BIOGRAPHY

William Emerson Ritter, 1856-1944

➤ PROFESSOR William E. Ritter, cofounder of Science Service and eminent scientist and philosopher, died at Berkeley, Calif., on Jan. 10, after a brief illness. He was 87 years old. He was president of Science Service from the time of its beginning in 1921, later becoming honorary president, which title he held at the time of his death.

Dr. William Emerson Ritter was born in Hampden, Wis., on Nov. 19, 1856. His childhood and youth were those of the typical American farm boy of early post-pioneer days, giving him plenty of opportunity to indulge his natural bent for natural history observation, in which an intelligent father encouraged him—except on occasions when he forgot errands on which he had been sent, in fascinated contemplation of the skull of a horse or cow found in the woods.

It was only natural that he should turn to schoolteaching. That is what all youngsters with a scholarly turn did at that period. The first institution of higher education, therefore, which he attended was the Wisconsin State Normal School, where he graduated in 1884.

But the process that was to make a better schoolteacher of him robbed schoolteaching of his services for a time. He had got a glimpse of the fair outline of organized science, and he wanted to see more. Out to the University of California accordingly he went, where Joseph LeConte was then in his heyday. Under such a teacher, and with such fellow-students as Vernon Kellogg and John C. Merriam, he rapidly found himself. When he received his bachelor's degree in 1888 he was not only competent in zoology, but had the beginnings of a philosophical outlook upon life in general well established in his mind.

Married Mary E. Bennett

During these early California days, the young Ritter met one of those rare phenomena of California, a Native Daughter, Mary E. Bennett. His mind was set upon her from the beginning; but he had first to finish service for the Leah of science, the doctorate in philosophy. He persisted until he received his master's degree at Harvard in 1891, married, and then went back to Harvard and received his Ph.D. in 1893.



WILLIAM EMERSON RITTER

As California had been the one place in all the world for him in his undergraduate days, so Harvard was the one place for his more mature studies. Here E. L. Mark was doing much toward putting American zoology on a par with the science as followed in European universities, while the philosophical hierarchy made famous by the names of Royce and Wundt was establishing its reign. Dr. Ritter always attributed the course his life took, synthesizing physical science with philosophy, exact and impersonal research with humanitarian applications, to this peculiar combination that then obtained at Harvard.

Back at Berkeley in charge of the pioneer department of zoology on the Pacific Coast, Dr. Ritter labored hard for many years at teaching, at research in laboratory and field, at liaison between the campus and the world.

One of his enterprises was a more or less nomadic marine biological station, which shifted from place to place on the coast, seeking the best location, hoping for more solid support. Into his laboratory one day wandered a big, blunt-spken newspaper owner, who had a habit of booming disconcerting questions at people, E. W. Scripps. Dr. Ritter wasn't disconcerted. He answered the questions calmly, as fully as his in-

formation warranted, and confessed ignorance where he did not know. The two men liked each other and soon became firm friends.

This lifelong friendship between Dr. Ritter and Mr. Scripps, a strangely assorted pair of powerful minds, contrasting yet supplementary, resulted in the development of several joint enterprises of great scientific and social significance.

Built Scripps Institution

One of these was the building of the Scripps Institution for Biological Research, now the Scripps Institution of Oceanography, at La Jolla, Calif. Dr. Ritter became its first director in 1909, and remained in active charge until 1923. Mr. Scripps used to visit him frequently there, and talk endless hours. He was not much interested in "pure" research, and frequently said so, but he was constantly urging his friend to apply the methods of natural history investigation to "this damned human animal." Mr. Scripps was primarily a person-minded man.

Dr. Ritter's philosophical treatises, beginning with *The Unity of the Organism*, were more to Mr. Scripps' liking. His later work, *The Natural History of Our Conduct*, would have pleased his friend still more; but it was not finished until after Mr. Scripps had died.

Science News Letter, January 22, 1944

E. W. and W. E.

➤ ONE of the most fruitful of intellectual partnerships was that of E. W. and W. E. Both were philosophers and both were builders.

E. W. Scripps was blunt, outspoken, perpetually inquisitive. Men feared him and worshipped him. He had an intense interest in people.

W. E. Ritter was a scientist, quiet in manner, perpetually inquisitive as to the ways of nature and nature's creatures. His biological teaching inspired many. Like Darwin, he studied human conduct.

The death of Dr. Ritter ends the partnership in its living phase. For even after E. W. Scripps passed from everyday activity to become a tradition (he died in 1925), his inspiration dominated Dr. Ritter's researches into the ways of

woodpeckers, little children and humanity in general.

Like two opposite poles of a magnet, the great newspaper publisher and the great scientist attracted each other. And the field of their influence was great.

Science Service is one of the major projects upon which they collaborated. The first world war had visualized the importance of science to the world. E. W. and W. E. had worked together on other projects—the study of the sea which both loved, an inquiry into population. They saw the necessity of making science understandable to the public. In their discussions of the way the world is going they agreed that the scientists themselves must see to it that their findings reach the ordinary person in comprehensible form.

Science Service as the institution for the popularization of science was born of the enthusiasm and wisdom of E. W. and W. E., given economic independence by E. W. and sold to the scientists by W. E. Under the watchful eyes of both, it took up its work of spreading to the public through newspapers and other agencies the facts an dimplications of science.

Dr. Ritter was an important personality in the growth of American biology, particularly on the west coast where he organized and headed the Scripps Institution for Biological Research, affiliated with the University of California. In his latre years as professor emeritus



DR. RITTER in 1940

he gave aid and encouragement to the study of little human animals at play in a Berkeley nursery school. He worked upon his philosophy of the unity of the organism, an idea that promises to live on in the thought stream of science.

W.D.

Science News Letter, January 22, 1944

MEDICINE

Identical Chemicals

Two mold cousins are found to produce the same germ-fighting substance, called both clavacin and patulin, which was thought for a while to be common cold remedy.

➤ DISCOVERY that two different molds produce the same germ-fighting chemical is announced by Dr. I. R. Hooper, Dr. H. W. Anderson, Dr. P. Skell and Dr. H. E. Carter, of the University of Illinois. (*Science*, Jan. 7)

The chemical was named clavacin by Dr. Selman A. Waksman and associates of New Jersey State Agricultural Experiment Station, who discovered it was produced by the mold, Aspergillus clavatus. It was named patulin by British scientists, Dr. Harold Raistrick and associates, who found it was produced by the mold, Penicillium patulum.

Patulin was at first heralded as an

effective remedy for the common cold, but subsequent reports were not so promising and doctors generally are awaiting further studies before drawing any conclusions about it.

Patulin and clavacin have the same physical and chemical properties and are beyond doubt identical, the Illinois scientists declare. The molds that produce them belong to distinct but related genera, that is, they have about the same degree of kinship as apples and pears, although the mold from which patulin was obtained is more closely related to *Penicillium notatum*, from which comes the famous penicillin.

Science News Letter, January 22, 1944

MEDICINE

Liver Damage Warning

A WARNING that "in nearly every case of malaria" the liver may be damaged to some extent is issued by Maj. I. Arthur Mirsky, Miss Ruby von Brecht and Maj. Leonard D. Williams (*Science*, Jan. 7) The experiments on which it is based were done in the laboratory of the station hospital of the Miami Beach Air Training Base.

The liver damage is not believed due to either atabrine or quinine given in treatment of malaria, since in several cases the test showing liver damage was done before treatment was started.

Every student of malaria, the scientists point out, knows that enlargement and tenderness of the liver and even jaundice may occur in various forms of malaria. Very few, however, have given attention to the possibility of disturbance of liver function and associated derangements in metabolism.

Treatment of malaria, Major Mirsky and his colleagues urge, should be revised to include measures for restoring the liver to normal. Such measures are giving diets high in carbohydrates, proteins and vitamins, and not "giving only

fluids during the course of the fever," as is advocated by some leading authorities on malaria.

Science News Letter, January 22, 1944

GEOGRAPHY

Geographical Society Honors British Scientists

TWO of the gold medals of the American Geographical Society will be awarded to British scientists this year. The Charles P. Daly Medal will go to Sir Halford John Mackinder, English geographer and statesman, and the Cullum Geographical Medal to Arthur Robert Hinks, secretary of the Royal Geographical Society since 1915.

Sir Halford Mackinder in 1919 in a book warned the Western democracies against the danger of a mighty land power gaining control of the interior of the Eurasian continent. The book is said to have exerted a considerable influence on the development of geopolitics in Germany.

Science News Letter, January 22, 1944