

PROCEEDINGS

OF THE

EDINBURGH MATHEMATICAL SOCIETY

CONTENTS

J. S. LOWNDES: An application of the Kontorovich-Lebedev Transform	<i>page 135</i>
A. P. ROBERTSON AND J. D. WESTON: A General Basis Theorem	<i>page 139</i>
H. K. FARAHAT AND W. LEDERMANN: Matrices with Prescribed Characteristic Polynomials	<i>page 143</i>
F. J. LOCKETT: A Method of Deriving Solutions of a Class of Boundary Value Problems	<i>page 147</i>
F. J. LOCKETT: Longitudinal Elastic Waves in Cylinders and Tubes—Including Thermoelastic Effects	<i>page 153</i>
W. D. COLLINS: Some Integrals involving Legendre Functions	<i>page 161</i>
G. N. WATSON: A Theorem on Continued Fractions	<i>page 167</i>
D. BORWEIN AND A. V. BOYD: Binary and Ternary Transformations of Sequences	<i>page 175</i>
Book Reviews	<i>page 183</i>

OLIVER AND BOYD
EDINBURGH: TWEEDDALE COURT
LONDON: 39A WELBECK STREET, W.1

THE EDINBURGH MATHEMATICAL SOCIETY

The Edinburgh Mathematical Society was instituted in 1883 for the promotion and extension of Mathematical Science—Pure and Applied.

Candidates for membership are nominated at one Ordinary Meeting of the Society and the candidature is voted upon at the next, a majority of at least two-thirds of the members present being necessary for election. Ordinary Members pay subscriptions to the funds of the Society at the times and of the amounts specified in the Rules. Members whose subscriptions are not in arrears receive free of charge one copy of each of the Society's publications. Additional copies and back numbers—as far as these are in print—are charged at a discount on the published price. Further information regarding membership may be obtained from the Secretary.

PROCEEDINGS OF THE EDINBURGH MATHEMATICAL SOCIETY AND THE EDINBURGH MATHEMATICAL NOTES

The Society publishes the Proceedings of the Edinburgh Mathematical Society and the Edinburgh Mathematical Notes. The Proceedings contain papers embodying the results of research that is original in matter or manner, and the Notes contain material of a less specialised nature. Members of the Society may submit papers for consideration with regard to publication; papers from non-members can be communicated by a member. Manuscripts of papers received cannot be accepted if not in a form suitable for submitting to the printer. Authors are advised to retain a copy of anything they may send for publication as the Society cannot accept responsibility for any loss. Manuscripts of papers for publication should be sent in the first instance to the Secretary.

Series I of the Proceedings consists of forty-four volumes published from 1886 to 1926. Series II consists of ten complete volumes to date.

The Proceedings are published in parts and issued twice yearly. Four parts complete a volume of approximately 200 pages, and the Title Pages and Index are published in part 4 of each volume.

The prepaid subscription per volume is 42s. (U.S.A. and Canada \$6.25) post free. Single parts 10s. 6d. (U.S.A. and Canada \$1.50) net. Orders, and requests for prices and availability lists of in-print back numbers, should be addressed to the publishers,

Oliver and Boyd
Tweeddale Court
Edinburgh 1

The Secretary will be pleased to receive gifts of back numbers of the Proceedings as certain of these are scarce and there is a demand from libraries for them.

All communications concerning the Library should be addressed to

The Librarian
The Edinburgh Mathematical Society
16 Chambers Street
Edinburgh 1

All other communications should be addressed to

The Secretary
The Edinburgh Mathematical Society
16 Chambers Street
Edinburgh 1