RECOGNIZING THE CROSSROADS

BEING at the crossroads, metaphorically speaking, seldom has the advantages of the literal sense of the words. One seldom has precise knowledge of the existence of the metaphorical crossroads or forks in the road of life. A case in point is the Committee on Education of the Engineers’ Council for Professional Development, which for twenty years has been accrediting the engineering curricula in the educational institutions of the United States. The committee is now at odds with itself and with the National Council of State Boards of Engineering Examiners over the accrediting of courses which in the opinion of many engineers are not strictly speaking engineering curricula at all. Such courses include: fire protection engineering, crystal engineering, nuclear engineering, and geological engineering.

The crossroads might be placed arbitrarily somewhere between 1936 and 1938 when the committee first started accrediting curricula and included the first course in industrial engineering. Purists might argue that the committee first wandered from the straight and narrow when it recognized subdivision of engineering into the major branches of mining, metallurgical, civil, mechanical, electrical, and chemical engineering.

Accrediting is certainly an important function because it provides a standard for engineering education and it should be done on a national basis by an unbiased group like the Education Committee of ECPD. Students, educational institutions, and industry derive great benefit from proper standards. The autonomous State Boards of Engineering Examiners have long accepted ECPD accreditation as evidence of the required academic training of engineers aspiring to licensing. But the State Boards today question the wisdom of applying the name engineer to graduates of some of the so-called fringe curricula. The Education Committee, having gone so far in accrediting some of them, has numerous applications pending for accreditation of similar curricula and even new courses never before accredited.

Arguments against recognizing highly specialized engineering curricula are numerous. The Salary Stabilization Board has disallowed industrial engineering from classification as engineering for its purposes. A graduate of a specialized course in geological engineering at a school in the Southwest slanted heavily for practice in the petroleum industry might not be interchangeable with a graduate of a similarly designated curricula at one of the institutions in the North Central states where the emphasis might be on metallic mineral deposits. Industry in general should not expect the universities to supply a degree in each of the specialized engineering classifications it might set up for purposes of salary or job designation.

Having gone so far, it is easy to understand the difficulty of the Education Committee. ECPD might well call a moratorium for the purpose of taking stock of its position. If the present trend is allowed to continue, it is apparent that an engineering institution could be subdivided into a multiplicity of departments teaching specialized curricula resulting in a subordination of the basic concepts of engineering.

Although the parallel of the medical profession is trite, it should be pointed out that degrees in medicine are not labelled by the numerous specialties practiced by doctors.

For practical purposes the ECPD would do well to accept the fact that the crossroads have been overreached and protect the engineering profession by coming up with minimum standards for an engineering curriculum.