

Graduates of the school of civil engineering have been unusually successful in being placed in important engineering positions in Oklahoma. J. F. Brookes, director of the school of civil engineering, has always been concerned with the practical side of his students' work. His interest in fitting them to "do the job" has helped hundreds of them to find their places.

## School of Civil Engineering

By J. F. BROOKES, Director

**E**DUCATED partly at the state's expense, partly at the cost of their own hard work, graduates of the school of civil engineering are returning to the state full measure for its investment in them.

A casual visit to the engineering department of the Oklahoma State Highway commission shows desk after desk occupied by O. U. civil engineering graduates, from C. W. McFerron, '11, who holds the responsible position of construction engineer, to young Thomas Field Thompson, winner of the American Society of Civil Engineers' honor membership in '34.

In the office next to McFerron's is C. M. Keiger, '08. Engineer in charge of maintenance, 7,159 miles of highway are under his supervision. Director of over 1,000 men, he drives approximately 50,000 miles in the course of an ordinary year's work.

Why one stretch of road is harder on automobile tires than another; what combinations of materials make the longest-wearing roads; what speeds are safe on gravel, cement, asphalt; what degree of curve is safest for a turn in the highway—Keiger knows the answers.

Knowing less of politics and far more of stresses and reinforcements than the average state employee, many of the civil engineering graduates found their first employment as rodmen—or even as day laborers—with the highway commission.

Typical of their records is that of Gwynn B. Hill, '25, who began work in the field immediately after graduation. Now squad boss of the bridge department's drafting room, he has been rodman, instrument man, draftsman, detailer, and checker.

In like manner there are University of Oklahoma graduates in all the various divisions, such as bridge design, plans and specifications, field surveys and field construction.

A 1922 graduate in civil engineering is very much in demand in third and fourth floor capitol building offices. He is Clarel B. Mapes, secretary of the Mid-Continent Oil and Gas association, and economic adviser of the oil industry. Recognized as an expert on oil and gas law, taxation, production and finance, he has found himself in vigorous disagreement with some of

the more popular theories of oil taxation—and, true to the "check and double-check" training received in the school of civil engineering, he is able to reinforce his arguments with authoritative evidence and accurate charts and graphs.

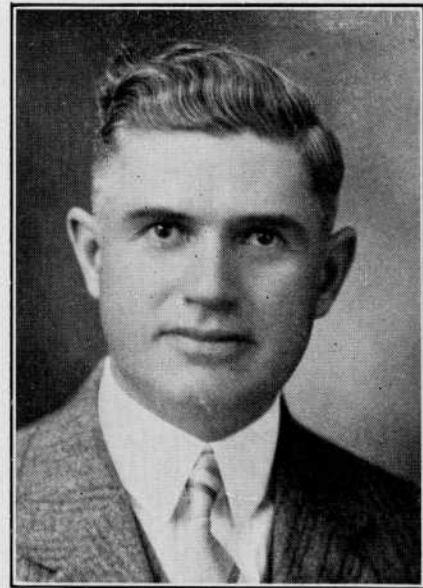
Immediately upon his graduation with a B.S. in C.E. degree in 1926, Herbert L. Oakes joined the faculty of the Kansas State Agricultural and Mechanical college. Later, in the employ of the Kansas State Highway department, he performed a further service for the Sunflower state when he wrote the official Kansas manual of rules for construction work. He is now Kansas representative for the Lehigh Portland Cement company, and makes his headquarters in Topeka.

California's King's River Water association has for many years had Charles L. Kaupke, '09, as its water master—a position especially responsible in an area depending upon proper irrigation for its very life.

J. J. Bollinger, '25, Oklahoma City construction engineer, and president of the firm bearing his name, follows California news closely, for his younger brother, James Ralph Bollinger, '33, is employed on the \$77,000,000 Golden Gate bridge, now under construction, which will connect San Francisco with its sister cities across the bay. This 10,450 foot bridge, with twin suspension spans, is one of the largest bridge projects ever undertaken by man. The cantilever type span over the shipping channel is 1,400 feet long. The clearance of the bridge ranges from 180 to 214 feet above the water. Completion of the structure, begun in July, 1933, is scheduled for 1937.

Warm climates have their attractions for Hubert A. Paton, '23, director of United States Coast and Geodetic Survey work in Florida, although one of his early assignments was on Kodiak Island, off the Alaskan coast.

Another wanderer, Jack S. Bolles, '26, finds opportunity to satisfy the travel urge more than the average engineer. His first expedition was the Hittite expedition of the Oriental Institute of the University of Chicago, during which he attended the presidential ball given in honor of Musta-



pha Kemal Pasha. Now he is with the Carnegie Institute' expedition in Yucatan, Mexico.

A number of Sooner civil engineers have entered either government or municipal service. Oakley F. Wadsack, '25, is civil engineer with the city engineering department of Van Nuys, California; Kenneth W. Markwell is PWA engineer for the state of Tennessee; Captain Henry G. Schenk, '12, is with the United States Engineering corps in the Panama Canal zone; Roland Horton, '21, is municipal and sanitary engineer of St. Louis, Missouri; Lieut. John H. Coffman, '26, is with the United States Marines corps at Washington, D.C.; Clarence Stoldt, '26, is Blackwell city engineer.

Leo C. Sanders, '29, Oklahoma City, has achieved national recognition for his expertness in razing buildings rapidly, and for his ability to construct difficult foundations by the Caisson method.

E. W. Mars, '24, is a resident engineer with the Texas State Highway department; John W. Borelli, '33, is an observer and has charge of a party for the United States Coast and Geodetic Survey at West Pittston, Pennsylvania; Paul Thurber, '31, is on the faculty of the Murray State School of Agriculture, Tishomingo; LeRoy Crabbe, '31, is an assistant, and Joseph Ray Matlock, '25, an associate professor in the University school of civil engineering.

If students in the school occasionally look forward eagerly to making "a mark in the world," they have precedent for it in the records of those who have graduated before them. For the most part, however, immediate problems, such as eight, twelve, and sixteen-weeks quizzes absorb their attention. Twenty of them expect to be granted the degree of bachelor of science in civil engineering in June of this year.