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RAILWAY ECONOMICS

BY THE SAME AUTHOR
THE ECONOMICS OF ROAD TRANSPORT
TRANSPORT CO-ORDINATION
TRANSPORT AND COMMUNICATIONS

RAILWAY ECONOMICS

BY

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IN MEMORIAM

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Edinburgh

The Roman roads, straight over the hills, and their bridges over great rivers, were in their day marvels of construction; but they cannot be ranked with the railways that are tunnelled through mountains and carried over great arms of the sea. . . . Transport and communications by land and water, the basis of industrial organization, during the present century have revolutionized the world, and we have already ceased to wonder at powers which former ages could not even imagine as attributes of their deities.—J. S. NICHOLSON, *Principles of Political Economy*, Vol. III, Book IV, pp. 21-2.

PREFACE

BRITISH railways have had their full share of the economic difficulties of the post-war period. General industrial depression and changes in the direction of trade have had adverse reactions on railway finance; the rapid rise of road transport competition has largely transformed the economic conditions of pre-war days, so that railways no longer enjoy the same measure of monopoly; the provisions of the 1921 Act in regard to grouping have involved the companies in a complete re-organization of their systems, while the same Act has been responsible for elaborate statutory alterations in the structure of their tariffs; the growth of labour organization has revolutionized industrial relationships between the companies and their employees, and has led to considerable modification in wages, hours, and conditions of service; finally, technological progress has proceeded at a rapid pace and has necessitated many changes in operating technique and equipment. It therefore seems opportune to attempt a re-examination of the whole field of railway economics in the light of present-day conditions.

The railways, with their various ancillary enterprises, must be regarded as a whole, and on this account some attention is devoted in this book to questions of road transport services and railway-owned docks. In view of the public attention which has been focussed on certain aspects of railway working by the Reports of the Royal Commission on Transport and the Weir Committee on Main Line Electrification, it has seemed advisable to discuss in some detail the problems of railway electrification and the economics of train working. The main aim of the author, however, has been to provide a survey of railway economics as a whole, including railway labour, capital, organization, and administration; statutory regulations; amalgamation;

the Railways Act 1921; and the theory and practice of railway charging.

To a certain extent, parts of the book are based on various courses of lectures delivered by the author during the past ten years in the Universities of Edinburgh and St. Andrews. He therefore hopes that the book may be found not unsuitable to the needs of railway students as well as to the requirements of the wider public interested in the problems of our railways. Since, however, railway economics impinges on the whole range of economic theory, railway students are advised to study some good text-book on general economics in conjunction with this work. Students are also recommended to keep in touch with new developments by reading some of the excellent technical publications now available, such as the *Railway Gazette* and *Modern Transport*.

Where possible the author has attempted to acknowledge his indebtedness to other writers by references in the foot-notes and the bibliography. In particular, however, he desires to record his debt to the standard works of Acworth, Hadley, Colson, and Sherrington.

The author's grateful thanks are due to Professor A. Gray of Aberdeen University, who encouraged him to write the book and who made numerous suggestions for its improvement. For assistance in obtaining material and information he is indebted to Mr. J. Calder (General Manager, Scotland, L.N.E.R.); Mr. W. Wood (Electrical Engineer, Scotland, L.N.E.R.); Mr. G. S. Begg (Passenger Manager, S.S.A. L.N.E.R.); and Mr. A. Winter Gray (Secretary, Institute of Transport). He wishes also to thank especially Dr. Mary T. Rankin (Edinburgh University); Mr. James Fairlie (Rates and Fares Clerk, S.S.A. L.N.E.R.); and Mr. W. N. Kerr (General Manager's Office, Scotland, L.N.E.R.) for their valuable suggestions for the improvement of certain chapters.

K.G.F.

MANCHESTER,

December, 1931.

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