too faithfully confirms the comment. In the circumstances I have felt that my duty as a reviewer falls short of devoting the remainder of a lifetime to wooing so unresponsive a text. I can therefore express no opinion on the soundness of the system; I can only indicate what a rich field lies open to the logician in want of a subject for analysis.

Nevertheless, the book is well worth reading. As a source of fruitful suggestions, of pregnant sentences and of directions to discussions—particularly Polish -which one might otherwise have missed, it is to be highly recommended. On what grounds its title was chosen I have not discovered. As with most writers on these subjects, there is evident a lack of familiarity with the actual practice of scientific workers and a looseness of thinking on scientific questions that contrasts strangely with the rigour of their thinking in pure symbolic logic. For example, because it is possible to adopt a scale of velocities which has no upper limit, Chwistek concludes that "the legend according to which there is no velocity greater than that of light is disproved" (p. 247); he overlooks the fact that on this scale the velocity of light is infinite. Again, his conclusion that "all modern arguments which seem to overthrow the doctrine of determinism appear to be illusory" (p. 254) demands a metaphysical definition of determinism which he professes to avoid. Perhaps the chief contribution of the book to science is contained in the remark on p. 253: "Thus a profound relation between events which never can be foreseen and undecidable propositions has been established".

The translators might note that the plural of formula is not formuli and that 'data' takes a plural HERBERT DINGLE verb.

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GENERAL EUROPEAN HISTORY

Chapters in Western Civilization

Chapters in vvestern Civilization
Selected and edited by the Contemporary Civilization
Staff of Columbia College, Columbia University.
Vol. 1. Pp. ix+438, Vol. 2. Pp. ix+300. (New
York: Columbia University Press; London: Oxford
University Press, 1948.) 14s. net each Vol.

THESE two volumes have been produced for
stidents following a course in "Contemporary
Civilization" at Columbia College. They provide, in
confunction with a basic source book, the historical

confunction with a basic source book, the historical background. It is natural that the first volume, going down to the French Revolution, should give the story of civilization in Western Europe; it is curious that the second volume should stick so closely to the same theme, having little more than passing references to civilization in the United States. The final chapter, for example, is entitled "Europe between World Wars". One can only conclude that America between world wars is dealt with in the lecture course, and hope that sufficient attention is paid to the way in which civilization is transmogrified when it is transplanted. "Background", in fact, is not a very happy metaphor by which to refer to the evolution of culture prior to its diffusion.

About half the chapters were specially written for the course or for this book; the rest are taken from recently published works. This method of compilation leads to some looseness of structure, marked differences of treatment, and occasional overlaps and omissions. But, considering the diverse origins of the contributions, the volumes present a fairly coherent plan. The main emphasis is on the mind, rather than the structure, of society, though this is less true of the first few chapters than of what follows. Medieval social systems are described and analysed with considerable skill-which is not surprising, since medieval historians have practised sociology with conspicuous success for at least half a century. The modern historians represented hereand this is true to a great extent of others as well tend to divide the subject into events and ideas. The chapters on events are unequal, some sinking to a low level of disjointed cataloguing. The chapters on ideas reveal in most cases a serious attempt to let students into the world of thought, rather than to leave them battering in vain against a hedge of names, titles and set phrases indicative of 'schools' and their theories; and the range of ideas treated is wide. Political theory naturally bulks large; but religion, and not merely church history, is fully treated, philosophy gets a fair share of attention. and science is recognized as a worthy companion of the rest. This last is a welcome feature of the book, since humanists are capable sometimes of forgetting that science (other than as applied to manufacturing techniques) is a major part of civilization, and still more that some knowledge of it and its history should be included in the general education of a man of

But should such a book be written at all? It is scarcely possible to answer the question without fuller knowledge of the way it is used by the lecturers in the course. Taken by itself, it is not wholly satisfactory either as a substitute for other reading or as a stimulant and guide to it. It is too long to give an enlightening conspectus into which fresh knowledge can be welded when it is acquired from other sources, and too short to tell the intelligent undergraduate everything he wants to know. To take one example, what is the precise function of a history of the French Revolution in fifty pages, however well written, unless it is part of an interpretation of eighteenth- and nineteenth-century history offered by a single philosophic mind? The multiplicity of authors makes such unity impossible; but perhaps the subject is in any event too vast. One can study a single aspect of a long period, or all aspects of a short period, but not all aspects of a long periodat least not within the compass of one book.

T. H. MARSHALL

AMERICAN CHEMICAL INDUSTRY IN THE TWENTIES

American Chemical Industry

The Merger Era. By Williams Haynes. Vol. 4, 1923-1929. Pp. xli+638+46 plates. (New York:

D. Van Nostrand Co.; Jac.; London: Maemillan and Co., Ltd., 1948.) 153. net.

IT was a hige task which Williams Haynes underthough when he conceived a history of American chemical industry from the year 1608 to the present time to appear in six volumes. The first volume has yet to come. Volumes 2 and 2 appeared in 1942. yet to come. Volumes 2 and 3 appeared in 1946, and in 1948 the fourth volume has arrived—an extraordinary achievement. But Mr. Haynes has spent his life in contact with the chemical industry and with the chief figures who have flitted across, or still occupy, the American stage. A history of