

He has been recognized by medical and scientific societies in this country and abroad. Five years ago he was given an appreciation banquet by the Chicago Odontographic Society. Among the delegates were many from distant places in the United States, and gifts were received from this and foreign countries.

In 1912, he was the recipient of the Miller prize of the International Dental Federation. Dr. Black was the first to receive this medal, and the award was made to him because of his researches and work in many branches of dental science. The medal was delivered personally by Floristan Aguilar, of Madrid.

At Northwestern, he found a school of moderate equipment which he built up until it acquired a world-wide reputation, and it has become in size one of the largest, if not the largest in the country. His former pupils are scattered over the world—in almost every civilized country—in America, in Europe, Asia, Africa and Australia. He is one of the outstanding great figures in professional education in this city.

His two great works are "Dental Anatomy" and "Operative Dentistry," which are standards in dental schools of to-day.

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SCIENTIFIC BOOKS

Selected Papers. Surgical and Scientific, from the writings of Roswell Park, late Professor of Surgery in the University of Buffalo and Surgeon-in-Chief to the Buffalo General Hospital. With a memoir by CHARLES C. STOCKTON, M.D. Published by the Courier Company, Buffalo, N. Y. 1914. Pp. 381.

No finer memorial could exist for Roswell Park, surgeon, scientist, litterateur, historian and educator, than this book of papers selected from the huge list of writings, the bibliography of which shows the extent of his surgical interests.

These selected papers, including one of Dr. Park's earliest, as well as the very latest paper prepared by him, portray vividly how during his thirty-six most active years his surgical and scientific interests developed and ex-

panded. Especially does one wonder at the amount of work accomplished during the last five years of his life as shown by the output of no less than twenty-one important papers, each of which bears evidence of active laboratory research and hours of library study.

Many of these papers are distinctly technical in character, but whether discussing the intricate details of a difficult surgical technic or the results of laboratory researches, Dr. Park never loses sight of the ultimate aim of surgical technic and laboratory findings—their humanitarian significance.

One is particularly impressed with the keen intellect, which, in the midst of large surgical activities and the stress of ill-health, could study and digest such scientific details, along other than his own special lines of research, as are included in the references listed after the paper "Of What Does the Universe Consist?" His interest in radioactivity, however, is but one of the many instances in which he made an absorbing study of some new physical or chemical discovery, that he might discern its widest clinical application.

One must read between the lines of these papers the important part played by Dr. Park himself in the researches which he discusses. Another writer of the history of carcinoma, for example, would carry his account to a later date and would not fail to speak of Dr. Park as the prime mover in the establishment of the Gratwick Laboratory, now the New York State Laboratory and Hospital for the study of Malignant Diseases. So also in writing of "The Present Status of Antiseptic Surgery" and the "Primary Antiseptic Occlusion and Treatment of Gunshot Wounds," another writer would speak with enthusiasm of Dr. Park's early acceptance of the principle of antiseptics, and of his studies of infections, which were the prime reason for his appointment to deliver the Mütter Lectures on Surgical Pathology at Philadelphia in 1892.

The brief biography by Dr. Charles T. Stockton is satisfying in its delineation of those periods and experiences in Dr. Park's life which contributed most to make him the man whom his fellow citizens, his pupils, his

surgical colleagues and fellow scientists knew, admired and loved.
 G. W. CRILE
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Societal Evolution: A Study of the Evolutionary Basis of the Science of Society. By ALBERT GALLOWAY KELLER, professor of the Science of Society in Yale University. New York, The Macmillan Co., 1915. Pp. 330. \$1.50.

Some years ago when he was professor of political and social science in Yale University, William Graham Sumner introduced the term "societal" into sociological terminology. His purpose was to employ a word more definite than "social" in order to emphasize the distinctively collective or group activities of individuals. "Social," he thought, had too many meanings to be exact. Following this usage, Sumner included in his remarkable book, "Folkways," an interesting chapter on what he termed "societal selection." In most concrete fashion did he therein show how by group or "societal" action, various "folkways" and "mores," as he termed them (*i. e.*, customs), whose origin is often obscure, are more or less consciously and intelligently chosen or "selected" by the group, become authoritative and finally compel conformity.

Professor Keller, modestly characterizing the present volume "as an extension of Sumner's work," employs "societal" in his title and in the main accepts Sumner's conceptions as a basis for his own contributions. The extension consists essentially in an endeavor to show both that there is "societal" evolution and that the manner in which such evolution occurs can advantageously be stated in terms employed by Charles Darwin in the biological field. To use Professor Keller's own language: "The question I have asked myself is: can the evolutionary theory, according to Darwin and his followers . . ., be carried over into the social domain without losing all or much of the significance it possesses as applied in the field of natural science?" He expressly denies that the eugenists in their attempts to prove the effectiveness of natural selection in human society have really attacked this gen-

eral issue. Professor Keller considers that natural selection is a term which in a very literal sense can and ought to be applied in the theory of social evolution not only with a strictly biological meaning, but also with a social, or, shall we say, "societal" meaning? He finds "a something in the social field which is variation, whether or not it may be like what is called variation in the organic field; similarly, social selection is selection and not merely *like* it." This "something" appears to be the differences among those customs which Sumner called folkways and mores. In conformity with this conception there are chapters on "variation," "automatic and rational selection," "counter selection," "transmission" and "adaptation." In these chapters occur many interesting instances of transformations in customs interpreted as illustrations of the processes just named.

The author vigorously defends his application of these Darwinian terms to social phenomena. "I shall be charged, doubtless," he says, "'with reasoning from analogy,' but I do not feel that the charge is deserved." To the present reviewer, however, there is a question raised by the use Professor Keller makes of these terms and the manner in which he deals with certain parts of his material, far more important than a possible "reasoning by analogy" of which he seems apprehensive. "Reasoning by analogy" is perfectly legitimate if thereby the reasoner develops a hypothesis that is capable of independent proof. Thus the known refrangibility of light and heat, Spencer tells us, produced the inquiry as to whether sound is not also refrangible. On investigation this proved to be the case. The analogy led to discovery. If in the present instance valuable discoveries had resulted from a use of an analogy, no one could have objected. Such, however, does not appear to be the fact. Many, if not practically all, of the important actual social processes emphasized by Professor Keller have been clearly discussed at one time or another by various sociological writers without unnecessary resort to biological phraseology. Even Walter Bagehot in "Physics and Politics," which he subtitled