have attracted much attention throughout the country. The formal organization of research laboratories accomplishes much more than the same expenditure of money for uncorrelated investigations by the individual members of the departments. calls attention to the activity of the institute in this field, raises its scientific standing, attracts advanced students, who are often just as effective research workers as inexperienced assistants, offers facilities and inducements for advanced study and investigation to our younger instructors, and forms a nucleus of development in this important direction.

## SCIENTIFIC BOOKS

American Philosophy: The Early Schools. By I. WOODBRIDGE RILEY, Ph.D. New York, Dodd, Mead and Co. 1907. Pp. x + 595. This substantial volume, the fruit of the author's three years' tenure of the Johnston research scholarship in Johns Hopkins University, constitutes the achievement of the first and most difficult part of an important undertaking, the neglect of which hitherto has been a reproach to American learning. That none have before attempted, on any adequate scale, the task which Dr. Riley is carrying through is perhaps partly due to a common impression that a history of earlier American philosophy would necessarily have the brevity of the chapter on snakes in Iceland. The first of the services rendered by the present publication is that such an impression can not well continue to prevail, in view of the evidence now given of the existence of much vigorous and independent activity in speculation and scientific inquiry even in the eighteenth cen-But it has always been reasonably apparent that some sort of intellectual processes must have been continuously at work in American life from the time of the founding of the earliest colleges down to the present. Yet, in spite of a considerable literature of books and monographs on special topics, we have thus far had nothing that was properly entitled to be called an intellectual history of America-

a history based on an extensive collation and first-hand study of the sources, and covering the intellectual movements of all parts of the country. The nearest approach to this hitherto has been the work of a Dominican scholar, written in French. Such a history Dr. Riley, however, has undertaken to provide. (what is still a thing sufficiently uncommon amongst us) an œuvre de longue haleine that he has proposed to himself; the present volume, which leaves off at the foreshadowings of transcendentalism, is designed to be followed by two others. What distinguishes this part of the work is the novelty of much of the material, and the thoroughness with which the author has documented himself for his task. He even seems to have read through the whole series of Harvard Dudleian lectures on natural religion since 1755—a sort of cruel and unusual punishment which one might almost have supposed contrary to law in these mild days.

The interest of the book is, of course, more historical than philosophical; but it is by no means merely antiquarian. The author has, perhaps, found no American philosopher to whose writings many are likely to resort for the solution of contemporary problems. he has rescued from oblivion some writers whom it is still possible to read with pleasure, and he has set forth, convincingly for the most part, not merely the vicissitudes of philosophical opinion—especially in academic circles—in America, but also the causes of those vicissitudes. A large part of the book may, indeed, be regarded as a record of the rise and fall of the scientific spirit and of intellectual vitality in the colleges. It is, in the main, a melancholy story of the triumph of obscurantism and mediocrity, of the suppression of ideas and the defeat of tendencies which were destined, after all, to be recalled from their graves and to exercise a powerful influence upon the university teaching of a later gen-Thus, in the first half of the eighteenth century there was an interesting development, in Johnson and Edwards, of philosophical idealism, which, like the doctrine of the Cambridge and Oxford Platonists from which it was, in the main, descended, showed

marked tendency towards pantheism. Though Johnson's books were used as texts in King's College and the Academy in Philadelphia, his theories were born out of due time and soon perished of general neglect. Again, one hundred years ago Philadelphia and the south seemed-much more than New England—to be full of promise of great and rapid intellectual progress. As a result of the impetus given in the one case by Franklin and in the other by Jefferson, the universities and medical schools in these communities abounded in bold speculations, in openness of mind towards new hypotheses, in enthusiasm for experimental investigation, in liberal educational policies, in an especial alertness to psycho-physical problems, and in materialistic tendencies which, however open to objection on metaphysical grounds, created an atmosphere favorable to the physical and biological sciences. So we find Joseph Buchanan, in Kentucky, approximating the theory of continuous evolution from the inorganic to man, arguing for epiphenomenalism, and investigating the physiological antecedents of mental processes; we find Cooper, at the University of Virginia, elaborating a "psychology without a soul," propounding the hypothesis of the electrical character of the transmission of the nerve-impulse, and anticipating positivism; we find Benjamin Rush, at the University of Pennsylvania, lecturing systematically on the relations of mind and body, experimental psychology, abnormal psychology and psychological esthetics. Crude and one-sided these developments often were; but the spirit, and the conceptions of scientific method, that lay behind them, if they had continued to rule in American universities, would have put science and education in this country, and especially in the south, thirty or forty years ahead of their present position. These possibilities, however, soon came to naught—partly because the public mind was not ready for such ideas, partly because of the clerical power in the colleges, and largely, Dr. Riley seems to think, because of the intellectually deadening influence of the "common-sense" system of the Scotch school, which, established at Princeton early in the nineteenth century,

gradually became the ruling American philosophy, as that college rose to dominance in the middle and southern states.

There are (naturally enough in so extensive a study) several minor slips that should be corrected in a subsequent edition. By an odd anachronism, Thomas Cooper (1759-1840), the son-in-law of Priestley and first professor of natural science in the University of Virginia, is confused (pp. 294, 408) with the celebrated chartist of the same name (1805–1892). would have been a matter of some metaphysical difficulty to have been a "former chartist" in 1819. Less explicably, Priestley himself is referred to as "the great chartist." The Bridgewater Treatises can not (p. 17) have been "relegated to the back shelves" in "the latter part of the 18th century," since the earliest of them came out in 1833. The year 1797 should not be placed (p. 318) in the "era of good feeling"; the period traditionally so called came twenty years later, while the beginning of the first Adams's administration was an era of uncommonly bad feeling. Channing was in no sense a pantheist; and his Dudleian lecture of 1821 has exactly the opposite purport to that ascribed to it (pp. 207, 208). It tends to confusion to call the philosophy of Wolff (p. 320) and that of the enlightenment generally, "illuminism"; that term already has two fairly definite (and incongruous) meanings and it is not desirable that it should acquire a third. Jefferson, in the argument outlined (p. 276), so far from "desiring to give gain de cause to the disciples of Ocellus, Timæus, Spinoza, Diderot and D'Holbach," is engaged in refuting the atheistic philosophy which he conceives to be represented by those names. The chapter on Jefferson, in general, seems a little confused and ill-arranged; the precise character of his eventual metaphysical opinions does not altogether plainly appear. Jefferson inclined (with some agnostic hesitancy about adopting any metaphysical opinion at all) to (a) the doctrine that all substance is corporeal and that thought is somehow an attribute or function of body—i. e., a materialistic monism; and at the same time (b) to the rejection of a purely mechanistic philosophy of nature, and the affirmation, on the basis of the argument from design, of the necessity of referring the origination of the world to an intelligent mind—i. e., an optimistic deism. It was implied in this that God must in some sense also be corporeal. Now, this peculiar combination of ideas was characteristically that of Priestley; and (as Dr. Riley neglects to point out, in his account of the sources of Jefferson's ontological notions) the Virginian's language plainly shows that he took over this combination, and the arguments for it, from Priestley, ready-made. The author's use of the term "deism" (to which movement a whole section of the book is devoted) is confusing and inconsistent. It would take too long to discuss here the historically correct and the incorrect uses of the word; but it is surely absurd to classify equally as "deists" such strange bed-fellows as Berkeley, Bishop Butler, Cotton Mather, Addison, Charles Chauncey, Channing, Toland, Ethan Allen and Thomas Paine. These men, between them, represent all possible attitudes upon all the issues with which the term "deism" has been associated: natural vs. revealed religion, pantheism vs. transcendence of the deity, optimistic vs. pessimistic view of nature, uniformity of natural law vs. miracles and special providences, inherent dignity vs. natural depravity of man. There can be no possible ground for the application of a common name to such an incongruous collection. Finally, it is rather unfair to dismiss as "puerility" a passage in which an otherwise unknown eighteenth-century writer, Thomas Dobson (p. 239), points out, concisely and clearly, just that fundamental fallacy in the then popular argument from design which Clifford, many years after, still thought it worth while to explain at some length.

But though open to criticism upon these and some other details, the book as a whole is a thorough and scholarly piece of research in a territory where the author has often been obliged to blaze his own way, and a notable addition to our historical literature. It will be indispensable to all who are interested in the history of philosophy, of natural science,

of education, of religious movements, of literature, and of public opinion in America.

A. O. LOVEJOY

## SOCIETIES AND ACADEMIES

THE WASHINGTON ACADEMY OF SCIENCES

THE Washington Academy of Sciences at its annual meeting, January 16, elected the following officers for 1908:

President-C. D. Walcott.

Vice-president representing the Anthropological Society—W. H. Holmes.

Vice-president representing the Archeological Society—J. W. Foster.

Vice-president representing the Biological Society—L. Stejneger.

Vice-president representing the Botanical Society—T. H. Kearney.

Vice-president representing the Chemical Society—F. W. Clarke.

Vice-president representing the Society of Engineers—A. P. Davis.

Vice-president representing the Entomological Society—A. D. Hopkins.

Vice-president representing the Society of Foresters—Gifford Pinchot.

Vice-president representing the Geographic Society—Willis L. Moore.

Vice-president representing the Geological Society—Geo. Otis Smith.

Vice-president representing the Historical Society—J. Dudley Morgan.

Vice-president representing the Medical Society—Henry D. Fry.

Vice-president representing the Philosophical Society—J. F. Hayford.

Corresponding Secretary-Frank Baker.

Recording Secretary—J. S. Diller.

Treasurer-Bernard R. Green.

Manager, Class of 1910—Bailey Willis.

Managers, Class of 1911—L. O. Howard, O. H. Tittmann, B. W. Evermann.

Under the auspices of the academy the president of the Anthropological Society of Washington, Dr. Aleš Hrdlička, delivered the annual address at Hubbard Memorial Hall, February 11, on "Physical Anthropology and its Aims."

THE fiftieth meeting of the Washington Academy of Sciences was held at Hubbard