

## THE ENGINEERING SOCIETY—ITS PAST, PRESENT AND FUTURE ACTIVITIES.\*

By Ernest McCullough.

**A** LITTLE over a century ago the men engaged in works of civil construction organized a society and called it a society of civil engineers. The right to assume the title of engineer was contested by the only men to that time recognized as engineers, that is, the men engaged in military engineering work, and it became necessary to define a civil engineer when the society finally applied for a royal charter. The result was the incorporation in 1828 of the Royal Institution of Civil Engineers of Great Britain, civil engineering in the charter being defined as "the art of directing the great sources of power in Nature for the use and convenience of man."

For a number of years in the first half of the last century it was common to read on title-pages of books the term "Mechanical Civil Engineer," "Mining Civil Engineer," etc., the inference being that in those days all men not military engineers were civil engineers. The development in the manufacture of power brought about by improvements in the steam engine and the vast increase in railway building finally resulted in the distinct professions of Mechanical Engineering and Mining Engineering, and later Electrical Engineering. Now the civil engineer is said in a late report of a committee of the Institution of Civil Engineers to have almost disappeared in the original meaning of the term. The men known as civil engineers are engaged in many special lines of work, so the multiplicity of specialties and the multiplying number of special societies is something requiring notice. Before the civil engineer was known as such there were road builders, bridge builders, canal builders, colliery viewers (engineers), surveyors and builders. The fundamental education in all branches being the same, the development of industry has had the effect of re-creating the old sub-divisions, more highly trained perhaps, but conditions now are as they were before the engineer evolved as an entity.

The time has come when the engineering society should pause and consider if it is doing necessary work. The earlier societies performed a valued service. They brought together men having similar interests; where the older men read papers and discussed papers which were intended purely for instructional purposes, most of the engineers being trained by apprenticeship. There existed few schools and there was a demand for trained men. Young men picked up their knowledge as best they might in the offices of eminent practitioners, and at the society meetings met other men of experience. Thus they obtained the broad view of their business so necessary for future success. The educational value of the meetings was so great that a professional spirit developed and was fostered.

The technical, or engineering societies, have not developed with the work of the engineer. They still consider themselves as institutions organized solely for educational purposes. This is the way they are conducted, but the majority of the members know many societies exist rather as an evidence of the standing of the members than for their declared purposes. The modern technical journal is doing more real educational work than any society, no matter how large or how important it

may be. The pages of the weekly and monthly papers bring to us news from the front fresh, and in a way which the more formal papers of a society cannot. Our society proceedings are become encyclopedias, which are consulted less frequently than are the pages of the journals maintained purely for profit.

Some societies are beginning to realize that something is lacking in the old methods, and this is shown by the growth of social activities. That there is a real demand for this side of the training of a technical man is proven by the societies which feature the social side.

May it not be asked if the central idea of the original technical societies was not the young man? Granting that he was the reason for the inception of such societies, we can ask ourselves if we have been for some time treating him fairly. Are we now taking proper notice of him and the increased difficulties attendant upon his endeavors to secure a foothold in his chosen work with the increase of competition following upon the great development of the engineering school and the popularity of technical training to-day?

The young man feels he has not been paid the proper attention. There is a well-founded idea that engineering societies have for many years past been mutual admiration societies of successful men, and used for furthering of insidious advertising by men qualified to take full advantage of the position their membership brings them. The discussions at the meetings are too frequently inadequate, and real criticism is seldom developed when the author of the paper is of commanding eminence. Some men even use the society to which they belong for exploiting patented processes and materials.

The third method, namely, the affording of patent and legal advice, needs to be approached with care. The society should have an attorney who can help members who have trouble in collecting pay,—that is, members who fall into the hands of unscrupulous employers. There are many such. There was organized a couple of years ago a society of authors to protect individuals against the rapacity of certain dishonest publishers. It is said to have been very successful. Medical men have such means for collecting bad accounts and to protect them against blackmail, for a number of physicians and surgeons are annually attacked by former patients who know a man will often pay large sums rather than get undesirable notoriety. This side of the medical societies is so well taken care of that few accounts of such attacks ever get into the public press. It is understood that lawyers and ministers of the gospel have similar legal protectors, and some of us believe our colleagues, the architects, have a few societies in which the business side of the profession is properly cared for. Engineers should similarly protect themselves against attacks on character and attempted extortion or robbery. Just what the new association intends to do in the matter of patent advice I do not know, and supposedly the members have only a vague idea, but that there is some good reason for including this item we cannot doubt.

The fourth method is concerned with legislation for the technical man. The people of the United States have gone mad on the subject of legislation. They apparently wish to preserve the individuality so long a characteristic of Americans, combined with the socialistic condition which is the inevitable result of the passing of a large number of regulatory laws. It is not for us to object and stand too much on dignity. We must recognize the fact that a condition and not an hypothesis confronts us. The legal profession would not have the standing it enjoys were it not for the very thorough way in which the lawyer

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