compounds and find that some of these have a definite inhibiting action on the growth rate of spontaneous mammary cancer in mice.

This survey of the experimental chemical treatment of tumors is merely intended to demonstrate that at least some suggestive results have been secured in this field. In view of the quite unexpected recent development of the chemotherapy of bacterial diseases it may not be over-optimistic to look forward to the time when similar results can be achieved in the chemical treatment of neoplasia.

In conclusion I hope that I have shown that encouraging progress has been made in the study of certain chemical aspects of cancer. There is every reason for looking forward confidently to the rapid accumulation of new knowledge, which will be helpful in the gradual solution of this important and baffling problem. It is most gratifying that the establishment of several well-endowed cancer research foundations and the recent creation of the National Cancer Institute have furnished the means for a concerted scientific attack on this devastating disease.

OBITUARY

DR. FRED BAKER

WITH the death of Dr. Baker, of San Diego, Calif., on May 16, 1938, a life of a very exceptional combination of valuable human qualities came to an end. Medical practice, specialized on eye, ear, nose and throat, was his sole means of livelihood and with his wife, also a physician, yielded a good family income.

Born at Norwalk, Ohio, on January 29, 1854, from early boyhood to the very end Baker's love of natural history was one of his foremost traits. Even his undergraduate course at Cornell was interrupted by extensive trips in Europe and Latin America, through all of which his broad naturalist proclivities were strongly to the fore.

Following graduation in medicine at the University of Michigan by him and his soon-to-be wife during the early eighties, after several thrilling experiences they found themselves (1888) in San Diego where, known to the community as Dr. Fred and Dr. Charlotte, their notable careers began at once. Being here chiefly concerned with Dr. Fred as a scientist, about him as a physician nothing need be said beyond reference to the extent to which he was recognized officially and otherwise by the profession of his city, county and state.

His contributions to natural knowledge as a researcher were limited to the mollusca, mainly as a conchologist. In this field he is widely known for his addition to knowledge of the marine fauna of Pacific North America; but still more probably to that of Brazil. His large paper on the last contained not only the descriptions of many new species, but important information on distribution and other ecological matters owing to his having done most of the collecting himself.

Up to near the end he was occupied, in collaboration with J. R. Le B. Tomlin, of the British Museum, on an extensive paper on Brazilian mollusca.

But a full account of his publications in this and other fields would be far from an adequate exhibit of his contributions to science. As a collector (and this for him meant an explorer) his record is surprising. Thus from his own biographical notes: "On all their travels the Bakers have collected extensively specimens in conchology, botany and ichthyology, which have been given to the National Museum at Washington, the California Academy of Sciences in San Francisco, the Academy of Natural Sciences in Philadelphia, the University of California at Berkeley, and its Scripps Institution of Oceanography at La Jolla, and finally to the San Diego Museum of Natural History goes his own great working collection of shells."

His activities in connection with the Society of Natural History of San Diego were so extended in time and so efficient that it is hardly possible to speak of the institute apart from him.

But of all his efforts in behalf of institutionalized science, he regarded his part in the founding and operating of what is now the Institution of Oceanography at La Jolla, a branch of the University of California, as the most important. And surely no one who has had a hand in that enterprise can hesitate for a moment to acknowledge his service in that connection.

Finally a few sentences on his ideas and acts in the realm of civics. His years of service on the city council and the board of education—part of the time as president of both—and on the board of the then State Normal School at San Diego must suffice except for this one remark: Although never, so far as I recall, did I hear him say anything of the sort I am sure that in all these varied relations and activities he maintained much of the scientific attitude especially as this appertains to natural history. Whether as a physician dealing with defective vision of a patient; or as a member of boards dealing with the affairs of the Society of Natural History, or of the Institution of Marine Biology; or as a member of the city council dealing with the water problem; or as a member of the board of education dealing with the question of the presidency of the board, I am sure his youthful in-

terest in, and life-long devotion to, natural history were potent factors in it all.

A fitting close to this note may be a statement, which, though actually made by Dr. Charlotte in connection with the celebration of their golden wedding, was as truly expressive of his views as hers. "At heart," she said, "I am a politician. I am sorry to see that the meaning of that term has been corrupted until it is in disrepute. Actually it should be a fine thing to take an active interest in politics. It has always been a hobby of mine." This by a woman who was mother of two fine children and as a physician had helped more than a thousand mothers to bring children into the world without the loss of a single one of that host of mothers.

WILLIAM E. RITTER

UNIVERSITY OF CALIFORNIA

LEE BARKER WALTON

WHEN on May 15, 1937, Lee Barker Walton was suddenly stricken there passed from the group of scientific workers in Ohio and throughout the country a figure not only prominent as an original investigator and science teacher but a man of striking personality and activity, beloved by a wide circle of intimate friends and associates.

Born at Bear Lake, Pa., November 12, 1871, he entered Cornell University and took his bachelor's degree there in 1897. Later he spent the years 1898 and 1899 in Germany—except for six months in India where, according to Mrs. Walton, "he was interested mostly in collecting butterflies and beetles." We may question this, since Caroline Louise Graham, the daughter of a missionary to India, later became Mrs. Walton. He went to Brown University in 1899 and served as assistant to Dr. A. S. Packard in 1900–1901, while working for the Ph.D. degree. He studied at Woods Hole during the summer of 1901 and was assistant to Dr. Bumpus at the American Museum of Natural History in 1901 and 1902. He was Goldwin Smith fellow and secured his Ph.D. at Cornell University in 1902 and that fall began his notable career at Kenyon College, Gambier, Ohio, where he remained an outstanding figure until his untimely death. In this position he at once identified himself with the Ohio Academy of Science and became one of its most loyal members, serving as secretary, president and on various principal committees. He served on the staff of the Lake Laboratory during the summers of 1905, 1906, 1907 and 1909, and was one of a group, mainly in the Ohio Academy of Science, which secured the organization of the Ohio Biological Survey as a department of the university, with a number of cooperating colleges in the state. He served as a member of the summer staff of the survey at various times, and in this connection contributed two of his most important papers, "The Euglenoidina of Ohio" and "Studies Concerning Organisms Occurring in Water Supplies."

He was a member of a number of national scientific societies, among them the American Society of Zoologists, the American Society of Naturalists and the Entomological Society of America, and he was a fellow of the American Association for the Advancement of Science and a member of the council, from 1915 to 1917.

His interests were varied—not confined to his biological work—and he was particularly interested in outdoor sports for young men, tennis, golf, hiking, fishing, and said "more of that kind of interest would tend to keep the young men in the proper condition morally as well as physically." He was "a great believer in play as well as work."

He was interested in problems of evolution, and many of his published papers had a bearing upon various phases of these fundamental biological questions. He studied the phenomena of spiral movement in aquatic organisms as exhibited in regions north and south of the equator and the intricate structure of various arthropod groups to elucidate their phylogenetic affinities.

He was a successful teacher beloved by his students, many of them going on to successful careers, perhaps his greatest contribution to science and society. The writer thinks of him first as an admired companion whose friendship through the years is one of the treasured memories of life.

HERBERT OSBORN

RECENT DEATHS

DR. FREDERICK PETERSON, from 1903 to 1915 clinical professor of psychiatry at Columbia University, died on July 9 at the age of seventy-nine years.

THE death in his fifty-sixth year is announced of Dr. F. P. Chillingworth, professor emeritus of pharmacology of the Tufts Medical School.

GEORGE W. CAVANAUGH, professor emeritus of chemistry at Cornell University, died on July 2, two days after his retirement from active teaching. He was sixty-eight years of age.

DR. JAMES LAWRENCE KELLOGG, professor emeritus of biology at Williams College, died on July 8. He was seventy-one years old.

DR. HOMER GAGE, consulting surgeon of Worcester, Mass., died on July 10, in his seventy-seventh year.

DR. A. GALT, keeper of the technological department of the Royal Scottish Museum, Edinburgh, from 1901 to 1920, died on June 26 at the age of eighty-three years.