

The Mathematical Gazette

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Editorial

500 up!

In issue number 400 of the *Gazette*, Douglas Quadling made a case for not getting too excited about multiples of 100. He felt that it would be more appropriate to celebrate mathematical landmarks in geometric progression rather than the arithmetic progression of hundreds. I am inclined to agree – if only because issue number 500 has rather crept up on me! Waiting until number 512 would give a breathing space in which a special issue could be prepared.

So for this issue our acknowledgement of the 500 landmark has been to look back to number 250 and reproduce the cover and one of the inside pages, which is an announcement for the 1938 British Association Meeting. In fact there is a link with the current issue: one of the speakers at the BA was Dr B. H. Neumann who has a book review in this issue (p. 348), and, incidentally, contributed to number 400. Dr Neumann did not figure in issue 300, but there were contributions from J. E. Littlewood, C. V. Durell, A. R. Robson, E. T. Bell, A. W. Siddons, E. H. Neville, R. L. Goodstein and reprints from G. H. Hardy, T. L. Heath and A. N. Whitehead. Furthermore, one of the Notes in number 300 was contributed by S. Parameswaran whose recent contributions on S·P numbers aroused so much interest.

These connections are indicative of the loyalty of some of our contributors. I hope that some of the prizewinning authors in this issue will still be writing for number 600 in 2033!

Fifth Annual Mathematical Gazette Writing Awards.

The Fifth Annual Mathematical *Gazette* Writing Awards have resulted in the first ever ties. Both the Article of the Year and the Note of the Year awards are shared.

Once again, voting was very close in both categories. The leading articles received just over 7% of the votes and the leading Note received just over 6% of the votes. The articles and notes receiving 5% or more of the votes were as follows:

1999 Article of the Year

Winners

Kiril Bankov	Principle of the extreme element
Graham Hoare	Stanislav Ulam 1909 – 1984

Runners-up

Charles McNeill	Playing with Pythagoras and geometric arithmetic
Tom Roper	Anyone for tennis?
P. Braza, J. Tong	Moving the first digit of a positive integer to the last
V. Bryant	What goes round comes round
Roger Voles	An exploration of hyperpower equations
Adam McBride	Remarks on Pell's equation and square root algorithms
Robert J. Clarke	Triangles, surds and Pell's equation

1999 Note of the Year

Winners

Darrell Desbrow	83.21 Volumetric proof of the sum of squares formula
Nick Lord	83.50 Recent formulas for π: arctan revisited!

Runners-up

Ladislav Beran	83.35 The complex roots of a quadratic from a circle
Roger Voles	83.27 Integer solutions of $a^{-2} + b^{-2} = d^{-2}$
J. A. Scott	83.48 Some examples of the use of areal coordinates
Sir Hermann Bondi	83.39 The throw of a die
M. Grant, M. Perella	83.25 Descending to the irrational
John B. Reade	83.60 The mathematics of equal temperament

I congratulate all the authors listed above, especially Kiril, Graham, Darrell and Nick, to whom I have sent prizes and certificates. I also thank all readers who voted.

The prize draw winner was Robert Pargeter, who will receive the book *Mathematics: frontiers and perspectives*, edited by V. Arnold, M. Atiyah, P. Lax and B. Mazur.

STEVE ABBOTT

THE MATHEMATICAL GAZETTE

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Intending members are requested to communicate with one of the Secretaries (G. L. PARSONS, Peckwater, Eastcote Road, Pinner, Middlesex; Miss Punnett, 17 Gower St., London, W.C.1). The subscription to the Association is 15s. per annum, and is due on Jan. 1st. It includes the subscription to "The Mathematical Gazette".

Change of Address should be notified to Miss Punnett. If Copies of the "Gazette" fail for lack of such notification to reach a member, duplicate copies can be supplied only at the published price.

Subscriptions should be paid to the Hon. Treasurer, Mathematical Association, 22 Gordon Square, London, W.C.1.

BRITISH ASSOCIATION ANNUAL MEETING, 1938

CAMBRIDGE, *August 17-24*

As befits Cambridge, the programme for this year's meeting of the British Association is exceptionally attractive mathematically.

Among the visitors expected are Professor G. D. Birkhoff, Professor S. Lefschetz, who will lecture on the fundamental problem of fixed points in topological transformations, Professor A. Ostrowski, bringing a modification of Newtonian approximation, and Professor A. Speiser, looking at elliptic functions from the standpoint of elementary geometry. The theory of groups and topological algebra are represented further by Mr. P. Hall, Dr. B. H. Neumann, Dr. O. Taussky, and Mr. J. H. C. Whitehead, as well as by Mr. M. H. A. Newman, who is to speak on the topological characterisation of the sphere in n dimensions, a problem which goes back to Poincaré, Professor W. V. D. Hodge and Mr. B. Kaufmann have contributions on geometry and analysis, and Professor E. H. Neville and Mr. D. H. Sadler will follow Professor Ostrowski.

The Association's Committee on the Calculation of Mathematical Tables, acting through Dr. W. G. Bickley, Dr. J. C. P. Miller, and Dr. A. J. Thompson, will take members behind the scenes to look at some of the problems, mathematical and typographical, that come between the simple decision to tabulate a function and the appearance of the printed volume. The National Accounting machine used by the Committee for subtabulation and the preparation of printers' copy is to be brought from London for inspection and demonstration, with an operator to explain the adaptations and ingenuities which have effected its conversion from commerce to pure science. Explanations and demonstrations will be given also of a number of other machines, including a model of the Bush integrator, the Mallock equation-solver, and Hollerith and other machines; in this exhibition the companies concerned are co-operating with the Association. Interest in the practical side of computation has been expressed and stimulated at Cambridge by the establishment of a mathematical laboratory, and a visit is planned to this embryonic institution.

Lastly, the application of methods and ideas of combinatorial analysis to the planning of biological experiments will be explained in a series of papers by Dr. C. C. Craig, Mr. H. W. Norton, Mr. W. L. Stevens, Mr. F. Yates, and Dr. W. J. Youden.

Further particulars can be obtained from the Secretary of the Department of Mathematics, Dr. D. M. Wrinch, Lady Margaret Hall, Oxford. A preliminary programme of the Cambridge meeting generally, with conditions of membership, arrangements for accommodation, etc., will be supplied on request to the British Association, Burlington House, London, W. 1.