

WORK OF TENNESSEE GEOLOGICAL SURVEY IN 1925

BY HUGH D. MISER, STATE GEOLOGIST

The work of the Tennessee Geological Survey in 1925 comprised many lines of activity, as in previous years, the object being to promote development of the State's resources and to increase the wealth and prosperity of the people of the State. During 1925 the mineral resources of different parts of the State were examined by several geological parties; topographical surveys were carried on in coöperation with the United States Geological Survey in several quadrangles in Middle and West Tennessee; progress was made on soil survey reports covering Dickson, Hardin, and Maury Counties in coöperation with the U. S. Bureau of Soils; stream gauging stations were maintained in coöperation with the War Department, power companies, and the U. S. Geological Survey; surveys for a map of Gibson County were begun; numerous dam sites were examined and reported on by Wilbur A. Nelson, former State Geologist and by Hugh D. Miser, present State Geologist (since September 1, 1925), in coöperation with the War Department Engineers; and Mr. Nelson at the request of Governor Peay examined and reported on the feasibility of locating a national park in the Great Smoky Mountains.

Among the investigations of the geology and mineral resources of the State the following may be mentioned:

Dr. Ray S. Bassler of the United States National Museum continued and completed his field work on the geology of the Nashville Basin.

Mr. Richard W. Smith, Assistant Geologist on the staff of the State Survey, continued the preparation of a report on the phosphate deposits and industry of Tennessee.

Dr. Austin F. Rogers of Leland Stanford University made a microscopic examination of the Tennessee phosphates and wrote an article giving the interesting results of the examination.

Dr. Joseph K. Roberts of Vanderbilt University and Mr. R. E. L. Collins, Assistant Geologist on the staff of the State Survey, continued the study of the Tertiary deposits of West Tennessee. Dr. E. W. Berry, Paleobotanist of the United States Geological Survey, and Professor of Paleontology in Johns Hopkins University, spent four weeks in the field with Messrs. Roberts and Collins. He is making a special study of the abundant fossil plants found in that region.

The field studies of the molding sands of Tennessee were continued and completed by Mr. James H. C. Martens, a graduate student at Cornell University.

The gold deposits in the eastern part of the State were examined by Mr. Olaf N. Rove, a graduate student of the University of Wisconsin.

The field work for a geologic structure map of the northern part of Morgan County was completed by Mr. Ralph G. Lusk, a graduate student at Harvard University.

The Tinsleys Bottom oil field was examined by Dr. Roberts.

The Administrative Report of the State Geologist for the biennial period 1923-1924, by Wilbur A. Nelson, was issued as Bulletin 35 of the State Survey. A soil map and report on Henry County was issued by the U. S. Bureau of Soils in coöperation with the State Geological Survey. Besides these reports many articles for newspapers and trade journals were prepared by the State Geologist and members of the staff.

The following reports which will be issued as bulletins are in press:

Water Resources of Tennessee by Warren R. King, district engineer of the United States Geological Survey.

The Tennessee Coal Fields, by Dr. L. C. Glenn of Vanderbilt University, Wilbur A. Nelson, former State Geologist of Tennessee, and Charles Butts of the United States Geological Survey.

The Adjustment of Industrial Development to Natural Conditions in the Valley of East Tennessee by Prof. Earl C. Case of the University of Cincinnati.

The following reports are ready for the press:

The Brown Iron Ores of the Western Highland Rim by Ernest F. Burchard of the U. S. Geological Survey.

Mining and Manufacturing in the Valley Region of Middle Tennessee, by K. C. McMurray of the University of Michigan.

Economic Possibilities of the Chattanooga Shale by Prof. Joel H. Swartz, of University of North Carolina.

The Oil Resources and Geologic Structure of Eastern Clay County by Gene S. Perry.