The final part of the book is entitled Geometry and the Sporadic Groups. It consists of (a) an interesting article by Tits on ways of looking at Leech's Lattice, (b) a brief (actually, rather too brief) survey by Tits of geometries associated with sporadic groups, (c) some thought-provoking remarks by Sims on the problems of trying to construct the large sporadic groups by computer and (d) an article by Thompson on fixed-point-free involutions and projective planes. It is not clear why Thompson contributed this particular piece of work which is rather tentative in nature and not really in keeping with the theme of the symposium.

The criticisms I have are all essentially minor. There is no doubt that every mathematician working in the area of finite simple groups will want to have a copy of this book on his bookshelves.

N. K. DICKSON

## BOOKS RECEIVED

The following books have been received. Reviews of some of the books listed below will appear in future issues.

- H. AMANN, N. BAZLEY, and K. KIRCHGÄSSNER (eds.), Applications of nonlinear analysis in the physical sciences (Pitman), pp. 325, £30
- R. J. Knops (ed.), Trends in applications of pure mathematics to mechanics, Vol. III (Pitman), pp. 234, £25
- J. R. SILVESTER, Introduction to algebraic K-theory (Chapman & Hall), pp. 255
- J. K. BEEM and P. E. EHRLICH, Global Lorentzian geometry (Marcel Dekker), pp. 460, SFr. 126
- N. Woodhouse, Geometric quantization (Clarendon Press, Oxford), pp. 316, £27.50
- D. N. Burghes and A. D. Wood, Mathematical models in the social, management and life sciences (Ellis Horwood), pp. 287, £13.50
- F. STUMMEL and K. HAINER, Introduction to numerical analysis (Scottish Academic Press), pp. 282, £9.50
- T. E. HALL, P. R. JONES and G. B. PRESTON (eds.), Semigroups (Academic Press), pp. 255, \$18
- J. D. Lipson, Elements of algebra and algebraic computing (Addison-Wesley), pp. 342, \$34.50 M. Atteia, D. Bancel and I. Gumowski (eds.), Nonlinear problems of analysis in geometry and mechanics (Pitman), pp. 208, £8.50
- W. A. GRUVER and E. SACHS, Algorithmic methods in optimal control (Pitman), pp. 233, £8.50
- W. H. RUCKLE, Sequence spaces (Pitman), pp. 198, £8.50
- H. BERESTYCKI and H. BREZIS (eds.), Recent contributions to nonlinear partial differential equations (Pitman), pp. 226, £9.95
- H. Brezis and J. L. Lions (eds.), Nonlinear partial differential equations and their applications: Collège de France Seminar (Pitman), Vol. I, pp. 388, £10.50
- S. V. STRATILA, Modular theory in operator algebras (Abacus Press), £33
- P. A. FUHRMANN, Linear systems and operators in Hilbert space (McGraw-Hill), pp. 350, £19.25
- C. PLUMPTON and P. S. W. MACILWAINE, New tertiary mathematics: Vol. 1, Pt. 1, Pure Mathematics, Vol. 1, Pt. 2, Basic applied mathematics (Pergamon), pp. 405 & 232, each \$16.75
- C. Plumpton and P. S. W. MacIlwaine, New tertiary mathematics: Vol. 2, Pt. 1, Further pure mathematics, Vol. 2, Pt. 2, Further applied mathematics (Pergamon), pp. 402 & 222, each \$16.75