

J. L. Liston, assistant professor of mechanical engineering, has been a member of the University staff for the past five years. Courses in natural-gas engineering are centered largely in the school of mechanical engineering. Liston several years ago was in charge of the construction of the University's wind-tunnel.

## School of Natural-Gas Engineering

By W. H. CARSON, Director

**T**HE school of natural-gas engineering of the University of Oklahoma was the first school of its kind to be organized in the world. It is the youngest of the ten professional engineering schools in the college of engineering. The curriculum, which was approved by men of the industry in conference with members of the faculty, was adopted by the faculty in March, 1933; and in September of the same year students were officially enrolled. Men in all phases of work dealing with problems in natural-gas engineering have long realized the necessity of having specially trained men capable of overcoming the obstacles that confront the industry. Men graduating from the school of natural-gas engineering will be employed not only in the municipal and privately owned utilities, but in the gas departments of the various oil companies. Practically every position of importance in the gas utility will eventually require the services of a trained engineer. A man with natural-gas engineering training will be found in positions from local manager on through the organization, including the engineering department, to the top,—the presidency of the company.

The school of natural-gas engineering of the University of Oklahoma can boast of one of the two fellowships sponsored by the American Gas association. Each year the A.G.A. sends a man to the University to take graduate work in natural-gas engineering with the requirement that his thesis represent an important piece of research pertinent to the natural-gas industry. Mr. K. J. Sonney, Pittsburgh, Pennsylvania, is the holder of the fellowship this year. His research problem is "A Study of the Thermodynamics of Gas Regulator Freeze-ups." Mr. Sonney is being ably assisted by Mr. J. W. Bowman. The work is being done under the direction of Dr. R. L. Huntington. A major part of the research will be carried on in the Oklahoma City field, however laboratory tests are made on all equipment to ascertain definitely whether it is properly designed and whether it will give the

desired results. The indications are that another industrial fellowship will be sponsored by persons directly interested in gas-fired air-conditioning units. Air-conditioning will soon play an important part in the life of everyone and it is the thought of many gas engineers that units to air-condition homes and office buildings can be designed along the same principles as the gas refrigerator. It is proposed that experimentation of this nature will be carried out at the University of Oklahoma.

The Southwestern gas measurement short course, held annually at the University of Oklahoma, is sponsored directly by the school of natural-gas engineering.

Several new pieces of equipment received during the last gas measurement short course have been installed, under the direction of Mr. Cromer. The main Natural-Gas Engineering laboratory is located in the Petroleum Engineering building. The natural-gas engineering students are an active group and they plan to have one of the outstanding exhibits for the St. Pat's openhouse.

▲ ▲ ▲

## Engineering Shops

By W. H. CARSON, Supervisor

**T**HE engineering shops is a division of the college of engineering; and it is under the direct supervision of the director of the school of mechanical engineering.

The engineering shops are divided into two departments: the metal working de-



partment, and the wood working department. In the metal working department the students are taught to operate various machines such as lathes, milling machines, planers, shapers, and drill presses. Also other instruction is given, such as electric and gas welding. Students regularly enrolled in mechanical engineering are required to take the machine shop courses, other students in the college of engineering may take them as electives. Advanced work may be taken by students who plan to go into the manufacturing phase of mechanical engineering. Graduate and undergraduate students engaged in research have found their shop training beneficial as it enables them to make many pieces of special apparatus, necessary in their experimentation work.

The electric sign on the Engineering building was designed by engineering students and manufactured in the college of engineering shops.

The wood shop department is equipped with the type of tools and machines needed to give instruction in pattern making, cabinet work, and general carpentry. All engineering freshmen are required to take the course in pattern making. The other courses offered are primarily for education students enrolled in manual training. Some exquisite pieces of furniture have been made in this department under the direction of Mr. M. Cameron, who is a cabinet maker of the old school. We have facilities to take care of fifteen students in manual training, however, this semester there are forty enrolled in this department, thirty-five of whom are girls.

This form of manual training should gain in popularity as it is an excellent leisure-time avocation.