

Reason and Chance in Scientific Discovery by R. Taton.  
Translated by A.J. Pomerans. Philosophical Library, New York  
1957, 171 p., \$10.

In his own works, the author has chosen to do no more than to give a description of the different realms of scientific discovery, its principal factors and its essential aspects, with examples drawn from the various fields. He certainly does no more; in fact, he accomplishes much less.

The first chapter, which is simply but ambitiously entitled "Mathematics", contains little more than a selection from Hadamard's well known book on the psychology of invention in mathematics, augmented by another selection from Poincare's non-technical writings. Brief entries are made about Elie Cartan and J. Fourier.

The following chapters deal with "Theoretical Sciences" (4 1/2 pages) and "Observational Sciences" (5 pages). Here the excerpts are from de Broglie and Claude Bernard.

This is an adequate description of Part 1. There are two other parts: Factors in Discovery, and various aspects of Discoveries.

For reasons of his own the author chose to exclude biochemistry, psychology, geology, meteorology etc. from the realms of scientific discovery. While he discusses biology, he does not mention, to give an example, Harvey's discovery of the circulation of the blood. He has something to say about medicine and "iatrochemistry", but the word "biochemistry" does not appear in the book - although terms such as "two-dimensional chromatography" make an occasional appearance. Neither Heisenberg's name nor Planck's is mentioned, nor the very existence of the uncertainty principle or Planck's constant. On the other hand there are plentiful references to rather obscure and relatively unknown writers, especially of French writers.

The book is pleasantly written and the typography and picture-plates are excellent.

Considering the meagre content of the book, its price of \$10 is bound to come down soon after its appearance.

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