Frequency Arrays. By H. E. Soper. Cambridge, University Press, 1922.
48 pp.

This booklet gives a very condensed treatise upon the advantages to be
gained in the use of "symbols bearing an objective or logical significance"
in the study of statistical and other distributions. No attempt has been
made to establish any new results, but any knowledge of the mass of
results treated here, and the fact that the treatment is restricted to less
than fifty pages, should produce faith in anyone in the power and possible
conciseness of the method of attack recommended by the author.

No one is advised to try to read this booklet who is not already familiar
with most of the work and results of Pearson and his disciples, for it
contents itself for the most part with the very concise reproduction of
most of the most important results of Pearson and others, with practically
no explanation of those results. This is no criticism, of course, because
the book is designed for the use of the advanced student who is interested
in research in statistics and who desires a very concise method of attack.
The book then will be of little or no use in any undergraduate course in
statistics, even as a reference book. For this reason it would perhaps be
well for the reviewer to limit further account to a mere list of some of the
most important topics included:

Moment arrays.

Binomial, Poisson, Gaussian, exponential and gamma types of fre-
quencies; including the simple, multiple and general Gaussian
distributions, the correlation surface, multiple correlation, Gaussian
derivatives, Thiele derivatives, tetrachoric functions.

Sampling without replacement and partitioning a limited population.

Hypergeometric and kindred frequencies; including moments of hyper-
geometrical frequencies and of the double hypergeometrical series
of frequencies.

Geometrical distributions; Samples of vectors; Random migration;
including polar symbols in two dimensional distributions, circular
distributions and vector sampling, moments of tensors of circular
distributions, the symmetrical Gaussian, circular area, uneven
distribution of points on a circle, single points, non-circular distri-
butions and vector sampling, polar symbols in three dimensional
distributions, spherical distributions and vector sampling, fortuities
of resultant tensor when n randomly selected tensors are set in
random directions in a space of s dimensions.

C. H. FORSYTH

Atomes et Électrons. Institut International de Physique Solvay. Rapports
et discussions du Conseil de Physique tenu à Bruxelles du 1er au 6
avril 1921. Paris, Gauthier-Villars, 1923. 8 + 273 pp.

The International Institute of Physics was founded in 1912 by Ernest
Solvay for the object of encouraging physical research. One of the means
of accomplishing this object was the organization of international con-
gresses, with a limited number of participants, meeting at Brussels from
time to time.