

Mathematicians (by whom I mean people who produce, rather than consume, mathematics, whether pure or applied) may well be depressed by the realization of how ineffective even a well-developed theory can be in the face of practical requirements. On the other hand, a study of some of the forms which have been found useful might well suggest new lines of research. The level of the exposition is implicitly a disheartening commentary on the present level of mathematical education of computer personnel.

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#### BRIEF MENTION

*Leitfaden der Nomographie.* By W. Meyer zur Capellen. Berlin, Springer, 1953. 4+178 pp., 203 figs. 17.40 DM.

*Nomographie.* By M. W. Pentkowski. Trans. from the Russian by M. Peschel. Berlin, Akademie-Verlag, 1953. 16+268 pp., 140 figs. 15 DM.

These two books contain much useful information not elsewhere available and present it in stimulating manner. Both pay considerable attention, for example, to the question of errors. In the first, the discussion proceeds by numerous varied examples taken from engineering practice. The types are listed in an easily usable index. The sources form a bibliography of 68 titles. The theory is only lightly treated. With sharply contrasting method Pentkowski's book discusses few applications to specific equations from engineering. Most of the types considered are among those given in d'Ocagne's treatise. A mathematical classification of these types and their relations is not attempted. The object is rather to discuss how data should influence type, size and disposition if the nomogram is to have specified accuracy. This is done at great length and with a high degree of success.

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*An introduction to the theory of numbers.* By G. H. Hardy and E. M. Wright. 3d ed. Oxford University Press, 1954. 16+420 pp. \$6.75.

The first edition was reviewed in this Bulletin vol. 45 (1939) p. 507. A number of changes have been made, among them the inclusion of an elementary proof of the prime number theorem.

*Mathematical foundations of quantum mechanics.* By J. von Neumann. Trans. by R. T. Beyer. Princeton University Press, 1955. 12+445 pp. \$6.00.

The German edition appeared in 1932 and was reviewed in this Bulletin vol. 39, p. 493. The translation was revised by von Neumann.

*Die Briefwechsel von Johann Bernoulli*. Ed. by the Naturforschende Gesellschaft in Basel. Vol. 1. Basel, Birkhäuser, 1955. 531 pp. 60 Swiss fr.

This magnificently produced volume is the first of 20 or more in which the Naturforschende Gesellschaft in Basel intends to publish the works and correspondence of the Bernoullis (and of the Basel mathematician Jakob Hermann (1678–1733)). The editor, O. Spiess, has provided this volume with everything that could be desired in the way of introductions, notes, and appendices. Vol. 1 contains correspondence between Johann Bernoulli and his brother Jakob, and some miscellaneous correspondence, but its greater, and by far the most interesting, part consists of Johann Bernoulli's correspondence with the Marquis De Lhospital (as he himself signed his name), who is remembered not only for his "rule" about indeterminate forms but as the author of the first calculus textbook. This correspondence, hitherto unpublished, indicates that the Marquis' originality has been much overestimated, and that even his famous rule should properly be attributed to Johann Bernoulli.

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