are of great and vital concern to him. The religious leader is too often nearly or entirely untrained in matters of science and in scientific methods of thought and (still more unfortunately) he is frequently unaware of his own limitations in this respect. It, therefore, happens that there come from our pulpits and our Sunday School classrooms great quantities of instruction designed to quiet the "doubts" of students of science, the religious instructor making use of a patter of scientific words and phrases, abused and garbled, with good intentions, but with lack of understanding, so that the student is more or less self-hypnotized into a temporary state of mental quietude concerning these matters.

If affairs were as they should be, our teachers of science would be perfectly correct in confining their efforts to the teaching of their own special phase of science. For true religion is a matter of the soul and it has little or nothing to do with any science, unless it be that of psychology. But *what passes for religion* in the minds of many (if not most) people is of very vital concern to the scientist because it contains a mass of dogma which can not be reconciled with the truths of science as we accept them and which is not susceptible to test by any method. And I maintain that no teacher of chemistry, biology, physics or any other science can consider his duty to his students as fulfilled if he allows them to cultivate one attitude and acquire one set of ideas in the classroom and another, incompatible with the first, in the pew. They will ultimately either come to a point of forsaking their religious beliefs entirely or to that of passive acquiescence in something which they can not, really and truly, believe. The latter is a state of mind all too common to-day and it is not a healthy state for either true science or true religion.

I have not meant simply to inflict a preachment upon you,—many of whom know far better than I of the things of which I have briefly spoken. But it has seemed to me desirable once again to direct our thoughts toward the problems of teaching,—not as they relate to the preparation of the student, the system of teaching or the arrangement of content of courses —important as all of these are,—but as they go back to the teacher himself, for upon him as a man must finally rest the responsibility for failure, as well as the credit for success. The truly successful teacher is the one who constantly studies himself as he watches the effect of his efforts upon the minds of his students and who continually tries to correct his failures and to strengthen his successes, putting himself in the place of the student, always. We have all had our schoolmasters and our teachers. We have but to project ourselves backward through the years to see examples of what we would wish to be, as well as of what we hope never to be.

E. G. MAHIN

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BERNHARD EDUARD FERNOW

DR. BERNHARD EDUARD FERNOW, author, pioneer educator, organizer of the forestry movement, and the first United States Forester, after a long illness died at Toronto on February 6 at the age of 72.

Dr. Fernow was a native of Germany and studied under the famous Heyer and other noted foresters. He first came to this country in 1876 and soon took an active part in the forestry movement of New York State, where he formulated legislation establishing the Forest Reserve in the Adirondacks. From 1885 to 1898 he was editor of the *Proceedings* of the Forestry Association. Sponsored by this Association was the greatest piece of forest legislation so far adopted in our country—the law of 1891 authorizing the President of the United States to establish National Forest Reserves. This act led to the creation of the present National Forests.

In 1886 Dr. Fernow's great work for the nation really began, when he accepted the position of organizer and director of the forestry work of the government for the Department of Agriculture, a position which he occupied until 1898.

During twelve years at Washington Dr. Fernow kept in close touch with the forestry work in the various states and there was little of state forest legislation passed during this time in which his opinion was not consulted. He secured the cooperation of many prominent men of science and the numerous bulletins and

circulars including monographs on white pine, the southern timber pines; results of tests and studies in timber physics, the first complete discussion of the metal railway tie as a possible substitute; studies on timber impregnation and other subjects all of immediate value in wood utilization are evidences to-day of the painstaking work of the guiding spirit which directed them and edited their results for publication.

Throughout the twelve years in the Department of Agriculture Dr. Fernow never ceased to write articles and addresses. In these years the larger part of two hundred articles and addresses, over twenty circulars, and over thirty bulletins and reports were prepared and edited.

In 1898 Dr. Fernow was called to Cornell to organize the first forestry school in the new world. Here he inaugurated the beginnings of professional education. The school grew rapidly, but the forest operations in the college forest in the Adirondacks met with opposition of wealthy camp owners. In 1903 the Governor vetoed the appropriations of the forestry school and this resulted in its discontinuance. After leaving Cornell he worked for four years as consulting forester. During these four years he continued the *Forestry Quarterly;* delivered lectures at Yale University, and started the forest school at Pennsylvania State College. In 1907 Dr. Fernow accepted an invitation to Toronto University and organized the first forest school in the Dominion. At the time of his death he was professor emeritus of that institution.

His well-known "History of Forestry" is a masterpiece of its kind, covering the subject for both the Old and New World.

Three years ago when Dr. Fernow retired from active teaching there was published in *American Forestry* a tribute by Raphael Zon to the father of forestry in the new world. To-day the words assume an added significance. "While the period which Dr. Fernow typifies is rapidly becoming history, his teachings and his contributions have the equality of permanence. They have been always a source of inspiration and guidance to the pioneers of forestry; they will be infinitely more so to the actual managers of our forest lands as soon as real woods forestry comes into general practice. As with any great teacher, it is not the kind of theory that he happens to advocate that really counts, but the ability to teach how to think in his particular field. Theories come and go, but the ability to orient oneself in the details of complex problems is a lasting asset; he who teaches to meet ever-changing problems, not by a ready-made theory or hypothesis, but by a critical attitude and ability to discern between the essential and non-essential, is building on a solid foundation. With him forestry was not merely theory but a movement ever changing as life itself, and for him problems became soluble not in ready-made formulas, but in the forces, economic and natural, that are at work." X.

GEORGE LEFEVRE

GEORGE LEFEVRE, professor of zoology in the University of Missouri and chairman of the department, died on January 24, after a brief illness with pneumonia. The foregoing announcement marks the passing of one who was probably the best loved man in the American Society of Zoologists, a man whose brilliant intellectual endowment and gifted nature marked him as a unique personality. Born of old American stock and inheriting his name from a Huguenot ancestor who immigrated at an early date, he was the son of a prominent Presbyterian clergyman who raised his children on good English, the Classics and the Shorter Catechism, and who read his original Greek and Hebrew almost to the day of his death.

After Professor Lefevre's graduation from a famous boys' school in Baltimore, the family spent a year in European travel; and although he was too young to profit scientifically by the experience, this European sojourn became an invaluable part of his cultural education. During his earlier boyhood the family spent long vacations in the country near Baltimore, where he acquired an interest in natural history and became an ardent amateur naturalist. It is, therefore, not surprising that he should have been attracted to zoology after his entrance to the Johns Hopkins University. Here he received a fundamental scientific training under the influence of Remsen, Rowland, Martin,