

The Engineer as a Business Man

President Humphreys of Stevens' Institute

I PROPOSE to speak to you more particularly from my experience as an engineer and industrial manager and as the employer and post-graduate trainer of many cadet engineers.

I had found that the cadet engineers who came to me for employment were not only deficient in knowledge of business methods, but they generally found it difficult to believe that the engineer required that knowledge, and some were unwilling to so believe even under pressure. Some few were only convinced when they found themselves outstripped by their fellows of a more open mind. I have in mind a number of able fellows who lost from one to five years in this way.

In a single talk like this I cannot expect to give you any real instruction, but if I can, speaking from own experiences, mind you, induce you to believe that the engineer to be commercially successful must be mindful of commercial conditions and limitations and be familiar with business methods, I shall be satisfied, because I shall know I have been of real service to you. I beg of you to believe that I shall speak only of that I know. * *

I include in my course the principles of accounting, depreciation of plant, shop cost, analysis of data and statistics, and commercial law—especially as to contracts.

In connection with work along these lines I weave in as far as possible hints as to business methods in general, and especially I try to show the great desirability of an engineer making his communications, specifications, etc., self-explanatory and of keeping them free from ambiguity. I then try to show that this last means that the engineer must have a good working command of his mother tongue. I also point out that the experienced and fair man who does succeed in making his papers clearly and fully express his real meaning has but little use for lawyers and the courts. Now, how can I convince you that a knowledge of these matters is of importance to the engineer? * * * * *

The engineer who is prepared to be satisfied with a subordinate position will find that he can be of much greater value to his employer if he is able to appreciate the bearing of commercial conditions upon engineering problems, and so will generally be able to secure a higher wage.

If I say you should at least understand the theory of accounts you may reply, as one of my classmates did. He said he did not propose to bother with bookkeeping; he could hire a bookkeeper for \$1,200 a year to do all that work for him. If this were true, why not also claim that engineers need