whether the proof given there is adequate. From this gradient method for approximating a saddle-point a gradient method for strictly concave programming is easily derived. A neat modification of this supplies an algorithm for all concave programming, which is illustrated by an example in linear programming. The gradient method is also formulated as a system of difference equations, and discussed in this form. In the final chapter of part II the possibilities of weakening the concavity assumption are investigated.

The three programming problems from mathematical economics discussed in part III show how great gains in simplicity and efficiency can be obtained by taking advantage of the special features of a problem, rather than making a mechanical application of some general programming algorithm.

A.M. Duguid, Brown University

Applications of Tensor Analysis, by A.J. McConnell. Dover, New York, 1957. xii + 318 pages. $1.85.

This is a paperback reprint of "Applications of the Absolute Differential Calculus". The book is still an excellent introduction to tensors from the classical "index pushing" viewpoint. It demonstrated, in 1931, the usefulness of tensor algebra for determinant theory and the analytic geometry of quadrics, a point which still needs emphasizing. It also contains sections on the differential geometry of curves and surfaces and on applied mathematics.

B.A. Rattray, McGill University

Elementary Statistical Methods, by W.A. Neiswanger. Macmillan, New York; Brett-Macmillan, Galt, Ont., revised edition, 1956. 749 pages. $7.25.

This is an excellent text for the student who wishes to employ statistical techniques without necessarily understanding their mathematical basis. Practical examples are used to present the techniques, simple intuitive approaches are given to the more mathematically difficult concepts and cautions are advanced in every topic to show the beginner the limitations of the techniques and to warn him of the more common misuses. Neither in the text nor in the summary is any attempt made to develop the formulae rigorously. For instance, when two formulae are given as applicable to the solution of some question, no attempt is made to show their equivalence. The strong point of this text is that motivation is given without mathematical argument, the emphasis being to enlighten the student as to what circumstances suggest the use of a particular technique.

The development of the design of samples is more than adequate for an introduction and would be a useful reference for any statistician concerned with random sampling. The section on correlation is an example of the author's ability to develop techniques on an intuitive basis. Tables included are Logarithms, Squares and Square Roots, Normal Curve Areas, Significant t values and Random Numbers.

Jacqueline Oler, McGill University

String Figures and other monographs, Chelsea, New York, 1960. $3.95.

String Figures, by W.W.R. Ball. Third edition, 1920. 72 pages.

Methods and Theories for the Solution of Problems of Geometrical Construction, by J. Petersen (translated from the Danish). 1879. 102 pages.

The Elements of Non-Euclidean Plane Geometry and Trigonometry, by H.S. Carslaw. 1916. 179 pages.

History of the Logarithmic Slide Rule and Allied Instruments, by F. Cajori. 1909. 136 pages.

From the Editor's preface: "... The reason for their inclusion in a single volume is neither learned nor recondite. The reason is purely economic: reprinted separately, the books would have to be priced at not much less than the price of the whole present volume (if they could be so reprinted at all)...".

It probably remains to be seen whether it was an economically sound venture to force a lover of string tricks to buy a text on non-euclidean geometry and two more treatises on unrelated subjects if he wants to read about his hobby. Although explained by one who knows his mathematics the present exposition is purely descriptive and unmathematical.

Petersen's (Hjelmslev's) Methods and Theories is an "attempt to teach the student how to attack a problem of construction". The author states that such problems have "by many been looked upon as a kind of riddle which only a few, gifted with a special talent, could attempt to solve. The consequence was that problems of construction have hardly gained any footholds in the schools, where they naturally ought be cultivated". Certainly this does not apply to schools in all countries. Geometrical constructions provide useful practice for all kinds of geometry. Projective geometry, however seems to have been omitted from the author's aims.