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.

The reprint of Carslaw's often quoted Non-Euclidean Geometry is, from the point of view of the mathematician, the most important part of the volume. It begins with an outline of the history of its subject in 39 pages up to the work of Riemann. There follow

Chapter III. Hyperbolic plane geometry in synthetic treatment.
Chapter IV. Hyperbolic plane trigonometry.
Chapter V. Length and Area.
Chapters VI-VII. Elliptic geometry and trigonometry.
Chapter VIII. Realizations.

Cajori's History of the Slide Rule would be useful for deciding related questions that may come up in conversation. But not many purchasers of the book will find the subject inspiring.

The book is printed on excellent paper and nicely bound.

H. Schwerdtfeger, McGill University

Corpuscules et Champs en Théorie Fonctionelle, by Jean-Louis Destouches. Gauthier-Villars, Paris, 1958. viii + 164 pages. U.S. $9.76.

Professor J.-L. Destouches has published a number of papers and tracts on the subject of "functional quantum theory". In the present work he provides a summary of his approach by way of an introduction and then proceeds to apply it to non-relativistic and to relativistic particles of spin $\frac{1}{2}$, to particles with I-spin, to spin-1 mesons and to photons, to non-linear electro-dynamics, and finally to linear and non-linear theories of gravitation.

Apparently the functional quantum theory of Destouches is an outgrowth of the school founded by Louis de Broglie. The presentation of the theory, which forms the first chapter of the present monograph, starts with a definition of elementary particles as portions of physical systems that cannot be subdivided by any method whatsoever (a definition that to this reviewer has very little bearing on the problems actually confronting us in high-energy physics, - after all, what is the distinction between transmutation and subdivision in the subatomic domain?), and then proceeds to the assertion that particles are to be represented by functions u to be taken from a separable function space (Ru). u is not the wave function in the ordinary sense. For instance, an elementary particle is located at a definite point M, which is a functional of u, M = sing u, where the symbol sing is to remind us of the origin of that idea, de Broglie's "onde pilot" which was to exhibit a singularity at the location of the particle.