

so when the remains are not uncommon and well preserved. One of the writer's students, Mr. Carl Owen Dunbar, has recently discovered a new locality for vertebrates of this period. It is situated near the city of Lawrence and lies at the base of the Lawrence shales. The fossils occur in oblong or spherical siliceous nodules of which nearly one third contain bones and shells of value. Some are filled with small masses of many kinds of organic material and such are interpreted as coprolites, while others contain remains of fishes, crustacea, cephalopods and wood. There are no leaves and few invertebrates. The interesting and remarkable fact connected with the occurrence is the abundance of well-preserved vertebrate fossils. No less than eighteen partial or complete skulls have been collected and such have been found on the occasion of each visit. Three of the skulls show well-preserved casts of the brain. In addition there are many other complete bones, spines and scales.

The description of the vertebrates has been entrusted to Dr. R. L. Moodie, while the invertebrate and stratigraphic phases will be elaborated by Mr. Dunbar and the writer.

W. H. TWENHOFEL

UNIVERSITY OF KANSAS

EXISTENCE OF CROWN GALL OF ALFALFA, CAUSED
BY UROPHLYCTIS ALFALFÆ, IN THE SALT
LAKE VALLEY, UTAH

ON May 3 of this year, the writer found several typical specimens of alfalfa crown gall, caused by *Urophlyctis alfalfæ* (v. Lagerh.) P. Magnus, in the Salt Lake Valley, Utah. This disease, so far as the writer has noted, has been reported by Smith¹ in California, McCallum² in Arizona, and the writer³ in Oregon. The presence of this disease in Utah may be of considerable importance in explaining many difficulties which alfalfa grow-

¹ SCIENCE, N. S., Vol. XXX., No. 763, August 13, 1909.

² *Experiment Station Record*, Vol. 23, No. 7, December, 1910.

³ SCIENCE, N. S., Vol. XXXVI., No. 928, October 11, 1912.

ers have had in maintaining profitable stands. In looking over the literature I do not note any report of its occurrence in the state of Utah, and, therefore, this note is published in order to record the presence of the disease in another locality. It is not yet known to what extent the disease has been injurious to alfalfa in the Salt Lake Valley, as its distribution has not been investigated.

P. J. O'GARA

LABORATORY OF PLANT PATHOLOGY,
AMERICAN SMELTING AND REFINING CO.,
SALT LAKE CITY, UTAH,
May 14, 1914

RELIGIOUS TRAINING AT A UNIVERSITY

THE article on this subject on page 722 of SCIENCE for May 15 ought not to pass without a protest. The primary function of religion, as most thoughtful men see it, is not worship but the development of right purposes and right ideals in the conduct of life—especially the development of the ideal of service. Nothing stands out more clearly in the teachings of Christ than the thought that worship and ritual are worse than useless unless they contribute to this end.

The statement that "a few are interested in religion, but all of us in education" is, to say the least, misleading. Educational men are apt to be very reticent about religious matters and superficial observers are liable to conclude that their opinions are colorless, but a little inquiry will reveal the fact that a large proportion of both students and faculty are members of Christian churches. In the state university with which I am best acquainted 45 per cent. of the students are members of such churches and 79 per cent. register as adherents of some church. A large majority of the faculty are adherents of churches.

It is true that the fundamental virtues have been long known, as Buckle says, but many of us think that it is also true that there is great need of bringing these virtues forcibly to the attention of men and women at frequent intervals throughout their lives. As our civilization is now constituted the agency which per-