

THE STEAM LOCOMOTIVE IN TRAFFIC

By

E. A. PHILLIPSON

A.M.I.C.E., A.M.I.Mech.E., M.I.Loco.E.

LONDON :

THE LOCOMOTIVE PUBLISHING CO.
88, Horseferry Road, Westminster
S.W.1

CONTENTS

	PAGE
I The Aims of Steam Locomotive Running -	1
II Departmental Organisation. Functions and Policy of Headquarters - - - -	4
Organisation - - - -	4
Functions of Running Headquarters -	8
Policy of Running Headquarters - -	18
III The Lay-out of Locomotive Running Sheds -	20
IV Locomotive Running Shed Equipment - -	39
Coal Handling - - - -	39
Coal Stacking - - - -	56
Ash Handling - - - -	57
The Turning of Engines - - -	59
The Removal of Wheels - - -	67
Machine Tools - - - -	71
Portable Tools - - - -	85
Other Equipment - - - -	94
V Water Supplies and Treatment. Boiler Washing	104
Water Supplies - - - -	104
Water Treatment - - - -	108
Boiler Washing - - - -	118
VI Storekeeping. Distribution and Consumption of Fuels and Lubricants - - - -	130
Storekeeping - - - -	130
Distribution and Consumption of Fuels and Lubricants - - - -	152
VII Shed Grades: Their Work and Establishment -	163
Examples of Shed Grade Establishments -	171

VIII	Periodical Examinations. Organisation of Repair and Maintenance Work - - -	174
	Periodical Examinations - - -	174
	Organisation of Repair and Maintenance Work - - -	180
IX	Engine Cleaning. Engine Management. Testing for Blows. Temporary Treatment of Failures on the Road - - -	196
	Engine Cleaning - - -	196
	Engine Management - - -	201
	Testing for Blows - - -	208
	Temporary Treatment of Failures on the Road - - -	209
X	Engine Failures - - -	213
	Some Common Causes of Specific Failures	220
XI	Breakdown Work and Equipment - - -	226
XII	Rostering of Enginemen. Depot Correspondence - - -	243
	Rostering of Enginemen - - -	243
	Depot Correspondence - - -	246
	Index - - -	249

PLATES

	FACING PAGE
I Frontispiece—Chester Engine Shed Roof	
II Dynamometer Car, Interior - - -	10
III Control Office - - -	14
IV Illuminated Inspection Pit, Peterboro - -	34
V L.M.R. 2-6-0 Class "4" Locomotive and South African Railways Class G.E.A. Beyer Garratt Locomotive - - -	202
VI Cab of Beyer Garratt Locomotive - - -	204
VII Cab of L.M.R. Class "4" Locomotive - -	206
VIII "Golden Arrow" near Tonbridge - - -	244