

PROCEEDINGS
OF
THE EDINBURGH MATHEMATICAL SOCIETY

SERIES 2—VOL. 9—PART III

EDITED BY

J. COSSAR, D. N. LAWLEY AND G. MACKENZIE

CONTENTS

	PAGE
A THEOREM ON GENERAL REGULAR TRANSFORMATIONS OF SERIES: ARWEL EVANS	105
LOGARITHMETICS OF FINITE QUASIGROUPS (II): HELEN POPOVA ...	109
TWO PROOFS OF THE ${}_6Y_6$ SUMMATION THEOREM: L. J. SLATER and A. LAKIN	116
SOME THEOREMS IN GROUP VELOCITY: P. M. DAVIDSON	122
AN APPLICATION OF HANKEL TRANSFORMS IN AXIALLY SYMMETRIC POTENTIAL FLOW: A. G. MACKIE	128
ON A CERTAIN SERIES OF ABEL: J. CLUNIE	132
REFLECTION OF A WAVE BY A CYLINDRICAL MIRROR: LL. G. CHAMBERS	145
A GENERALISED HYPERGEOMETRIC FUNCTION: WILLIAM FABIAN ...	151
A NOTE ON CONVERGENCE FACTORS: C. E. WALSH	154

Issued July, 1956

LONDON:

PRINTED BY C. F. HODGSON & SON, LTD., 23 PAKENHAM STREET, W.C.1

AND PUBLISHED FOR THE SOCIETY BY

G. BELL & SONS, LTD., PORTUGAL STREET, LONDON, W.C.2.

THE EDINBURGH MATHEMATICAL SOCIETY is instituted for the promotion and extension of Mathematical Science—Pure and Applied.

It consists of Ordinary and Honorary Members.

Candidates for admission as Ordinary Members are nominated at one ordinary meeting of the Society, and balloted for at the next, a majority of at least two-thirds of the members present being necessary for election.

The Annual Subscription for ordinary membership is fifteen shillings, but any member may compound for his annual subscriptions by a payment of fourteen guineas payable under covenant in seven annual instalments of two guineas each.

The Committee of the Society may nominate as Honorary Members persons eminently distinguished in the Mathematical Sciences. The mode of election is, otherwise, the same as for Ordinary Members.

Each Member whose Subscription is not in arrears receives the *Proceedings* and the *Edinburgh Mathematical Notes* as published. Authors of papers who are Members of the Society are entitled to receive 25 reprints of their papers free of charge.

Members can obtain back numbers of the publications—as far as these are in print—at reduced prices on application to the Hon. Secretary. Other intending purchasers of the *Proceedings* should apply to the Publishers, G. BELL & SONS, LTD., Portugal Street, London, W.C.2. All intending purchasers of the *Edinburgh Mathematical Notes* should apply to the Hon. Secretary. Certain volumes of the *Proceedings* are out of print or very scarce, and the Hon. Secretary will therefore be glad to hear from members willing to give or sell their collections to the Society. Such gifts will be earmarked if desired for transmission to war-damaged libraries needing them.

Presents to the Library of the Edinburgh Mathematical Society should be addressed to the

HON. LIBRARIAN,
EDINBURGH MATHEMATICAL SOCIETY,
16 CHAMBERS STREET, EDINBURGH, 1.

All papers for publication and other communications should be sent to the

HON. SECRETARY,
EDINBURGH MATHEMATICAL SOCIETY,
16 CHAMBERS STREET, EDINBURGH, 1.