The following papers have been accepted for publication and will appear shortly:

ALTMANN, S. L. Equivalent functions: hybrids and Wannier functions.

TARÁCS, LAJOS. On a general probability theorem and its applications in the theory of stochastic processes.

DOUGLAS, A. S. On the numerical solution of a class of partial differential equations.

BASSALI, W. A. and NASSIF, M. Transverse bending of infinite and semi-infinite thin elastic plates. III.

BIRCH, B. J. and DAVENPORT, H. Quadratic equations in several variables.

BROWN, W. BYERS. Adiabatic second-order energy derivatives in quantum mechanics.

BASSALI, W. A. Problems concerning the bending of isotropic thin elastic plates subject to various distributions of normal pressures.

HILTON, P. J. and LEDERMANN, W. Homology and ringoids. I.

KILMISTER, C. W. A note on the summation over Feynman histories.

ELIEZER, C. JAYARATNAM. A consistency condition for electron wave functions.

HARTREE, D. R. A method for the numerical integration of the linear diffusion equation.

## CONTENTS OF BIOLOGICAL REVIEWS

## Vol. 33, No. 1. February 1958

JANET E. HARKER. Diurnal rhythms in the animal kingdom.

- D. H. NORTHCOTE. The cell walls of higher plants: their composition, structure and growth.
- M. M. SWANN and J. M. MITCHISON. The mechanism of cleavage in animal cells.

## CONTENTS

		PAGE
HARROP, R. On the existence of finite models and decision procedures for proposition calculi	nal	1
LAWTON, B. Bounded representations of the positive values of an indefinite quadra form	tic	14
ARMSTRONG, RUTH. Finite groups in which any two subgroups of the same order a isomorphic	are	18
COHAN, NORAH V. The spherical harmonics with the symmetry of the icosahedral gro	up	28
GOOD, I. J. Legendre polynomials and trinomial random walks		39
GOOD, I. J. Random motion and analytic continued fractions	•	43
DOMB, C. and FISHER, M. E. On random walks with restricted reversals	•	48
MORAN, P. A. P. Random processes in genetics	•	60
SCIAMA, D. W. On a non-symmetric theory of the pure gravitational field	•	72
STEPHEN, M. J. Double refraction phenomena in quantum field theory	•	81
RIKITAKE, TSUNEJI. Oscillations of a system of disk dynamos	•	89
BARTHOLOMEUSZ, E. F. The reflexion of long waves at a step	•	106
HALTON, J. H. Elliptical whirl of flooded journal bearings	•	119
RESEARCH NOTE: WALLACE, D. A. R. Note on the radical of a group algebra	•	128
ADDENDUM: HEINS, ALBERT E. and SILVER, SAMUEL. Comments on the treatment of diffraction plane waves: Addendum to 'The edge conditions and field representation theore in the theory of electromagnetic diffraction'	n of ms	131

Printed in Great Britain at the University Press, Cambridge (Brooke Crutchley, University Printer)