that be accounted for? Neither did we see or hear a single Wood Thrush. The Robins, on the contrary, are becoming more numerous thirty years ago there were few here—and the Bluebirds are holding their own. On George's hill we came across a band of twenty to thirty Bluebirds busily feeding on red elder berries (Sambucus canadensis) and a little lower down one of ten to twenty gorging themselves on pinchberries. So it seems that when Bluebirds disappear from their haunts in July, they are simply congregating in places where wild fruit abounds.

CONCORDIA TEACHERS' COLLEGE, RIVER FOREST, ILL.

FRANKLIN HIRAM KING*

BY MRS. H. J. TAYLOR

Franklin Hiram King was born near Whitewater, Wisconsin, on June 8, 1848. He died at Madison, Wisconsin, on August 4, 1911.

The only school in which Professor King graduated was the State Normal School, now called Teachers' College, at Whitewater, in 1872. After his stay at Cornell University, mentioned below, he spent a summer at Beaufort, N. C., in the biological station then maintained by Johns Hopkins University. In 1910 the University of Wisconsin conferred upon him the honorary degree of Doctor of Science.

From 1878 to 1888 King taught in the Normal School at River Falls, Wisconsin. In 1888 the University of Wisconsin called him to the Chair of Agricultural Physics, the first of its kind in America. He prepared his own textbook for this work. It was so successful that six editions were published. He remained in this connection until 1901. From 1901 to 1904 he held the position of Chief of the Division of Soil Management, in Washington, D. C.

King's contribution to economic ornithology consists of a paper entitled "Economic Relations of Wisconsin Birds", published in the "Geology of Wisconsin" (Survey of 1873-1879, Vol. I, Part II, pp. 441-610). King began working on this subject in 1873. In 1875 the State of Wisconsin invited him to make an official report on the economic importance of birds in relation to agriculture. He then realized the necessity of a thorough knowledge of insects. He began to

^{*}Mrs. Taylor published a sketch of F. H. King as a part of another paper in the WILSON BULLETIN, XLIII, September, 1931, pp. 188-189. In the meantime additional material has been obtained, together with a portrait of Professor King. At the Editor's request Mrs. Taylor has re-written this sketch, incorporating both the old and new material.—EDITOR.



FRANKLIN HIRAM KING, 1848-1911

make collections of insects in order that he might become acquainted with them for purposes of identification. He also observed them at work, and studied what was known concerning their beneficial or harmful effects on farm crops.

Beginning in the fall of 1876, he spent two years at Cornell University, pursuing the study of entomology.

King was born and chiefly educated in Wisconsin, and became a teacher in her highest institutions of learning.

King's interest in ornithology was wholly incidental to the major interest of his life—agriculture. So, we find his attention reverting to farming in the broadest sense. It was his desire to share his specialized knowledge with those who were actually tilling the soil, dairying, or feeding cattle.

In 1895 he published a book on "The Soil". This was followed in 1899 by "Irrigation and Drainage". This book is not a discussion of the general subject of irrigation and drainage with reference to arid tracts and swamp lands. It treats only of the cultural phases of the subject and presents specifically the fundamental principles which underlie methods of culture by irrigation and drainage. The farmer, the horticulturist, the gardener, must have a clear understanding of the relations of water to soil and to trees and plants, in order to act rationally in controlling the moisture of the soil.

The five years following his sojourn in Washington were spent in writing and lecturing. In 1908 he published "Ventilation for Dwellings, Rural Schools, and Stables". This book was enthusiastically received by the general public. It contained important information presented in language which the layman could understand. *Hoards' Dairyman* said of this book: "The subject is so widely and strongly, and so profoundly treated . . . that we are sure that it will be regarded by all classes of society as one of the most important contributions to human knowledge that has yet appeared. All the knowledge Prof. King uses exists in the great domain of scientific investigation. But it is here brought down to the average comprehension in a way that makes it of the greatest importance to every household in the land." This little book of 125 pages did its work well in educating all classes to the need of fresh air, sunshine, and sanitation. Today these things are accepted as a matter of course.

A letter received from Mrs. King in September, 1931, says: "In 1909 Mr. King went to China, Korea, and Japan in a pilgrimage to learn, if possible, what an older soil management than that of this country or Europe had accomplished. He had planned much writing as the result of that study, when his death occurred suddenly on August 4, 1911. He had finished the preparation of his book, 'Farmers of Forty Centuries', except the last chapter, which was never written." The typesetting for this book was started on the day of Kings' death. It was published in Madison by Mrs. King. In her letter she states: "The first edition was 1000 copies. The second edition was 4000. In 1927 a third edition was issued in London. The latter edition does not contain quite all the earlier ones do. A few of the illustrations and some of the more personal things were left out."

It can scarcely be doubted that "Farmers of Forty Centuries" did not reach the public as it would have had King lived. Local printing could not give a book the publicity which a publishing house gives. Nevertheless, the book received many favorable reviews from many sources. And it also received the first award from the Grant Squires Fund. Among the reviews we may mention only one or two. Dr. J. Kawaguchi, Director of the Agricultural Station, Japan, wrote: "Mr. King's 'Farmers of Forty Centruies' is the greatest work written in a European language to set forth the conditions of our Oriental agriculture." *The Living Age* said: "Professor King's book has all the interest of a book of travel, but it has much greater value, for the author's observations went deeper than those of the ordinary traveller."

This book, covering forty centuries of farming, is more fascinating than one might suppose. In it the author tells how successful an ancient people have been in cultivating their lands and keeping their soil productive over a period of 4000 years. He shows the young and boastful new world that it has still much to learn from the old. This book is, doubtlessly, to be regarded as the climax of Professor King's life. Yet, in our field, cognate to agriculture, we recognize his early studies on the food habits of birds, by the method of stomach examination and by the method of field observation, as a fundamental and pioneer contribution.

BERKELEY, CALIFORNIA.