COMMUNICATIONS IN AFRICA, 1880-1939

GENERAL EDITOR David Sunderland

Advisory Editor Godfrey N. Uzoigwe

Volume 3
Railways: Operation

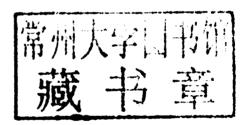


COMMUNICATIONS IN AFRICA, 1880-1939

GENERAL EDITOR
David Sunderland

Advisory Editor Godfrey N. Uzoigwe

Volume 3
Railways: Operation





LONDON
PICKERING & CHATTO
2012

Published by Pickering & Chatto (Publishers) Limited 21 Bloomsbury Way, London WC1A 2TH

2252 Ridge Road, Brookfield, Vermont 05036-9704, USA

www.pickeringchatto.com

All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without prior permission of the publisher.

Copyright © Pickering & Chatto (Publishers) Limited 2012 Copyright © Editorial material David Sunderland 2012

To the best of the Publisher's knowledge every effort has been made to contact relevant copyright holders and to clear any relevant copyright issues. Any omissions that come to their attention will be remedied in future editions.

BRITISH LIBRARY CATALOGUING IN PUBLICATION DATA

Communications in Africa, 1880–1939. – (Britain and Africa)

1. Railroads – Africa – Planning – Sources. 2. Railroads – Africa – Design and construction – History – 19th century – Sources. 3. Railroads – Africa – Design and construction – History – 20th century – Sources. 4. Railroads – Africa – Management – History – 20th century – Sources. 5. Railroads – Africa – Economic aspects – History – 19th century – Sources. 6. Railroads – Africa – Economic aspects – History – 20th century – Sources. 7. Communication and traffic – Africa – History – 19th century – Sources. 8. Communication and traffic – Africa – History – 20th century – Sources. 9. Great Britain – Colonies – Africa – Administration – History – 19th century – Sources. 10. Great Britain – Colonies – Africa – Administration – History – 20th century – Sources. I. Series II. Sunderland, David.

ISBN-13: 9781848930643



This publication is printed on acid-free paper that conforms to the American National Standard for the Permanence of Paper for Printed Library Materials.

Typeset by Pickering & Chatto (Publishers) Limited Printed and bound in the United kingdom by the MPG Books Group

CONTENTS

Operation of Lines	1
F. D. Hammond, Report on the Railway System of Southern Rhodesia under the Railways Enquiry Act, 1924 (1925)	9
J. H. Smith, Report upon the Administration, Organisation and Working	
of the Natal Government Railways (1903)	111
S. Herbert Frankel, Memorandum on Railway and Harbours Working	not regerant
and Finance (1933)	169
F. D. Hammond, Report on the Sierra Leone Government Railway	
(1922)	187
F. D. Hammond, Report on the Railway Systems of Kenya, Uganda and Tanganyika (1921)	245
F. D. Hammond, Report on the Railway System of Tanganyika Territory (1930)	309
Editorial Notes	393

OPERATION OF LINES

The majority of British African railways were operated by local administrations. As discussed in the General Introduction in Volume 1, Rhodesian and early South African lines were built and operated by private companies, but were gradually acquired by the state (see Hammond, Report on the Railway System of Southern Rhodesia (1925), below; Smith, Special Railway Commissioner, upon the Administration, Organisation and Working of the Natal Government Railways (1903), below; and Herbert Frankel, Memorandum on Railway and Harbours Working and Finance (1933), below). In West Africa (see Hammond, Report on the Sierra Leone Government Railway (1922), below), Uganda, Kenya (apart from the Konza-Magadi railway) and Tanganyika (see Hammond, Report on the Railway Systems of Kenya, Uganda and Tanganyika (1921), below, and Hammond, Report on the Railway System of Tanganyika Territory (1930), below) all the lines were publicly built and managed - in West Africa by individual country authorities, and in Uganda and Kenya after the First World War, by the East African Railways Corporation.1 Proposals that government constructed lines be operated by the private sector were swiftly dismissed by both the Crown Agents and the Colonial Office. It was pointed out that contractor-run railways in the UK were poorly managed, that the absence of cost and revenue information would discourage contractors bidding for the management of railways and that those that did tender would submit excessively low offers that colonial officials would have difficulty judging. The local government would also be obliged to continue to bear its public responsibility as regards safety and would have to closely and expensively monitor operations to prevent the setting of excessive freight rates.2

Although they contributed greatly to economic development, the majority of lines were commercially unsuccessful.³ Losses were the result of both high costs and low revenues. Costs were raised by the basic nature of construction; in West Africa, by the poor quality of the lines built; various problems with expatriate and African labour; and inadequate organization of railway departments. The higher operating costs that arose from basic construction are summarized in Table 1; while a good example of a railway with high running costs caused

by poor quality construction is the Gold Coast Sekondi–Kumasi line. The steep gradients and tight curves of the railway restricted the haulage capacity of engines, badly laid track demanded almost continuous track maintenance and replacement, poorly built river crossings led to bridge speed limits, the failure to cut a wide right-of-way through forest increased the incident of falling trees that blocked and damaged track, and grades, curves and track problems resulted in numerous derailments and accidents.⁴

Table 1: The Impact of Lines of a Lower Standard on Operating Costs and Carrying Capacities.⁵

Pioneer feature Impact on operating costs

Incomplete earthworks Higher maintenance costs

Light rails Less durable than heavy rails; light engines essential

Narrow gauge rolling Relatively expensive and small. More prone to breakdown than stock broader gauge counterpart. Smaller trucks increased empty haul-

age and siding needs

Narrow gauge track Comparatively unsafe and subject to costly accidents. Truck size

has little effect on administration and supervision, the largest

component of working costs

Native wood sleepers Shorter lifespan and required more maintenance than steel sleep-

ers

Restricted station Loading difficulties

accommodation

Trestle bridges More likely to collapse than stone bridges

Costs were further increased by the appointment of advisory consulting engineers and expatriate staff. In order to ensure that completed lines worked efficiently and economically, their operation in the Crown colonies was initially supervised by consulting engineers, who provided advice on rates, staffing and management structures and track and equipment purchase and maintenance.⁶ For these duties, the West African consulting engineer, Frederic Shelford, received an annual salary plus expenses and recruitment and purchasing fees.7 Not surprisingly, Shelford's work was subject to a number of criticisms. It was argued that his remuneration was excessive, a claim supported by a comparison of consulting engineer/Crown Agent operation fees (see Table 2); in order to maximize his own income and avoid criticisms of the operation of lines, he recommended the purchase of expensive rolling stock and staff; and he failed to closely monitor the working of lines. He rarely visited Africa and his knowledge of railway operations was based on generally out-of-date reports and correspondence with general managers, who could easily omit information. More importantly, he insisted that completed lines be managed by highly remunerated general managers, selected by himself, and that colonial government involvement should be kept to a minimum, even when it was plain that railway departments were being

inefficiently administered. Aware that Shelford's supervision of the operation of railways was as inadequate as his construction of them, the Crown Agents in 1904 sought to take over some of his duties, but were repulsed by the Colonial Office. A further attempt in 1911 was more successful, and, by the start of the First World War, they had acquired most of his workload.⁸

Table 2: Fees and Salaries of Open Line Consulting Engineers.9

	West Africa		Ceylon		
	Shelford (1908-12)	Crown Agents (1920–6)	Messrs Gregory Eyles & Waring	Crown Agents (1920-6)	
Average annual mileage	1,300	1,727	(1908–19) 946	1,747	
supervised Average annual remu- neration per mile (£)	6.01	1.96	5.15	1.82	

The use of expatriate employees similarly raised costs. It took months to recruit staff, who were often incompetent and/or inexperienced, became so ill that they were unable to work, or died, and stayed in their posts for a relatively short period of time. 10 Faced with such criticisms, the Crown Agents, who filled all technical appointments, pointed out that recruitment of high quality technical staff was a formidable task. The construction of railways around the world had resulted in shortages of specialist workers, colonial administrations often demanded highly qualified candidates or combinations of skills impossible to find in one person, and few Englishmen wished to work in Africa. Apart from the health risks, salaries were often relatively low, promotion slow, appointments initially only for two tours of duty and permanent pensionable employment gained only if officers performed their roles well.11 Employment also involved a number of hidden costs - for example, successful candidates had to purchase special equipment and clothing, the cost of passage to Africa was subtracted from future salaries and only reimbursed on their first home leave, some colonies refused to allow wives to accompany appointed officers, forcing the maintenance of two households, and, on their return to Britain, ex-colonial staff often found it difficult to obtain fresh employment, as the colonial experience gained was usually practically useless. A further reason for the inadequacies of recruitment, however, was the Crown Agents' appointment procedure. Prior to 1911, candidates were chosen by the consulting engineer who worked in the employing colony and specialized in the technical area of appointment. As regards West Africa, recruitment was undertaken by Shelford, who delegated the task to a clerk, and, receiving a fee of five guineas for each man selected, had a monetary incentive to choose candidates who would break their contract before they sailed or would prove unacceptable. Aware of Shelford's failings, the Agents took over his duties

in 1911, with the result that the quality of recruits noticeably improved, though the recruitment process remained lethargic.¹²

The obvious solution to the problems of obtaining expatriate skilled staff was to employ Africans or other nationalities (who were also cheaper). Unfortunately, few colonies were willing to replace expatriate workers with trained Africans. It was thought that 'natives ... did not take kindly to mechanical work or any work requiring sustained effort' and European staff were loath to train them, often being racist and wishing to protect their jobs. 13 Some administrations, however, relented. The Gold Coast Sekondi-Kumase line after 1907 began to hire and train a few Fanti men for skilled mechanical roles, and there was further Africanization of posts during the First World War and towards the end of the period.¹⁴ Administrations looked more kindly on other nationalities. The Kenyan and Ugandan governments, for example, employed large numbers of Indians as drivers, foremen, station masters and so on, though an attempt to follow a similar policy in Lagos in 1903 was opposed by the Crown Agents, who claimed that Indians would be difficult to recruit and would have difficulties adjusting to the West African climate. Other nationalities employed included Afrikaners, found in Rhodesia and South Africa, and West Indians, seven of whom worked at the turn of the century in the Gold Coast and Sierra Leone. 15

Africans were largely used for non-skilled work, but, again, were often difficult to recruit. There was competition for labour from agriculture, mines and trading companies, and many Africans were reluctant to work on the railways. Wages were low, owing to the low revenues of lines and the fear that high wages would attract workers away from agriculture/mining and thus weaken colonial economies, and many of the posts were in towns where living costs were relatively high. 16 Railway work also involved long hours and poor working and living conditions. Many recruits were killed or severely injured by runaway trains etc, the housing provided both in segregated towns and rural camps was often of poor quality and the work of the gangers, who maintained and repaired track, was hard and tedious.¹⁷ Railway authorities responded to the shortages by employing workers on a temporary or day-to-day basis, which also reduced labour costs; recruiting European staff - Italians and Greeks in Rhodesia and South Africa. respectively - and gradually improving wages and working and housing conditions. 18 In Natal and the Cape in the 1930s and 1940s, model railway villages were erected, and, from 1938, South African Railways initiated a community development programme.19

Finally, costs were increased by high debt charges and the high cost of coal, African theft of railway materials and the poor structure and financial management of some railway departments.²⁰ The Gold Coast railway administration, for example, suffered from unclear lines of authority, interdepartmental rivalries, over-concentration of power in the hands of the resident engineer, admin-

istrative structures that overlapped and personality clashes.²¹ The costs of the Kenya–Nairobi–Thika railway, meanwhile, were excessive because the officers of the Uganda Railway simply refused to incorporate it into their own operations.²² Structural problems were matched by poor accounting and poor decision making. As regards the Gold Coast Sekondo–Kumase line, the expenditure account excluded loan interest payments and Sinking Fund charges, capital improvements were initially financed from the local Treasury and only later applied to the revenue account, locomotives were purchased that lacked automatic breaks, and the line possessed few safety devices and no semaphore signals, making accidents an almost weekly occurrence.²³

Turning to the other side of the cost—revenue equation, as already discussed in the General Introduction in Volume 1, in West Africa the Crown Agents and consulting engineers deliberately exaggerated anticipated receipts in order to encourage the building of lines. Construction costs also failed to be covered for a host of other reasons. Some lines, such as the Uganda Railway and many of those in South Africa, were constructed for non-economic political or administrative purposes. For others, the anticipated traffic failed to emerge, the construction of rival lines led to intense competition, as occurred in the Transvaal/Cape, and tariffs were sometimes forced down for the good of the economy by local governments. In Rhodesia, administrators put pressure on railway authorities to reduce seed cotton rates, and, in Kenya, to cut maize tariffs. ²⁶

Administrations and railway authorities responded to operating losses in a numbers of ways. While some set low freight rates in order to generate traffic, a far larger number used their monopolistic power to introduce excessively high tariffs. ²⁷ The Kenya Nairobi–Thika line, the Nyasaland and Rhodesian railways and the Transvaal NZASM company all pursued this policy. ²⁸ Other administrations and railway authorities sought to maximize returns by extending lines into new territories (see the Construction thematic introduction in Volume 1); through the building of branch lines, which broadened a railway's hinterland; as discussed in the Road thematic introduction in Volume 5, by encouraging the building of feeder roads and establishing road haulage companies; and, in South Africa, via electrification. ²⁹ There was also some cross-subsidization of tariffs designed to increase traffic. The low agricultural freight rates of the Rhodesian extension to the Congo border, for example, were made possible by the higher tariffs charged for the large amounts of Katanga copper carried by the line. ³⁰

Notes

- R. T. Ogonda, 'Transport and Communications in the Colonial Economy', in W. R. Ochieng and R. M. Maxon (eds), An Economic History of Kenya (Nairobi: East African Educational Publishers, 1992), p. 144.
- D. Sunderland, Managing the British Empire: The Crown Agents for the Colonies 1833– 1914 (London: Royal Historical Society/Boydell & Brewer, 2004), p. 145.

- Exceptions are the Uganda Railway and some of the South African lines. Accounting problems made the determination of profitability complex (J. M. Mwaruvie, 'Kenya's Forgotten Engineer and Colonial Proconsul: Sir Percy Girouard and Departmental Railway Construction in Africa, 1896–1912', Canadian Journal of History, 41 (2006), pp. 1–22; W. Beinart, Twentieth Century South Africa (Oxford: Oxford University Press, 2001), p. 51).
- 4. R. E. Dumett, 'British Imperial Transport Management. The Gold Coast Sekondi-Kumase Railway, 1903–1911', Journal of Transport History, 27:2 (2006), pp. 60–79. See also F. Jaekel, The History of the Nigerian Railway, Volume I, Opening the Nation to Sea, Air and Road Transportation (Ibadan: Spectrum Books, 1997); W. J. Busschau, 'Some Aspects of Railway Development in Natal', South African Journal of Economics, 1 (1933), pp. 405–20; W. L. Webb, Economics of Railway Construction (New York: John Wiley & Sons, 1910); E. R. Calthrop, The Economics of Light Railway Construction (Leeds, 1896). In the early 1920s, Nigeria and the Gold Coast spent respectively £1m and £418,000 on broadening line curves (Sunderland, Managing the British Empire, p. 98).
- 5. Sunderland, Managing the British Empire, p. 108.
- Source: Ibid., p. 145.
- Shelford's involvement in the purchase of rolling stock is discussed in the General Introduction (Volume 1).
- Sunderland, Managing the British Empire, pp. 145–8; Dumett, 'British Imperial Transport Management'.
- 9. Source: Sunderland, Managing the British Empire, p. 146.
- Ibid., p. 257; Dumett, 'British Imperial Transport Management'. European mortality in the Gold Coast was 7.5 per cent (Sunderland, Managing the British Empire, p. 259).
- 11. Sunderland, Managing the British Empire, pp. 258–9; Dumett, 'British Imperial Transport Management'. Strikes over low wages were common. In Rhodesia, workers struck in 1916, 1920 and 1929; in South Africa in 1914; and, in Kenya, in 1900 and 1910 (L. H. Gann, A History of Southern Rhodesia. Early Days to 1934 (London: Chatto & Windus, 1965), p. 226; K. P. Vickery, 'The Rhodesia Railways African Strike of 1945, Part I: A Narrative Account', Journal of Southern African Studies, 24:3 (1998), pp. 545–61; T. R. H. Davenport, South Africa. A Modern History (London: Macmillan, 1991), p. 243; T. Zeleza, 'The Colonial Labour System in Kenya', in W. R. Ochieng and R. M. Maxon (eds), An Economic History of Kenya (Nairobi: East African Educational Publishers, 1992), p. 186).
- 12. Sunderland, Managing the British Empire, pp. 257–60; C. Jeffries, The Colonial Empire and its Civil Service (Cambridge: Cambridge University Press, 1938), p. 107.
- Glaster to Colonial Secretary, 19 December 1902, National Archives, Kew, CAOG 13/283; Sunderland, Managing the British Empire, p. 262.
- Dumett, 'British Imperial Transport Management'; D. C. Dorward, 'British West Africa and Liberia', in A. D. Roberts (ed.), The Cambridge History of Africa. Volume 7. 1905– 1940 (Cambridge: Cambridge University Press, 1986), p. 427.
- R. Hardy, The Iron Snake (London: Collins, 1974); Gann, A History, p. 226; Sunderland, Managing the British Empire, p. 261.
- 16. Dumett, 'British Imperial Transport Management'; A. Olukoju, 'The Travails of Migrant and Wage Labour in the Lagos Metropolitan Area in the Inter-War Years', Labour History Review, 61:1 (1996), pp. 49–70. African workers went on strike over wages and other issues in Nigeria in 1920; in Sierra Leone in 1926; in Kenya in 1900, 1908 and 1910; and, in Rhodesia, in 1945 (W. Oyemakinde, 'The Impact of the Great Depression on the Nigerian Railway and its Workers', Journal of the Historical Society of Nigeria, 8:4 (1977), pp. 143–60; Olukoju, 'The Travails'; R. A. Buchanan, 'The Diaspora of British

- Engineering', *Technology and Culture*, 27:3 (1986), pp. 501–24; Zeleza, 'The Colonial Labour System', p. 186; B. Turton, 'Capital and Labour on the Rhodesian Railway System, 1888–1947', *Journal of Transport History*, 10 (1998), pp. 208–9).
- Gann, A History, p. 226; J. Tayler, 'Building Railways and Building Character: The Model Villages in Northern Natal', New Contree, 35 (1994), pp. 32–8; E. H. Campbell, Formalizing the Informal Economy: Somali Refugee and Migrant Trade Networks in Nairobi (New York: State University of New York Global Commission on International Migration, 2005); G. H. Pirie, 'Railway Ganging in Southern Africa, c. 1900–37', Journal of Transport History, 14:1 (1993), pp. 64–76.
- Gann, A History, p. 226; E. A. Mantzaris, 'Greek Workers in South Africa: The Case of the Railway Workers and the Cigarette-Makers, 1905–1914', Journal of the Hellenic Diaspora, 14:3–4 (1987), pp. 49–63.
- J. Lun, 'The Political Economy of Primary Railway Construction in the Rhodesias, 1890–1911', *Journal of African History*, 33:2 (1992), pp. 239–54; J. Tayler, 'Combating Unfavourable Conditions: Experiments in Scientific Social Work and Community Development in the South African Railways, 1935–50', *Kleio*, 36 (2004), pp. 107–25.
- Jaekel, The History. Debt charges are discussed in the General Introduction (Volume 1)
 and the high cost of coal in the Shipping thematic introduction (Volume 5).
- 21. Dumett, 'British Imperial Transport Management'.
- 22. Mwaruvie, 'Kenya's Forgotten Engineer'. The two lines were merged in 1913 (ibid.).
- Dumett, 'British Imperial Transport Management'. The railway's accounting procedures were reorganized in 1908 (ibid.).
- J. Toye, 'Herbert Frankel: From Colonial Economics to Development Economics', Oxford Development Studies, 37:2 (2009), pp. 171–82.
- 25. M. Meredith, Diamonds, Gold and War: The Making of South Africa (Johannesburg: Jonathan Ball, 2007). The anticipated traffic for the Rhodesia Broken Hill extension built to exploit zinc and lead deposits failed to materialize due to technical problems in separating the ores (S. Katzenellenbogen, 'Zambia and Rhodesia: Prisoners of the Past. A Note on the History of Railway Politics in Central Africa', African Affairs, 73:290 (1974), pp. 63–6).
- P. S. Nyambara, 'Colonial Policy and Peasant Cotton Agriculture in Southern Rhodesia, 1904–1953', International Journal of African Historical Studies, 33:1 (2000), pp. 81–111; A. D. Roberts, 'East Africa,' in A. D. Roberts (ed.), The Cambridge History of Africa. Volume 7. 1905–1940 (Cambridge: Cambridge University Press, 1986), p. 581; Mwaruvie, 'Kenya's Forgotten Engineer'. See also Toye, 'Herbert Frankel'.
- The South African Railways, for instance, lowered tariffs in order to increase traffic (Katzenellenbogen, 'Zambia and Rhodesia').
- 28. Mwaruvie, 'Kenya's Forgotten Engineer'; L. Vail, 'The Making of an Imperial Slum: Nyasaland and its Railways, 1895–1935', Journal of African History, 16 (1975), pp. 89–112; I. R. Phimister, 'The Reconstruction of the Southern Rhodesian Gold Mining Industry, 1903–10', Economic History Review, 29:3 (1976), pp. 465–81; G. Pirie, 'Railways and Labour Migration to the Rand Mines. Constraints and Significance', Journal of Southern African Studies, 19:4 (1993), pp. 713–31. After the 1923 fall of the British South Africa Company, railway rates were reduced (I. R. Phimister, An Economic and Social History of Zimbabwe, 1890–1948 (London: Longman, 1988), pp. 120–1).
- The first electric trains ran between Daimana (Ladysmith) and Chieveley in 1924. The Booth–Cato Ridge line was electrified in 1936 and the first electric train arrived in Durban in 1936.
- 30. Katzenellenbogen, 'Zambia and Rhodesia'.



F. D. Hammond, Report on the Railway System of Southern Rhodesia under the Railways Enquiry Act, 1924 (Salisbury, Rhodesia: Government Printer, 1925).

SOUTHERN RHODESIA.

REPORT

BY

Brigadier-General F. D. Hammond, C.B.E., D.S.O,

ON THE

Railway System of Southern Rhodesia

Under the 'Railways Enquiry Act, 1924.'

VOL. I.

PARTS I. AND II.

Presented to the Legislative Assembly, 1926.

Salisbury, Rhodesia: [...]

PART I.

Bulawayo,

Southern Rhodesia, 5th September, 1925.

HIS EXCELLENCY,

LIEUT.-COLONEL SIR JOHN R. CHANCELLOR, G.C.M.G., G.C.V.O., D.S.O., R.E.,

Governor of Southern Rhodesia,

Salisbury.

SIR.

I have the honour to forward this, the first portion of my report on the Railways of Southern Rhodesia, under the Railways Enquiry Act of 1924.

The terms of my reference are contained in Clause 2 of that Act, which reads as follows:-

'The Governor-in-Council may, if he deem fit, at any time after the coming into force of this Act, appoint any person or persons to enquire fully into and report upon the conduct, administration, finances and general affairs of any railway or railways.'

These terms of reference were supplemented by the following letter:-

'31st March, 1925.

Brigadier-General Hammond, C.B.E., D.S.O.

With a view to leaving you as free a hand as possible in the prosecution of your Enquiry, the Government do not propose to issue more detailed Terms of Reference than those contained in Clause 2 of the Railways Enquiry Act, 1924.

There are certain points, however, to which they consider it advisable that your attention should be directed. These points are given in the attached Memorandum. /

In forwarding this Memorandum the Government would point out that they do not intend that it should be considered as in any way comprehensive or as limiting the scope of your Enquiry.

(Signed) H. U. MOFFAT,

Minister of Mines and Public Works.

MEMORANDUM No. 1 FOR GENERAL HAMMOND.

The Railways which serve this Colony and which are operating in Northern Rhodesia, the Union of South Africa, the Bechuanaland Protectorate and Portuguese East Africa as well as Southern Rhodesia are:—

The Rhodesia Railways, Limited	mileage	1,396
The Mashonaland Railway Co., Ltd.	mileage	607
The Beira Junction Railway Co., Ltd.	mileage	351/2
The Beira Railway Company, Ltd.	mileage	1681/2
The Blinkwater Railway Co., Ltd.	mileage	123
•		2,330
The Railway line operating from Broken Hil Border, 132 miles, owned by the Rhodesia-	Katanga Junc-	
tion Railway and Mining Company, Limit and is under the same management as the a		132
Total		2,462

A full enquiry is required into the affairs of these Companies, particularly in regard to the following matters:-

- 1. The Capital issues of the Companies, particulars of shares issued for cash and of shares issued for other than cash.
- The debenture issue of the Companies, the dates of repayment, the guarantees of capital and interest and terms conditions of the issues and of the repayments.
- 3. How the Capital raised was expended, including the expenditure on works which have subsequently been abandoned.
- 4. The financial position and connection between the various Companies, the working arrangements and Agreements between them.
- 5. The position of the Railway Companies (the Beira Junction Railway Company, Limited, and the Beira Railway Company, Limited) in Portuguese East Arica and at Beira, the rights they hold under Treaties between the British and the Portuguese Government under the Van Laun Agreement, and any other contracts or agreements between the Railway Companies and the Mozambique Company.
 - 6. The connection between the Railway Companies and -
 - 1. The British South Africa Company;
 - 2. The Rhodesia Railways Trust, Limited;
 - 3. The Beit Trust;

and how their working, finance and policy is controlled by these concerns, whether by agreements or otherwise.

- 7. The revenues of the various Railways and the amounts drawn from the various traffics and other sources.
- 8. The working expenses, viz., the costs of running and working the Railways, whether these are reasonable or whether reductions could be made with out loss of efficiency.
- 9. The reserves set aside by the Companies for renewals and depreciation, whether the amount already set aside and the annual provision being made are fair and fair and reasonable or excessive, in view of the annual amounts spent on renewals and in maintenance of the permanent way and rolling stock.

- 10. Whether any portion of the provision for depreciation and renewals (see last combined balance sheet) has been expended on renewals of rolling stock and permanent way and works, or whether such necessary renewals have been provided solely out of revenue. /
- 11. Whether any fresh expenditure on capital account, viz., erection of buildings or purchase of new machinery and plant is in the accounts of the Railways being charged direct to working expenditure.
- 12. Whether the profits, namely, the balance of revenue over expenditure, which includes the provision for a reserve in Clause 9, are excessive.
- 13. And therefore whether the rates and fares charged are fair and reasonable or excessive; the effect of the present rates on the industries of the country, particularly mining and farming.
- 14. Do the fares and rates as now charged act to the prejudice of this Colony in comparison with those charged in the other countries served by the Railways?
- 15. Whether the charge of £7 per ton per annum for the carriage of Government mails in Southern Rhodesia is excessive.
- 16. The Port of Beira. Whether provision at Beira has been sufficient and whether the developments and extensions proposed are sufficient to meet the reasonable needs of this Colony, having regard to increase in the traffic of this Colony and from the other countries using the port.
- 17. Is the equipment of the Railways, the rolling stock, etc., sufficient for the traffic requirements, particularly in view of a certain expansion of traffic in the near future?
- 18. Whether, having regard to the requirements of mining, farming, commerce and of the general public, the equipment and administrative organization of the Railways produce the best commercial results.
- 19. Is the traffic of the Railways actually operating in this Colony sufficient to support the Railway system of the Colony on the present basis?

'(Signed) H. U. MOFFAT,

Minister of Mines and Public Works.

In order to explain the reason for the division of my enquiry into two parts, it is necessary to point out that the subjects to which my attention was directed in the Memorandum of Instructions fell into two categories. In respect to the first, I was requested to record an opinion on various aspects of the Railways' present activities, charges and finance, and their effects on the industries of the country. As these included, *inter alia*, such questions as whether or not the profits are excessive and whether or not the rates are fair and reasonable, it was essential that I should adopt a strictly impartial attitude towards them, more particularly in view of the special powers granted to me.

In the second category, I was asked to advise as the future policy of the country, not only in regard to the general problem of railways, but also in respect of certain specified subjects. In this second part, therefore, I was acting merely as the adviser of the Government, and it was no longer incumbent on me to treat the subject from a purely impartial standpoint.

These considerations rendered the division of the enquiry into two parts a necessity.

[...]