A RARE CRYSTAL HABIT FOR GYPSUM

IN November, 1931, the writer, in company with Professors S. B. Talmage and Evan Just, of the New Mexico School of Mines, and S. G. Lasky, of the U. S. Geological Survey, made a visit to the White Sands in Dona Ana County, New Mexico. To the west of the main body of the sands and east of the San Andres Range, in the heart of the Tularosa Desert, lies a typical, ephemeral, desert soda lake, Lake Lucero. This shallow lake and its surrounding alkali flat are fed at certain times of the year by a small, sluggish stream from the north. Along the banks of this stream, in T. 18 S., R. 5 E., three or four miles northeast of the old Eddy Soda Prospect, were found a number of gypsum crystals, the habit of which is believed to be rare, if not unique.

The writer made some study of the crystals without being able to arrive at a satisfactory conclusion concerning their habit. Some of the crystals were then sent to Dr. A. J. Walcott, of Northwestern University, who reported the habit to be that of a negative hemibypyramid and a basal pinacoid, the latter showing a vicinal formation.

The crystals are tabular and have their greatest dimension along the *b* crystallographic axis. Some of the surfaces, particularly the faces of the basal pinacoid, are much corroded, and the edges in some cases are rounded. Twinning appears to be uncommon, but one contact twin was found showing the twinning plane along the orthopinacoid.

As mentioned above, this habit appears to be rare or unique. At least it was a new habit to the members of this party and to Dr. Walcott. If other mineralogists are familiar with gypsum crystals of this type, the writer will appreciate learning of them.

C. E. NEEDHAM

NEW MEXICO SCHOOL OF MINES

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE SOCIAL SCIENCES AT ATLANTIC CITY

A DISTINCTLY varied program will be presented in the social sciences at Atlantic City. Program plans in anthropology, psychology, history, economics, sociology and education are now complete.

On Tuesday evening, December 27, Professor Franz Boas, of Columbia University, retiring president of the association, will deliver a general address on "The Aims of Anthropological Research." On Wednesday evening, Dr. W. K. Gregory, American Museum of Natural History, retiring vice-president for Section H (Anthropology) will speak on "The New Anthropogeny: Twenty-five Stages of Vertebrate Evolution from Silurian Chordate to Man." Sessions for the reading of papers on anthropological research will be held, beginning Wednesday and extending through Friday, December 30. Professor J. Alden Mason, of the University of Pennsylvania, is expected to present some interesting new material on the relations between the Indian cultures of Mexico and the Mississippi Valley. Dr. J. Spinden, of the Brooklyn Museum, will exhibit some pre-Columbian manuscripts of Southern Mexico, and Dr. Aleš Hrdlička, of the U. S. National Museum, will describe the 1932 anthropological explorations in Alaska. Dr. George Grant MacCurdy, director of the American School of Prehistoric Research, will show lantern slides exhibiting the latest Old World discoveries of fossil man. On Saturday morning, the American Anthropological Association and Section H will join with the historical and philological section for a symposium on "Primitive Languages." (For details of this symposium and others see SCIENCE, November 11.)

The psychological section plans sessions from Wednesday morning, December 28, to Friday afternoon, December 30. At a joint session with the educational section on Wednesday evening the addresses of the retiring vice-presidents for the two sections will be given. Professor Herbert S. Langfeld, of Princeton University, retiring vice-president of Section I (Psychology) will speak on historical development in response psychology, and Professor Ernest Horn, of the University of Iowa, retiring vice-president for Section Q (Education) will speak on science and the problem of value. On Wednesday afternoon problems of old age will be discussed by Professor Walter R. Miles and Catharine Cox Miles, of Yale University, by Dr. David Wechsler, of Bellevue Hospital, New York, and by Professor John E. Anderson, of the University of Minnesota. On Thursday afternoon Miss Myrtle B. McGraw, of the Babies Hospital, New York City, and Dr. E. A. Doll, of the Training School at Vineland, New Jersey, will show motion pictures in a symposium on "Mental Development." Miss McGraw will also speak on outstanding phases in the development of specific traits of infants during the first year of life, and Dr. Doll will speak on the psychological significance of cerebral birth lesions. Twenty-seven other psychological papers will be presented on a wide range of subjects, including tests and measurements, responses, behavior patterns, reliability and cheating, psychoneuroses and others.

Section Q (Education) will begin its program on

Tuesday morning, December 27. At the first session Professor Arthur B. Moehlman, of the University of Michigan, will present a study of teacher supply and demand. Other experimental studies of general educational problems will be described by Professor E. D. Grizzell, Professor L. A. Pechstein and Professor Norman M. Grier. The Tuesday afternoon session of Section Q will be devoted to experimental studies of collegiate education, and the Wednesday morning session will be devoted to experimental studies of elementary and secondary education. On Wednesday afternoon there will be a symposium on "General Problems of Education." Professor E. R. Hedrick, of the University of California at Los Angeles, will speak on cooperation in educational problems. Professor W. B. Carver, of Cornell University, will discuss substitutes for thinking in the study of mathematics. Professor F. K. Richtmyer, of Cornell University, will speak on "Physics is Physics," and Professor Harry A. Cunningham, of Kent State College, will discuss science laboratories in teachers' colleges. A session devoted to miscellaneous educational problems will be held on Thursday morning.

The program of Section K (Economics, sociology and statistics) will be more varied than usual and will be devoted to sessions on sociology, statistics and econometrics. At the first session of Section K and the Econometric Society, which will be held on Monday evening, December 26, papers on economic theory will be presented by Professor H. T. Davis, of the University of Indiana, and Professor Edward Thiess, of the Technical University of Hungary. Professor W. F. Ogburn, chairman of Section K, will preside at a session on sociology Tuesday morning, December 27, and will present a paper. Other papers on sociology will be presented by Charles A. Ellwood, Dorothy S. Thomas, F. Stuart Chapin, Robert Faris and Wilson Gee.

On Tuesday morning there will be also a joint session with the American Mathematical Society for the reading of papers on mathematical statistics. Dr. W. A. Shewhart, of the Bell Telephone Laboratories, and Dr. Max Sasuly, of the Brookings Institution, will present papers at this session. Tuesday afternoon will be devoted to miscellaneous papers on statistics, economics and sociology. At 4:30 Tuesday afternoon a joint session will be held with the Mathematical Association of America. At this session Professor G. C. Evans, of the Rice Institute, retiring chairman of Section K, will speak on "The Theory of Money."

All day Wednesday Section K will meet with Section M (Engineering) for a symposium on "The Stabilization of Employment." At this session papers will be presented by Gerard Swope, Irving Fisher, John Lyle Harrington, Leo Wolman, Dugald C. Jackson, Alvin Hansen, C. F. Kettering, H. L. Rietz, K. T. Compton, Elmer J. Working, Walter Rautenstrauch, Royal Meeker, James W. Angell and W. N. Loucks. (See SCIENCE for November 11.)

CHARLES F. ROOS,
Permanent Secretary.

THE NATIONAL ACADEMY OF SCIENCES

PAPERS PRESENTED AT THE ANN ARBOR MEETING. II

(*Continued from page 522*)

Some aspects of neurohumoralism: GEORGE H. PARKER. By a small transverse cut in the tail of a fish the chromatophores posterior to the cut may be denervated. Such denervated areas become light or dark under appropriate environments but more slowly than the surrounding skin. These slower changes are due to the transfusion of neurohumoral substance from the adjacent changed areas. The rate of transfusion is such that the process must be regarded as cellular and not due to lymph or blood currents. Layers of cells thus form transmitting systems in contrast with lymph and blood. This is common in coelenterates, but, as the example shows, the process also occurs in higher forms.

How the primitive ants of Australia start their colonies: WILLIAM MORTON WHEELER. See p. 532.

Time of embryonic segregation in aphids as determined from intermediate types: A. FRANKLIN SHULL (introduced by F. G. Novy). Nearly twice as great a proportion of the intermediates between gamic and parthenogenetic aphids are of the sorts required by the time-of-segregation theory as could be accounted for by mere random combination. Nevertheless, nearly one fourth of the total number do not fit that theory without modification. To explain these exceptional forms in harmony with the theory requires that the time of segregation be frequently irregular or that there be a rapid fluctuation of the physiological level which constitutes the "turning-point" of development or that the thresholds of stimulation of the several parts vary greatly. The accumulation of the regular or expected intermediates near the gamic extreme has received no satisfactory explanation.

The distribution of birds in northern Guatemala: JOSSELYN VAN TYNE (introduced by F. G. Novy). The Museum of Zoology of the University of Michigan undertook two years ago to cooperate with the Carnegie Institution of Washington in a survey of the Maya area of Central America, this survey to extend over a number of years. The Museum of Zoology is responsible for the biological phase of the survey. The first field party from the Museum of Zoology accompanied the Carnegie Institution's archeological expedition to Uaxactun in northern Guatemala, and researches made on these collections are the basis for certain zoogeographical con-