

being a study of those who appear in 'Who's Who in America.' Authors are in the great majority, and, save in science, those educated in private schools exceed in number those educated in public schools. D. D. Wallace presents the case of 'Southern Agriculture: Its Condition and Needs,' the latter being better trained labor, credit at reasonable rates and a more suitable education for his work. Wm. Scheppegegrell describes 'Voice, Song and Speech,' and there is a reprint of Herbert Spencer's 'What Knowledge is of Most Worth?' 'The Progress of Science' contains a criticism of what the Carnegie Institution has not accomplished.

SOCIETIES AND ACADEMIES.

THE ACADEMY OF SCIENCE AND ART OF PITTSBURG. SECTION OF BIOLOGY.

THE regular monthly meeting of the section was held on December 1, in the lecture hall of the Carnegie Institute. Doctor E. G. Matson, city bacteriologist of Pittsburg, discussed with the members, the germ theory and the zymotic theory of epidemic diseases; the discovery of bacteria, their form, structure and office in the economy of nature, evidence upon which rests the doctrine that they are the causes of diseases, the advantages of having the specific agents of these diseases for practical purposes, and at the same time the possibility of getting on without this knowledge; the individuality of contagion and the necessity of taking this into account in the attempt to prevent epidemics, such as smallpox, typhoid fever and yellow fever; how the bacteria make their attack; toxin, antitoxin and the immunity problem.

The malarial mosquito received some attention, and considerable valuable information was given regarding the epidemic of typhoid fever which has been raging for several weeks in Butler, Pa. There have been about 1,800 cases, with 84 deaths, representing a fatality of a little more than 10 per cent.

Many thousands of dollars have been generously contributed from various sources.

The infection of the water supply of the

city seems to have been responsible for the general spread of the disease, two cases being discovered not far from the city's reservoir.

FREDERIC S. WEBSTER,
Secretary-Treasurer.

WISCONSIN ACADEMY OF SCIENCES, ARTS AND LETTERS.

THE thirty-fourth annual meeting of the Wisconsin Academy of Sciences, Arts and Letters was held in the State Normal School Building in Milwaukee, Tuesday and Wednesday, December 29 and 30, 1903, President J. J. Davis in the chair. The program contained thirty-six titles, nearly every field of science being represented, although physical papers were entirely absent. Several excellent papers were presented upon philosophical, pedagogical and literary subjects. The program was notable in that so many sections of the state and so many different institutions were represented. The number of papers coming from the university, from the colleges and from the normal schools was nearly equal. Volume XIV., part 1, of the *Transactions* of the academy, containing fifteen papers, has just been published.

E. B. SKINNER,
Secretary.

NORTHEASTERN SECTION OF THE AMERICAN CHEMICAL SOCIETY.

THE 48th regular meeting of the section was held Friday, December 18, 1903, at 8 P.M., at the Tech Union, Boston, President W. H. Walker in the chair. Sixty members were present.

Dr. Carl Otto Weber, of Manchester, England, addressed the section on the 'Application of Scientific Data to Technical Problems in India Rubber Manufacture,' in which he discussed the various steps in the evolution of a scheme for rubber analysis, and the methods of applying the results to the theoretical and practical consideration of the chemistry of india rubber.

ARTHUR M. COMEY,
Secretary.