

worthless lands in the east? The answer lies largely in the fact that no other part of the country than the arid west has such wonderful opportunities for crop production, as it does not have the continuous daily sunshine upon which plant life depends. The advantages of the development in the arid region also are greater from the political standpoint, as population is better distributed and is brought nearer to important sources of mineral wealth, enabling development of industries in otherwise remote and inaccessible localities.

All of these results are successful in proportion as they have been brought about by scientific methods, and by following the principles inculcated at the schools of which the Institute of Technology is chief.

F. H. NEWELL

U. S. RECLAMATION SERVICE,
WASHINGTON, D. C.

THE ST. LOUIS UNIVERSITY EXPEDITION TO COLORADO

IN a recent number of the *Fleur-de Lis*, one of the publications of the St. Louis University, there appears an article on a geological expedition to Colorado, organized last summer by that university. Its purpose was to afford an opportunity of geologic field-work to those teachers who were called upon to teach geology as an accessory subject, in addition to other regular work. Accordingly, those who availed themselves of the opportunity were chiefly professors of physics and chemistry. They were: Professor John P. Coony, head of the department of chemistry, St. Louis University Medical School; James I. Shannon and Charles Cloud, professor and associate professor, respectively, of physics, and Theodore Schulte, professor of chemistry, St. Louis University; Joseph Wilczewski and William Agnew, of the department of physics, St. Ignatius College, Chicago; A. M. Schwittalla, professor of chemistry, St. Xavier College, Cincinnati; Vincent Jenneman, pro-

fessor of physics, Sacred Heart College, Prairie du Chien, Wis.; Hugo Sloctemeyer, curator of the Mineralogical Museum, St. John's University, Toledo, O.

Colorado, and especially the foot-hill region, was chosen for its variety of geological formations within a comparatively small area. Ten days were spent near Cañon City chiefly to study the occurrence and formation of igneous and metamorphic rock in the Royal Gorge of the Arkansas River. Camp was then moved to Garden Park, ten miles north, where during four days attention was principally directed to the foot-hill topography and the strata profiles in Oil Creek Cañon. The famous dinosaur beds of the region were also examined as carefully as was possible under the circumstances. Finally, more than two weeks were spent in the Ute Pass near Manitou, where, besides special problems investigated by the individual members of the party, some coordinated work was done on the formations of the Manitou embayment, and the Archæan-Cambrian contact in this region. The pedagogical character of the work was continually kept in mind, and the results were such as to warrant a repetition of the experiment.

A. M. SCHWITTALLA

RESOLUTIONS ON THE DEATH OF PROFESSOR CHARLES OTIS WHITMAN

AT the Ithaca meeting of the Eastern Branch of the American Society of Zoologists in December, 1910, it was voted that "the president appoint a committee to prepare a resolution on the death of Professor Whitman, the resolution to be published in the minutes of the society, and transmitted to the family of Professor Whitman." In accordance with this vote Professor S. F. Clarke and Professor F. R. Lillie were appointed on this committee. They have prepared the following resolutions which have been incorporated in the permanent records of the society:

The Eastern Branch of the American Society of Zoologists records with profound regret the death of Professor Charles Otis Whitman on December 6, 1910. Professor Whitman was one of the founders of this society; he was chairman

of the committee that issued the first call for organization of the American Morphological Society, the forerunner of the American Society of Zoologists, and he was president of the society for the first four years, 1891-94. He was organizer of the *Journal of Morphology* and its editor for many years, and in this capacity also exerted a strong influence on the development of zoological research in America. As director of the Marine Biological Laboratory for twenty-one years, he exerted an even more powerful and entirely unique influence in the development of biological science. As an investigator he was painstaking, enthusiastic and thorough, as a thinker on biological problems profound and far-sighted. Devoted to principle, his uncompromising personality sometimes made enemies, but the charm of his character made him devoted friends. His influence will long remain as one of the most important forces in the history of zoology in America.

SCIENTIFIC NOTES AND NEWS

JOHN WILLIAM DRAPER, eminent for his contributions to physics, chemistry and physiology, was born on May 5, 1811, and the centenary of his birth is being celebrated by New York University, where he was professor from 1839 until 1873.

THE Paris Academy of Sciences has elected as corresponding members Professor Svante Arrhenius, of Stockholm, in the section for physics, and Professor I. P. Pawlow, of St. Petersburg, in the section of medicine.

As already announced, the British Association will meet at Portsmouth on August 30. On the evening of that day, Sir William Ramsay will give the presidential address. Public lectures will be given by Mr. Leonard Hill on the "Physiology of Submarine Work," and by Professor A. C. Seward on "Links with the Past in the Plant World."

THE Association of German Men of Science and Physicians will hold its eighty-third meeting at Karlsruhe from September 24 to 30.

MR. J. H. GRISDALE has been appointed director of the experimental farm system of Canada, to succeed Dr. William Saunders.

PROFESSOR LOUIS DOREMUS HUNTOON, M.E., of the department of mining and metallurgy,

Sheffield Scientific School, Yale University, has resigned his position to engage in work in the Canadian gold fields.

DR. F. W. WOLL, professor of agricultural chemistry in the University of Wisconsin, has been designated as the delegate of the university at the celebration of the centennial of the University of Christiania, Norway, September 2 to 6, 1911. Dr. Woll is a graduate of the University of Christiania.

PRESIDENT TAFT has appointed the following as the official representatives of the respective bureaus of the federal government on the organizing committee of the International Congress of Applied Chemistry: *Department of the Treasury*—Dr. Reid Hunt, Hygienic Laboratory, Marine Hospital Service; Dr. A. B. Adams, Internal Revenue Service. *Department of the Interior*—Mr. George Seiger, Geological Survey; Dr. George S. Ely, Patent Office; Professor Nathaniel W. Lord, Ohio State University, Columbus, O., to represent Bureau of Mines. *Department of Agriculture*—Dr. H. W. Wiley, Chief, Bureau of Chemistry; Dr. C. F. Langworthy, Office of Experiment Stations; Professor W. W. Cooke, Biological Survey; Mr. William L. Hall, Forest Service; Dr. Frank E. Cameron, Bureau of Soils; Professor W. J. Humphreys, Weather Bureau; Dr. R. H. True, Bureau of Plant Industry; Dr. Marion Dorset, Bureau of Animal Industry; Dr. W. F. Hillebrand, Chief Chemist, Bureau of Standards.

PROFESSOR K. L. HATCH, of the University of Wisconsin, has been elected president of the newly founded American Association for the Advancement of Agricultural Teaching in Secondary Schools, which was launched in Chicago at a meeting of all the heads of departments of agricultural education in the universities and colleges in the north central states. Representatives from the United States Department of Agriculture were also present. The purpose of the new society is to organize and systematize agricultural material so that it can be used with greater efficiency in propagating agricultural education through the medium of the high schools of the nation.