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September 1954, p. 17), I mentioned the absence of two topics: the relation to Fisher's statistical estimation theory, and applications to library searches. Here both these topics receive some attention, but no exhaustive treatment. It is still hard for communication-theory experts to communicate; the discussion becomes particularly violent on probability as applied to telepathy experiments (p. 15).

Here are a few topics that I found particularly interesting. A machine for Braille transcription (p. 184) seems a modest and realistic goal; I have taken a dim view of proposals to build a machine that would translate (and expurgate?) Catullus. A successful experiment in Monte Carlo composition of cowboy songs is mentioned (p. 168); regrettably, the songs were not included in these proceedings. Statistical style parameters of various authors are tabulated (p. 155); for instance, the mean number of syllables per word in *Othello* is only 1.2758. I did a quick sampling on one of the less intelligible (to me) authors in the volume under review, and got 1.96.

Many readers will find these particular topics unexciting. But if the reader has interests—even casual ones—at all related to any of the five headings, he will find in this book at least a few interesting pages.

Rayleigh's Principle and its Applications to Engineering. By G. Temple and W. G. Bickley. 154 pp. Dover Publications, Inc., New York, 1956. Paperbound \$1.50. *Reviewed by Milton Abramowitz, National Bureau of Standards.*

This is a photographic reproduction of the original volume published in 1933. It describes the energy method and applies it to a large number of examples. Rayleigh's method often provides adequate information concerning the first mode of a vibrating system if a suitable approximation to the amplitude is selected. It is characterized by the fact that results may be obtained with a minimum of labor. When one attempts higher order approximations the effort required usually increases exponentially while the resulting improvement in accuracy behaves logarithmically. Engineers and physicists are wise to acquaint themselves thoroughly with the ideas presented here since they serve as an important basis for modern approximation methods in many areas.

Atomic Quest: A Personal Narrative. By Arthur Holly Compton. 370 pp. Oxford U. Press, New York, 1956. \$5.00. *Reviewed by R. B. Lindsay, Brown University.*

This is mainly a narrative of the author's personal experiences in the carrying out of the atomic bomb project during World War II. The treatment is popular and there is a minimum of technical detail, with just enough of simple basic nuclear physics to make the whole understandable to the layman. The style is rather digressive, though not so much so as to interfere seriously