

are "Running the Canyons of the Rio Grande", illustrated by the great artist Thomas Moran; and "The Wonders of the American Desert" (published in 1902), a superbly illustrated article in which Dr. Hill points out the early development and value of the arid lands of western Texas, Arizona, and Southern California.

Four important books should also be listed: "The Geological History of the Isthmus of Panama and Portions of Costa Rica", "Geology of Jamaica", "Cuba and Porto Rico" and the most recent volume, published in 1928, titled "Southern California Geology and Los Angeles Earthquakes".

The Hill collection is housed in a special steel cabinet in the Geological Library on the second floor of Hyer Hall.

A complete bibliography of the Hill collection will be published in an early issue of *FIELD & LABORATORY*.

A.A.P.G. MEETING AT DALLAS

Geology students of Southern Methodist University found a rare opportunity in attending the annual meeting of the American Association of Petroleum Geologists in Dallas, March 21-24, 1934. This meeting brought together more than 1500 professional geologists, world wide in distribution. The Association is one of the largest and strongest of scientific bodies. Its publications and programs are of outstanding interest in the field of geology. The program for 1934 was one of unusual merit and was distinguished by the number of papers on geological principles and pure science rather than applied geology.

The initial paper "The Texas Cretaceous Continued" by Robert T. Hill gave an account of his

early studies in Texas, his discovery of the lower Cretaceous and the gradual development of the Cretaceous column and nomenclature for the state which was finally recorded in his monumental work on the Black and Grand Prairies. Dr. Hill closed his paper with a proposed new classification of the Cretaceous based on successive cycles of sedimentation.

A paper by L. L. Nettleton on the "Fluid Mechanics of Salt Domes" attracted wide interest and discussion. Nettleton presented a simple yet spectacular demonstration of his hypothesis that the prime motive force for the formation of salt domes is the density difference between the salt and the surrounding sediments and that the salt and sedi-

ments behave as highly viscous liquids and slowly flow through long geological time. Using a thick dense syrup and a viscous lubricating oil he placed the emiscible but lighter oil beneath the dense syrup. The oil pushed its way upward into the syrup showing various phenomena connected with known salt domes, such as dome shaped plugs, overhang, and the development of a "peripheral sink", which phenomena was assumed to be responsible for rim synclines and down faulted blocks near salt domes.

N. W. Bass presented a paper showing the similarity between the "Bartlesville" Shoestring sands of Kansas and offshore bars such as are found along the Atlantic coast of New Jersey or on the Texas Gulf coast.

Ira Cram in his paper on "Sub-surface Faults in Oklahoma" emphasized the probability of vertical movements of crustal blocks and the necessity for recognizing that not all normal faults were gravity faults.

Among the outstanding papers of the session was that by Dr. W. H. Twenhofel, given at the luncheon of the Paleontological Society. In this paper special emphasis was laid on the bottom control of faunas. His conclusion was that, while the stratigrapher must be sure of the relationships between the sediments and the fossils contained, there was a very definite distribution control by the sediments and that many

so-called "barriers" merely represented faces changes in the sediments.

Among the Southern Methodist University alumni and ex-students who attended the A.A.P.G. meeting were:

Jim Aimer, '27, Arkansas Natural Gas Company.

Bill Moore, '28, Shell Oil Company.

Martin Kelsey, '31, Geophysical Service.

H. M. Law, '23, Law Laboratories.

John Wilson, Colorado Geophysical Company.

Stephen G. Waggoner, Consultant.

Billy Bramlette, '32 University of Texas.

Boyd Rowland, Union Sulphur Company.

John Cruse, '24, Amarado Oil Company.

Edwin J. Foscue, '22, Southern Methodist University.

Jerome Sweeney, Sun Oil Company.

Bruce Whitcomb, Consultant.

Mac Coker, '33, Consultant.

Joe Wilson, '24, Sate Railway Commission.

Bill Ransone, '30, Geophysical Service, Inc.

Advanced geology students of S. M. U. registered as visitors included Jack Boon, Bob Everet, Anton Korn, and W. D. Frazell. Louis Kelsey and Fred Smith served as pages throughout the sessions.

Dr. J. C. Karcher, of the Geophysical Service, Inc., reported that Barney Fisher, '30, had been promoted to "party chief". He is now heading a field party with seismographs in Wyoming.

E.W.S.