine hours in each yard.

(b) Signals.

Divide in proportion to total passenger and goods engine miles.

(c) General Administration,

Maintenance of telegraph and telephone lines, station and service buildings, residential staff quarters, and all other expenses in this abstract.

Divide in proportion to the result of dividing (a) and (b).

685. *Abstract " B " Maintenance of Equipment.*

Divide as far as possible directly between passenger and goods equipment.

Divide all other expenses in this abstract in proportion to the direct division between passenger and goods equipment.

686. *Abstract " C " Commercial.*

Divide expenses directly as far as possible, and divide the remainder in proportion to the direct division.

687. *Abstract " D " Transportation.*

(a) Running repairs.

Machinery and tools.

Divide in proportion to number of engines and vehicles handled for passenger and goods respectively.

(b) Engine drivers, guards, motormen and other train staff, including both wages and clothing, etc.

Divide directly as far as possible, and balance in proportion to direct distribution.

(c) Yard expenses.

Divide directly as far as possible, and balance on the basis of passenger and goods shunting engine hours at each yard.

(d) Signals.

Divide in proportion to total passenger and goods engine miles.

(e) Compensation for goods lost and damaged.

Expenses of train accidents.

Fuel, water, lubricants.

Divide each heading direct as far as possible, and balance in proportion to direct division.

(f) All other expenses in II, Repairs and maintenance and III, Operating.

Divide in each case direct as far as possible, and balance in proportion to passenger and goods proportion of that main heading.

(g) All expenses of general administration.

Divide in proportion to the division of the remainder of this abstract.

688. *Abstract " E " General Expenses.*

Divide the total of this abstract between passenger and goods in the same proportion as all the other abstracts together are divided.

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APPENDIX XII.

SECTION IV.

COMMENTS ON NORTH WESTERN RAILWAY STATISTICS.

689. This Railway prepares every month a most elaborate series of statistics. Those for December, 1926, were issued about the middle of February, 1927.

No. I.

690. The fundamental units are set out by this Railway in pamphlet form for the month of December, 1926, as follows :—

No. 2 *Train miles* :—

Passenger.

Mixed.

Goods.

Passenger and proportion of mixed.

Goods and proportion of mixed.

Nos. 3, 4 and 5 ... *Shunting engine miles* :—

Yard shunting engines.

Passenger train engines.

Goods train engines.

Nos. 6 and 7 .. *Assisting engine miles* :—

Required.

Not required.

No. 8 *Light engine miles*.

No. 11 *Departmental train and engine miles* :—

Transportation.

Engineering.

Other.

Divided between train, assisting, required and not required, shunters and light.

Nos. 10 and 12 .. *Total engine and train miles*.

No. 14 *Train hours*.

Nos. 15, 16 to 22 .. *Train halts without engine (i.e., detentions)*.

Various classifications of engine hours and total engine hours.

All these figures are readily obtainable as explained in Section I of this Appendix for all engines attached to each shed and through sheds for sections and divisions, and the whole railroad. There is, however, this complication, that as these figures are compiled by engines and engines frequently run over two or more divisions, they are not strictly divisional statistics.

No. 13. Wagon miles, are provided for on form 217.

Nos. 9 and 18. Siding engine miles and hours, should be added to "Duty" code, and is then obtainable on form 216.

No. 1. Number of trains, passenger, mixed and goods, and assisting engines required thereon, is presumably furnished by transportation department.

No. II.

691. Another pamphlet entitled "Financial and Operating Statistics" for the month of October, 1926, also issued in February, 1927, contains the following statements:—

Abstracts "A" to "G" are given in totals for each division, divided between actual divisional costs and costs attributable to division, and given for the month, the total for year to date, and corresponding month of preceding year.

There seems to be no good reason for giving the figures attributed to divisions, as these are all arbitrary apportionments. The authorised expenditure for each division should be exclusive of that attributable to the division, as the divisional superintendent has no control over them, a separate authority should be given for the expenses on divisions which are under the control of the divisional superintendent.

692. A summary is given (also for divisions and under the same headings) dividing this cost between goods and passenger in proportion to gross ton-miles. This method of apportionment is incorrect, nor can it be of any value to make it each month. The new method, explained in Section I of this Appendix, should be adopted and worked out once a year only.

693. The next table gives *route miles and track miles* for each division. This also should be given once a year. The additions brought into operation each month is all that need be supplied monthly.

694. Tables 40, 41 and 42 give *numbers of passengers* of each class forwarded, received and carried on each division compared with previous year. "Carried" includes "foreign," "received" and "forwarded" and cross traffic.

695. Table 43 gives *passenger miles* for each class for 13 Sections and total, worked out on Scott's Density Method, tabulating received and forwarded at each station from tickets issued and foreign lines proportions.

696. Tables 44 to 47 give *coaching earnings*; Table 53, *goods earnings*; and Tables 54 to 57, *miscellaneous earnings* by 13 divisions and total.

As stated in paragraph 327 of the main report, there is no object in dividing earnings over divisions as the divisional superintendent has no control over passenger fares or goods rates. The tendency of these tables and of spreading the whole of the operating expenses of the Railway over divisions by more or less arbitrary methods is to elevate each division into a separate Railway which cannot tend to the efficient operation of the whole system.

697. Tables 48, 49 and 50 give *goods tons* received and forwarded, and Table 50 gives *number of tons* carried over each division compiled by the density method by commodities.

698. Table 51 gives *net ton miles* by same commodities and division.

699. Table 52 gives *average haul over broad gauge and narrow gauge* respectively by commodities.

700. All the statistics in No. II are most voluminous, and it is doubtful whether the lateness of their production (October figures are issued in February) does not deprive them of any value they might have if issued promptly. It should be seriously considered whether they should not in all cases be limited to the seven divisions, and whether narrow gauge (only 500 miles) could not be merged with the respective broad gauge divisions.

No. III.

701. *Statistics based on working expenses and earnings.*—This pamphlet gives for each month the *percentage to gross earnings* for each division of actual and attributable division costs under each Abstract "A" to "G". For reasons already given, these figures are of no real use and should be discontinued.

There are also given for each division :—

Cost of fuel.

Per engine mile,

Per 1,000 gross ton miles.

Cost of running repairs to

Engines per 100 engine miles.

Cost of running staff

Per 100 engine miles.

Cost of train and station staff

Per 100 train miles.

Per route mile.

Average earnings per net ton mile.

Average cost (actual divisional) per net ton mile.

Average cost (total attributable) per net ton mile.

Average earnings per passenger mile.

Average cost (actual and total attributable) per passenger mile.

Average earnings per train mile.

Average cost per train mile—

Actual.

Total.

Gross earnings.

Working expenses and percentage to gross earnings :—

Excluding depreciation.

Including depreciation.

Net earnings.

The whole of the tables based upon allocating earnings and total expenses to divisions should be discontinued.

No. IV.

702. There are also prepared monthly the following ; the figures for October to December being issued on 21st January.

Speed of transportation, i.e., train miles per train engine hour, for each section of each division, viz. :—

Lahore	Division.	7	Sections,
Ferozepore	"	9	"
Delhi	"	7	"
Multan	"	7	"
Karachi	"	8	"
Rawalpindi	"	4	"
Quetta	"	7	"

—
49 in all,

but no division totals are given. These speeds are worked out for the following " Duties," i.e. :—

Passenger.

Mixed.

Goods.

The following are also given monthly for the same sections :—

Average number of wagons per goods train.

Light engine miles per 100 train miles.

Passenger and proportion of mixed.

Goods and proportion of mixed.

It should be carefully considered whether it is necessary to give these figures for so many sections, and whether figures by divisions are not sufficient, which would reduce the volume from seven sheets to one.

No. V.

703. There are also made up for each month and printed with all preceding months the following statements:

No. 1. *Passenger, mixed and goods trains.*—

Train miles per train hour.

Train miles per engine hour.

These are given for seven divisions and total, broad gauge, and for four divisions and total, narrow gauge; and there are also given for goods the same figures for main lines and branches separately.

No. 2. *For wagons.*—

Average number of wagons per train :—

Empty.

Loaded.

Total.

Average starting load :—

Coal and coke.

Heavy merchandise.

Light merchandise.

Average wagon load :—

For 6 main line divisions and total.

For 7 branch lines and total.

For 4 narrow gauge lines and total.

Average starting load is made up from station returns of average weight loaded for month.

No. 3. *Shunting and light engine miles, per 100 train miles* :—

Passenger (and proportion of mixed).

Goods (and proportion of mixed).

No. 4. *Yard statistics, showing for each month* :—

Number of wagons detached and dealt with,

Total shunting hours,

Number of wagons dealt with per shunting hour,

Average detention to through loaded wagons,

for 5 yards asked for by Railway Board, but also for 31 other yards.

No. 4a. The following costs are given monthly for the same yards :—

(a) Cost of engine time per shunting hour, Rs.....

(b) Cost of engine time, Rs.....

(c) Wages paid to goods shunting staff, Rs.....

(d) Total per wagon dealt with, in annas.

(a) This is exact for the five yards required by Railway Board; for other yards it is Rs. 5 per hour.

The so-called "exact cost" is an empirical formula arrived at by the operating superintendent, and includes interest at 5 per cent. per annum; depreciation at 3 per cent. on average original cost of type of engine used in shunting, and cost of repairs based on average cost of all engines under Abstract B; average wages paid to drivers and firemen of shunting engines, plus 10 per cent. for extra staff required for relieving purposes; average cost of fuel, oil, water, etc., on same; and at the end 22 per cent. is added to interest, depreciation and Abstract B expenses for extra power necessary while engines are under repair.

(b) This is cost per shunting hour plus total shunting hours.

It is doubtful if this statement is required to any extent beyond the Railway Board requirements.

The best tests for the work in shunting yards would seem to be :—

- (1) Number of wagons detached for shunting.
- (2) Number of wagons actually shunted.
- (3) Number of wagons shunted per shunting engine hour.
- (4) Number of wagons awaiting shunting.

Nothing further is gained by working out these estimated and probably inaccurate costs.

No. 6. Gross and net train load for each month for :—

- 5 main lines and total.
- 8 branch lines broad gauge and total.
- 4 narrow gauge lines and total.

Nos. 7, 7a and 7b relate to workshops statistics ;

No. 8 gives for :—

- 7 broad gauge divisions and total,
- 7 narrow gauge divisions (no total).

for each month :—

- Lbs. of coal per engine mile.
- Lbs. of coal per train mile.
- Lbs. of coal per vehicle mile.
- Lbs. of coal per gross ton mile.
- Net ton miles per goods engine hour.
- Passenger miles per passenger engine hour.
- Engine miles per day per engine.
- Pints, oil, per 100 engine miles.

As to all the statistics in this publication, the question again arises whether the figures by divisions are really required.

No. VI.

704. Finally, there are published annually the following :—

Passenger Statistics.

A volume of 102 pages showing for all consecutive stations, and “ up ” and “ down ” traffic separately, the following :—

- Passengers (4 classes)—
 - Forwarded
 - Received.
 - Density.
 - Ton density (all classes).
- Vehicles—
 - Density.
 - Tare density.
 - Seat density.
- Gross ton density (ex loco)—
- Trains—
 - Density.
 - Times :
 - Running (including halts).
 - Halt at important stations.
- Engines—
 - Density.
 - Times.
 - Shunting.

This volume is the rough material from which the monthly statistics are obtained, and is similar to the publications by the Eastern Bengal Railway. It should be quite sufficient if it were published by divisions and selected sections only, when it would occupy a comparatively small space. Any other combinations between pairs of stations or over sections of line could be quickly prepared from the working papers as required, and the tabulation sheets of the machines compiling the material for these figures should be bound up and kept for say, five years, so that any particular sectional figures required could be readily obtained.

No. VII.

705. *Goods Statistics*.—A volume of 152 pages, giving for each station consecutively, and for “up” and “down” separately, the following:—

(1) Total traffic in maunds and tons, and figures in maunds for 10 groups of commodities—

- Received ;
- Forwarded ;
- and for totals only ;
- Density.

(2) Wagons—

- Loaded density.
- Empty density.
- Tare density.
- Gross ton density (excluding locos).

Trains—

- Density.
- Times.
- Running, including halts.
- Halt at important stations.

Engines—

- Density.
- Times.
- Running, including halts.
- Shunting.

This volume also is the rough material from which the monthly statistics are obtained, and is similar to the publication of the Eastern Bengal Railway. It should be limited to divisions, and would then only occupy three sheets instead of 152. Any special combinations between any pairs of stations could quickly be prepared from the tabulation sheets as required, and these tabulation sheets should be bound up and kept for say, five years.

APPENDIX XIII.

STATEMENT FURNISHED BY MESSRS. MORLAND AND IMPEY, LTD., ON THE SAFETY WORKING OF KALAMAZOO LOOSE LEAF LEDGERS.

706. Before enumerating the safety devices which can be used in conjunction with Kalamazoo Loose Leaf books we should like to make a general remark to the effect that the majority of users of our ledgers both in England and India look for safety to the methods which are relied upon with old fashioned bound books, *i.e.* :—

- (1) Internal check.
- (2) Possibility of collusion between clerks.

707. Provided the system of internal check is good and the possibility of collusion between clerks reduced to minimum the loose leaf book has been found in practice to be equally as safe as the bound book.

708. Almost without exception the first class business houses in Calcutta have adopted Kalamazoo loose leaf books in some degree, and in the vast majority of cases no special safety device has been provided, nor is it even found necessary to keep any watch over the issue of sheets. It should not be lost sight of that fraud by the substitution of a sheet in a bound book is perfectly possible, and that moreover it is always possible to use the blank pages of a bound book for fraudulent entries.

709. *Safety devices.*—These consist of three main classes as under:—

- (1) Special locks.
- (2) Special sheets.
- (3) Guarding the sheets.

710. (1) *Locks.*—All locks supplied with Kalamazoo Books are Chubb locks. When desirable, locks can be supplied all of different patterns and an undertaking can be given that locks supplied to one user will be supplied to no one else either in India or elsewhere. We can supply the following types of locks :—

- (a) The Chubb sheet security lock. This lock shoots a bar across the opening of the ordinary binder key hole, and makes impossible the insertion and extraction of sheets except by an authorised official holding the key.
- (b) The Chubb sheet security double lock. This serves the same purpose as (a), but two keys (which may be held by separate officials) are necessary to allow the binder to be opened for the insertion or extraction of sheets.
- (c) The Chubb strap or Four-Edge lock. This fastens together the two covers so that the book cannot be opened without the use of the key. The strap is of spring steel covered with leather and cannot be cut through.
- (d) (a) and (c) can be fitted to one binder, or (b) and (c).
- (e) The Chubb seal lock. A recess is cut in the binder which takes a small seal initialled by the officer fastening the lock. The lock is a sheet security lock as (a), the additional safety being secured by the fact that the use of the key by an unauthorised person breaks the seal with the initial on it.

711. (2) *Special sheets.*—All Kalamazoo sheets are printed on Kalamazoo watermarked paper. The paper is made specially for us and cannot be purchased elsewhere. Additional safety can be obtained by :—

- (a) Printing the name of the user on the sheet. This acts as a deterrent to printers not to copy these sheets except when in receipt of a signed order from the firm whose name the sheet bears.
- (b) The Kalamazoo One Colour Process of printing which is distinctive and requires an extremely expensive plant to produce the sheets. (No such plant exists in India.)

- (c) The Kalamazoo Patent " Stipple " or " Blueing-in " process used in conjunction with Kalamazoo one-colour sheets. A sample of this work is attached. Any single column or any number of columns may be blued-in in this way as desired. The ink used is acid proof and the erasure of an entry leaves a white mark. Such sheets are printed from a plate and the extra charge for the blueing-in process is Rs. 15-0-0 only per job, irrespective of the number of sheets required. The plate lasts indefinitely and no charge under this head occurs at the time of reprinting. Each form requires its own plate. The total cost of the plate for the attached specimen including all words, lines, and blueing-in was Rs. 22-8-0.

All the above locking and sheet devices refer to Kalamazoo Loose Leaf Books only.

712. (3) *Guarding the sheets.*—It will be seen that if special sheets which cannot be copied by local printers are used, it only becomes necessary to place the stock of spare sheets in the hands of a responsible official for safety to be assured. The fact that such an official controls the stock and only issues fresh sheets when satisfied that the need exists is usually a sufficient safeguard, but the officer-in-charge can also :—

(a) Initial or perforate with a perforating stamp every sheet he issues.

(b) Keep a register of sheets issued.

713. The above safety devices have been instituted by us for use with books of extreme importance, *i.e.*, banks' specimen signature books, minute books, etc., but are now-a-days seldom considered necessary in the case of books of accounts.

714. *Legality.*—Occasionally we find prospective customers who cast doubt on the legality of Loose Leaf Books. We hold the opinions of Sir John Simon, K.C. and Sir Douglas McGarrel Hogg, K.C., to the effect that loose leaf books are in accordance with the laws governing Public Companies and Bankers and with the various Evidence Acts. In addition loose leaf books have repeatedly been admitted as evidence in Courts of Law all over the World.

(Signed) S. LIVINGSTON,
For Morland & Impey, Ltd.

GROSS ANNUAL SALARY £.....

ANNUAL TRAVELLING OR OTHER ALLOWANCES £.....

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Name.	Month or Term.	Salary.	Superannuation Deductions.	
			Date.	Amount.
<p>CANCELLED.</p> <p>Kalamazoo (Sales) Ltd. Fairlie House, 4, Fairlie Place, Calcutta.</p>				