

Book Reviews

William Heytesbury. Medieval logic and the rise of mathematical physics. Curtis Wilson. University of Wisconsin Press, Madison, 1956. xii + 219 pp. \$4.

Since the beginning of Pierre Duhem's work, in 1903, we have been aware that Galileo's mechanics was somewhat less miraculous than it had appeared to be, since 14th- and 15th-century logicians of the school of "Modern Logic" had deviated from Aristotelian physics in the same direction as that which the great Pisan was to explore so successfully. Deriving from William of Occam, these teachers, principally at the universities of Paris and Oxford, are gradually coming into clearer view through the exacting labor of the few scholars who possess the requisite training in mathematics, philosophy, and language. William Heytesbury, the subject of the present book, was described, as recently as 1955, in Gilson's *History of Christian Philosophy in the Middle Ages*, as being "little more than a name."

Whatever obscurity he may have fallen into, Heytesbury was once an influential teacher and writer and no slavish mouthpiece of the Aristotelian philosophy-cosmology which formed the intellectual environment of his time. The present study is concerned with the elucidation of a portion of one of Heytesbury's works—a portion in which he deals with physics and mathematics in a way that shows the same awareness of Aristotle's shortcomings as that which marked Galileo's thinking about two and a half centuries later. Two and a half centuries was a long time, even in the Middle Ages, and a perusal of Curtis Wilson's closely reasoned discussion at once illuminates the critical attitude of the 14th century toward traditional physics and the limitations of the academic environment, which precluded any leap at that time into "Galilean" physics. In Heytesbury's work, concludes Wilson, "mathematics is employed in the service of classification, i.e., of the correction and elaboration of everyday speech." In this, Heytesbury differed from Aristotle, who, in his physics, showed no such awareness of any need for the correction of everyday speech, and from Galileo, to whom mathematics was the direct key to the

world, without the intervention of everyday speech. Other aspects of Heytesbury's physics show affinities with the 19th-century discussions which led to the logical foundations of the calculus.

As in the case of a work of pure science, the popularity of this book is likely to be in inverse proportion to its originality. It is more likely to please the rare-book dealer of the next generation than the publisher of this generation. The University of Wisconsin Press is to be congratulated for considering the importance of the work ahead of the likelihood of its immediate popularity.

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Report of the Princeton Conference on the History of Philanthropy in the United States. Russell Sage Foundation, New York, 1956. 84 pp. \$1.

American social philosophers have long agreed that wealth cannot expect public approval unless it contributes to the advancement of human welfare. "They should own who can administer, not they who hoard and conceal," wrote Ralph Waldo Emerson; "they whose work carves out the work for more, opens a path for all." More than any other people, Americans have turned their private fortunes to public account through philanthropy. They have relieved distress at home and abroad, have endowed schools and churches, have supported art galleries and museums, and have subsidized the quest for new social and scientific knowledge. Important as philanthropy has been in our national life, we know very little about it. Some of the great foundations now feel that they can profit by the discovery of new knowledge concerning the historical role of philanthropy in the United States.

At Princeton, on 3-4 Feb. 1956, a group of historians met with representatives of the Ford Foundation and the Russell Sage Foundation (sponsor of the conference) to discuss research possibilities in this field. *Report of the Princeton Conference on the History of Philanthropy in the United States* summarizes the results of that conference. Richard

H. Shryock, of the Johns Hopkins University, and Henry Edward Guerlac, of Cornell University, who represented the history of medicine and the history of science, respectively, participated in the discussions. Their influence is revealed in the suggestions for further study of the role of philanthropy in the promotion of scientific research, in the creation of such agencies as the Smithsonian Institution and the Chicago Natural History Museum, and in the support of medical education, hospitals, and various public health programs. The conferees venture the opinion that the task of studying philanthropy in its scientific role belongs more properly to the historian of science than to the scientist, who may not be able to relate his specialty to broad historical movements and social goals.

The bulk of the report deals with the relation of philanthropy to government, law, the economy, the arts, education, religion, and other such matters. Interested parties will find a great variety of research topics suggested here, together with an extensive preliminary bibliography. Because of its comprehensiveness, the report is likely to fulfill the object of its sponsors by stimulating research in many different areas. Anyone who contemplates research in this field should also read the article on "The history of American philanthropy as a field of research" [*American Historical Review* (January 1957)] by Merle E. Curti, the distinguished historian who presided at the Princeton conference.

The Ford Foundation, which made an earlier grant for a study of English philanthropy, has recently awarded the University of Wisconsin \$100,000 for American philanthropic studies. Curti, who will head the Wisconsin project, will undoubtedly welcome research suggestions from members of the scientific community.

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Introductory Psychosomatic Dentistry. John H. Manhold, Jr. Appleton-Century-Crofts, New York, 1956. 193 pp. Illus.

Introductory Psychosomatic Dentistry is a contribution to the expanding list of published materials that concern psychosomatic medicine and dentistry. The book introduces, at relatively great length, material on statistics and research methods for studying dental caries and for establishing a causal relationship to personality disorders. It is a moot question whether dental caries, because of the multiplicity of factors that participate in its causation, can be selected as the appropriate index for establishing a