

Tracheae alone in the solifugae, Pseudoscorpionioidea, Phalangida and Acarina." But on page 519 he mentions the presence of two pairs of lung books and no tracheae in the spider families Atypidae, Liphistiidae and Aviculariidae, and the presence of only tracheae in the Family Caponiidae.

Notwithstanding the inconsistencies and shortcomings

pointed out above, the book is more complete and better than several other texts and may be well recommended for use in colleges and universities. It is to be hoped that errors will be eliminated in the next edition.

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SOCIETIES AND ACADEMIES

THE TENNESSEE ACADEMY OF SCIENCE

THE spring meeting of the Tennessee Academy of Science was held on Friday and Saturday, April 17 and 18, at the Tennessee Polytechnic Institute, Cookeville, Tennessee. Two sessions were held on Friday and one on Saturday morning, the president of the academy, Dr. Claude R. Fountain, presiding. Friday evening, in the auditorium, following a dinner in the cafeteria, there was an address of welcome by Q. M. Smith, president of the institute, and a lecture by Dr. William S. Webb, head of the department of physics, University of Kentucky, Lexington. The subject of Dr. Smith's lecture was "A Discussion of an Archeological Survey of Norris Basin." The lecture was illustrated and of especial interest as, owing to the overshadowing importance of the economic and social features of the development of the Norris Basin, the public has given little attention to the archeological exploration. Saturday afternoon many of the members went on a botanical excursion, led by Professor D. R. Bartoo, to Stamp's Hollow.

Friday afternoon, Dr. Clinton S. Baker, associate director and resident biologist of the Reelfoot Lake Biological Station, read a paper by Dr. A. Richard Bliss, director, on the work to be done at the station next summer, and then explained the requirements for research scholarships offered by the academy, the number to be limited to about twelve. Ten applications had already been received, he said.

The success of the meeting at Cookeville, a town in the highlands on the border of the Cumberland Plateau, lends support to the policy of the Tennessee Academy of Science to hold a meeting at some point in the state in the spring in addition to the regular meeting in the fall at Nashville.

The sentiment of the forty members of the academy attending the meeting was well expressed in a motion by Dr. Bircher, adopted unanimously, that the Tennessee Academy of Science extend to the Tennessee Polytechnic Institute, to Dr. Dicus and the members of the committees who have arranged this meeting, a vote of thanks for the facilities of the institute so graciously placed at our disposal, for the friendly

hospitality shown the members of the academy and for the splendid program of papers and lectures.

J. T. MCGILL

THE TEXAS ACADEMY OF SCIENCE

THE Texas Academy of Science held a regional meeting in conjunction with the eleventh annual meeting of the West Texas Historical and Scientific Society, an affiliated organization, at Alpine, Texas, on April 10 and 11. The occasion of the joint meeting was the laying of the corner-stone of the museum building, which is to be the home of the Historical and Scientific Society. This pretentious building is being erected on the campus of Sul Ross State Teachers College and is built of native rock. The museum building is to be not only a depository for the records of the historical and scientific achievement but will contain laboratories, preparation rooms and other facilities for individual investigators, especially those who come from a distance. Here ample provision is being made for the investigator to have those advantages which are so necessary to field work. The program was presided over by Frederick A. Burt, secretary of the Texas Academy of Science; H. B. Parks, secretary emeritus, acted as secretary. A program consisting of twelve numbers was given. The notable papers were: "Light from the Midnight Sky," by Dr. C. T. Elvey, in charge of the new McDonald Observatory which is now under construction on the summit of Mount Locke about forty-five miles from Alpine; "The Geology of the Chisos Mountains," Dr. Charles M. Gould; and a lecture on "Sulphur," by Dr. J. C. Godbey, past president of the academy.

A visit was made to the observatory and the visitors were shown through the empty dome which awaits the telescope. They were also shown the apparatus on which the work in astral physics is now being done. A combined field trip under the direction of Henry Fletcher, president of the West Texas Historical and Scientific Society, Dr. O. W. Sperry, Sul Ross Teachers College, V. L. Cory and H. B. Parks, of the Experiment Station, visited the Glass Mountains. One of the important actions was the making of plans for holding the meeting of the Southwestern Division of the American Association for the Advancement of

Science in connection with the Historical and Scientific Society and the Texas Academy of Science at Alpine in 1938.

SAN ANTONIO, TEXAS

H. B. PARKS

THE ARKANSAS ACADEMY OF SCIENCE

THE twentieth annual meeting of the Arkansas Academy of Science was held at the Agricultural and Mechanical College at Monticello on April 10 and 11.

The annual public lecture was presented by Mr. Adrian Williamson, of Monticello, and the title of the address was "The Amateur Astronomer." Two field trips were arranged and conducted by the local committee—to Posey Bog and to the Mill and Chemical Plant of the Crossett Lumber Company of Crossett.

The following officers were elected for 1936-1937: *President*, L. B. Ham, University of Arkansas; *Vice-president*, P. G. Horton, Henderson State Teachers College; *Secretary*, L. M. Turner, University of Arkansas; *Treasurer*, W. R. Horsfall, Agricultural and Mechanical College, Monticello; *Editor*, Janice Singleton, Central College, Conway.

The 1937 meeting will be held at the University of Arkansas at Fayetteville.

LEWIS M. TURNER,
Secretary

THE MOBILE ACADEMY OF SCIENCE

THE Mobile Academy of Science, a local branch of the American Association for the Advancement of Science, closed its first year with the election of officers on March 5. Those elected were: *President*, Rev. Dr. P. H. Yancey, S.J., head of the department of biology in Spring Hill College; *Vice-President*, Dr. Toulmin Gaines, physician; *Secretary*, Matt J. Lawler, instructor in science, Murphy High School; *Treasurer*, Dr. A. A. English, lapidist; *Historian*, Miss Hazel Driver, head of the science department, Murphy High School; *Members of the Board of Trustees*, Dr. Stephen Hale, physician, and Dr. L. A. Loveridge, professor of physics, Spring Hill College.

During its first year the academy held bi-monthly lectures and field trips in the sciences of biology, chemistry, entomology, geology, medicine, mineralogy and physics. It also undertook the formation of a museum in the Mobile Public Library. It now has fifty active members and one honorary member, Professor A. H. Sturtevant, of the California Institute of Technology, who formerly resided in Mobile. The academy meets on the first Wednesday of every month in the Mobile Public Library.

MATT J. LAWLER,
Secretary

REPORTS

APPROPRIATIONS FOR GRANTS-IN-AID BY THE NATIONAL RESEARCH COUNCIL

AT its meeting in April, 1936, the Committee on Grants-in-Aid of the National Research Council made the fifty-five following awards:

Physical Sciences: Robert G. Aitken, astronomer and director emeritus, Lick Observatory, "card catalog of all measures of double stars"; Willard H. Bennett, assistant professor of physics, Ohio State University, "collision of negative atomic hydrogen ions"; S. L. Boothroyd, professor of astronomy, Cornell University, "ultraviolet spectra of F. G. and M. type stars"; Paul L. Copeland, assistant professor of physics, Montana State College, "secondary emission of electrons from thin metallic films"; William W. Hansen, assistant professor of physics, Stanford University, "production of high speed electrons"; Raymond Morgan, assistant professor of physics, University of Pennsylvania, "studies in electron diffraction"; Harold Osterberg, research assistant in physics, University of Wisconsin, "elastic and piezoelectric properties of crystals"; David H. Rank, instructor in physics, Pennsylvania State College, "fine structure of certain deuterium band spectra"; Francis G. Slack, associate professor of physics, Vanderbilt University, "Verdet

constant of crystals"; C. L. Utterback, professor of physics, University of Washington, "transmission of solar radiation in water."

Chemistry: Ralph A. Beebe, associate professor of chemistry, Amherst College, "measurement of heats of adsorption at low temperatures and low pressures"; William M. Blanchard, professor of chemistry, DePauw University, "conclusion of several chemical problems"; Richard Bradfield, professor of agronomy, and Wesley G. France, professor of chemistry, Ohio State University, "sedimentation equilibria and colloidal systems"; Merle Randall, professor of chemistry, University of California, "studies of heavy water"; Pierce W. Selwood, instructor in chemistry, Northwestern University, "study of magnetochemistry"; Arthur A. Vernon, instructor in physical chemistry, Rhode Island State College, "the effect of one electrolyte upon the solubility of another electrolyte in non-aqueous solvents."

Geology and Geography: Florence Bascom, senior geologist, retired, U. S. Geological Survey, and professor of geology, retired, Bryn Mawr College, "the petrology, origin and history of the Pickering and Baltimore gneisses of eastern Pennsylvania"; Kenneth E. Caster, assistant head of science department, State Normal School, Geneseo, New York, "the stratigraphy