

Carl T. Almquist, associate professor of electrical engineering, is doing much of the work in that school while Director Tappan is acting dean of the college during the present school year.

Electrical Engineering

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WE are sometimes inclined to think of electrical engineering as being a relatively old science, as it may well be judged when we consider it from the standpoint of those basic principles and laws, constituting the very foundation upon which the manifold wonders of electricity and its applications are established. Yet, from an engineering standpoint, the electrical industry is young, still enjoying a remarkable growth and further destined to play an extremely vital part in providing those useful services so essential to the procurement of that so much desired "more abundant life" of which we hear a great deal at the present time.

It was but somewhat more than fifty years ago that Thomas Edison first inaugurated his pioneering electric service from a central station to his New York City customers whose load aggregated approximately 400 incandescent lamps. This venture grew by leaps and bounds, to be duplicated in other cities throughout the country. New development followed upon new development with services of equal or greater importance than that of lighting being provided by the electric power industry in the form of the many labor saving household appliances, ranges, electrically driven mechanical refrigeration, air conditioning, and so on, motive power supplied to the various manufacturing industries, to the transportation systems, and the increasing extension of electric service to rural customers in many areas heretofore unserved.

In spite of a temporary setback during these late depression years, the output of the electric power industry has now reached an all time peak. Customers served in the United States now number well over 25,000,000 with domestic or household customers constituting about 80 per cent of this total. The total combined output of all operating companies in the United States has now passed the 2,000,000,000Kw.-hr. per week mark with the curve still showing a decided upward trend.

Whether there is agreement or disagreement with the government's present

power policies, acknowledgment must be made of the fact that the various activities are serving to make the public more "electricity conscious." The resultant increased usage per customer, and increasing number of customers will necessitate careful study and planning on the part of electrical engineers, whose responsibility it will be to provide for these. The demand for better service at reduced rates offers an ever present challenge to the resourcefulness of our present and future engineers.

Engineering graduates and engineers in practice have not escaped the depression of the last several years. Nor can it be said now that industry is "out of the woods," and many factors still contribute against an immediate return or approach to those days when each graduate had the choice of several opportunities presented to him for his consideration in entering the engineering profession. However, many signs of recovery are on the horizon now which were not apparent a year ago and encouragement is noted here and there, even though it may lack much to be desired in the way of an enthusiastic reception to the young graduating engineers. It is gratifying to know, however, that practically all the recent graduates are now employed in one way or another and a great many have promising positions in fields directly to their liking.

The school of electrical engineering at the University of Oklahoma is endeavoring to provide for the young men of Oklahoma, and many from other states as well, adequate training and facilities to prepare them to take their places in this expanding profession of electrical engineering. To this end laboratory facilities are constantly being improved and new equipment added to the already excellent laboratory layout. Advanced courses are available for both undergraduate and graduate students. The school can feel justly proud of its accomplishments under the able leadership of Professor F. G. Tappan, director of the school of electrical engineering.

Professor Tappan is now acting dean of the College of Engineering and while



he still teaches some of the electrical engineering work, it was necessary to add a new member to the electrical faculty. The school was fortunate in being able to obtain the services of Mr. Ansel Challenner, a University of Oklahoma graduate. Mr. Challenner received his B. S. in E. E. from the University in 1925 and after varied engineering experience, chiefly in the communication field, two years of which were spent in the Bell Telephone laboratories on development and research, he returned to the University and obtained the M. S. degree in 1933.

The University radio station, WNAD, under the technical supervision of Professor Clyde L. Farrar, again takes a step forward, or perhaps it should be said a step higher. With the completion of the Student Union Building tower, provision has been made for enlarged and improved studio facilities therein, and it is expected that the new studios will be in use the early part of the 1936-37 school year. WNAD, a 1000 watt station, operating on an assigned frequency of 1010 kilocycles, provides excellent facilities for the electrical engineering students to observe and become familiar with modern commercial broadcasting practices.

Space does not permit the presentation of the large number of outstanding electrical engineering graduates of the University of Oklahoma, but mention can be made of two graduates, Mr. R. D. Evans, class of 1914, co-author of *Symmetrical Components*, and Mr. Percy H. Robinson, class of 1925, co-author of *Relay Systems*, as having become prominent in the relatively limited field of authorship. These books are outstanding works in their respective fields and should receive a great deal of engineering recognition.

The electrical engineering faculty takes this opportunity to extend greetings to all of you O. U. engineers and particularly to welcome a word from any or all of you "electricals" of former years.