

of deltas, possessing similar and rather highly specialized features, cannot be referred to merely accidental conditions governing the forward growth of the deltas.

R. A. DALY.

HARVARD UNIVERSITY.

THE NEW MEXICO BIOLOGICAL STATION.

THE Biological Station was founded as an independent institution at Mesilla in 1896. In 1899 it was moved to Las Vegas, and held a successful summer session in the New Mexico Normal University. A brief session was also held in 1900. The students in attendance have been mostly public school teachers. The results of the research work have been published in the *Annals and Magazine of Natural History*.

The Station will now be conducted as a part of the work of the biological department of the Normal University. The session of 1901 commenced on the 1st of June. A course in nature study is offered to public school teachers, and opportunities are afforded for research work along a number of different lines.

Las Vegas offers excellent opportunities for biological work. The summer climate is very good, and at no time is the heat excessive, as it is at lower altitudes in New Mexico and other parts of the Southwest. The altitude is about 6,400 feet, with mountains close by, rising above 11,000 feet.

Four distinct life-zones, the Upper Austral, the Transition, the Canadian and Hudsonian can be studied within 35 miles of Las Vegas. It results from this that the local fauna and flora are extremely rich in species; in the Hudsonian zone are forms of circumpolar distribution and others ranging to Alaska, though not to Asia or Europe; in the Canadian zone we find types identical with those of the mountains of the Northern States and of Colorado; in the Transition a varied assemblage typical, in part, of the foothill region of the Rocky Mountain range; in the upper Austral many species characteristic of the arid southwest, some ranging far southward and westward. With all this comes a certain percentage of local or endemic types, just how numerous further research must determine. Such are the snail *Ashmunella thomsoniana porteri* and the magnificent butter-

fly *Argynnis nilocris nigrocærulea*, both found in Sapello Cañon.

The Gallinas River, flowing through Las Vegas, contains a crayfish (*Cambarus gallinus*), described as new last year, some interesting fishes (*Leuciscus* and *Rhinichthys*), and a variety of aquatic insects, algæ, etc. The Hot Springs, six miles away, contain some peculiar organisms, which have not yet been sufficiently examined.

In the Arroyo Pecos, and elsewhere in the immediate vicinity of the town, is an immense alluvial deposit of Pleistocene age, containing innumerable remains of mollusks and occasional mammalian fragments. Special facilities are offered to students of wild bees (*Apoidea*), the available collections and literature being very extensive. Facilities are also offered for the study of *Coccidæ* and other groups of insects. Students should, if possible, bring their own microscopes, slides, forceps and other accessories.

T. D. A. COCKERELL.

ANNOUNCEMENT CONCERNING THE THIRTEENTH SUMMER MEETING OF THE GEOLOGICAL SOCIETY OF AMERICA.

Sessions.—The thirteenth summer meeting of the Society will be held in Denver on Tuesday, August 27th, in the East Denver High School building. The Council will meet on Monday evening at the hotel headquarters. The Society will be called to order by the President, Mr. Charles D. Walcott, on Tuesday morning, immediately following the general session of the American Association for the Advancement of Science.

Program.—The preliminary list of papers will be mailed about August 1st, and no supplementary list will be sent. The Fellows are requested to send their abstracts on the printed form as promptly as possible, and not later than July 15th. By the rule of the Council abstracts are required. Papers offered for printing should be fully described on the blank forms, extra copies of which will be promptly sent on request.

Hotel Headquarters.—The Brown Palace Hotel has been selected by the local committee, A. A. A. S., as headquarters. The regular

rates at the hotel, are \$1.50 per day and upwards on European plan, and \$3.00 to \$5.00 per day, American plan. Reduced rates will doubtless be made for the meeting.

Transportation.—The Western Passenger Association, covering the territory west of Chicago and St. Louis, has made a rate of one fare plus \$2.00 for the round trip, in their territory, to Denver, Colorado Springs and Pueblo. The tickets may be bought from July 10th to August 31st, and are good for return up to October 31st. At this rate the fare from Chicago to Denver and return will be \$31.50. The Pullman fare is \$6.00 extra, each way.

Further details will be found in the A. A. A. S. circular, which will be issued soon.

Geological Excursions.—A circular has been sent to all Fellows, describing an extended excursion through Colorado planned by Professor C. R. Van Hise, Chairman of Section E, for the ten days (Aug. 17–27) preceding the meeting. For information concerning this trip request should be made to Professor Van Hise, Madison, Wis.

The Secretary of the Denver Local Committee writes as follows:

“Geological excursions which are likely to be arranged by the local committee are as follows, but subject to change: An all-day railroad excursion to Mt. Alto and Ward; one to the mesas at Golden; one to Morrison, to the Garden of the Titans, to study the magnificent exposure from the red beds of the Triassic to the uppermost beds of the Denver formation; to the classic ground where were obtained the first *Atlantosaurus* and *Stegasaurs*; to the Pleistocene deposits near Denver. At Colorado Springs excursions will be taken to the Garden of the Gods; to the mineral springs at Manitou; and to the top of Pike’s Peak. The greatest gold camps of the world, Victor and Cripple Creek, will also be visited.”

The preliminary circular of the A. A. A. S. will be sent to Fellows of the Geological Society, who are not members of the Association, upon request to the secretary of the local committee, Mr. Arthur Williams, Denver Chamber of Commerce. All arrangements described in the association circular, relating to entertainment, transportation, etc., apply to the Geological

Society and other societies which meet in conjunction with the Association. Details will be found in that circular which cannot be given here.

Express and Mail.—Matter for use at the meeting should be sent in care of the janitor, East Denver High School building. It should bear the shipper’s address and be fully prepaid.

HERMAN LE ROY FAIRCHILD,
Secretary.

ROCHESTER, N. Y.,
June 7, 1901.

SCIENTIFIC NOTES AND NEWS.

AN official announcement has now been made in regard to the Rockefeller Institute for Medical Research, toward the establishment of which Mr. John D. Rockefeller has recently given \$200,000. The directors are: William H. Welch, M.D., Baltimore, President; T. Mitchell Prudden, M.D., New York, Vice-President; L. Emmett Holt, M.D., New York, Secretary; C. A. Herter, M.D., New York, Treasurer; Theobald Smith, M.D., Boston; Simon Flexner, M.D., Philadelphia; H. M. Biggs, M.D., New York. The purpose of the foundation, as the name implies, is to furnish facilities for original investigation, particularly in such problems in medicine and hygiene as have a practical bearing upon the prevention and treatment of disease. The sum of money mentioned above is not an endowment, but may be used for current expenses. The Institute will be situated in New York City. A building will not, however, be erected at present, but research will be conducted in existing laboratories under the auspices of the directors.

PRESIDENT DAVID STARR JORDAN and Dr. Barton W. Evermann sailed from San Francisco on May 30th to conduct the investigation on the fishes of the Hawaiian Islands to which we have called attention.

PROFESSOR ASAPH HALL has resigned the lectureship in celestial mechanics at Harvard University, and will spend the next year or two abroad.

PROFESSOR HENRY F. OSBORN, of Columbia University and the American Museum