

young man best acquire the knowledge necessary to become an efficient and useful member of his profession?

It is now generally admitted that no amount of practical sagacity can compensate for total ignorance of scientific principles, and it is equally true, that excess of theoretical training is comparatively useless without the knowledge gained from practical experience; it therefore appears that the method of sending youths, fresh from school, to assist as chain-men and staff-holders on a line of railway, and learn the use of the instruments by watching other persons use them, who have themselves acquired their information in the same way, is not calculated to give the pupil a thorough knowledge, either practical or scientific, of his profession. In order to gain the requisite theoretical knowledge it would be advisable for him to become a student in a University School of Engineering, and this course cannot be considered complete in less than three years.

Besides scientific knowledge the student would learn Surveying, Drawing, and such technical knowledge of his profession as can be acquired from lectures and books. After he has completed his course he would be qualified to become a pupil of either a Civil or Mechanical Engineer, and having already a correct appreciation of theory, and acquired a mental training of a kind likely to develop habits of industry, he would in one year learn more than an ordinary youth fresh from school would in three or four, and when thrown afterwards on his own resources, would not display that lamentable ignorance which is sometimes exhibited by those purely practical men whose scientific education has been entirely neglected.

King's College is now in a position to impart this requisite knowledge, the Governors having this year expended a large sum of money in supplying the institution with requisite instruments, and suitable books have been added to the library, rendering it quite efficient for consultation.

The instruction in Practical Chemistry is given on the system which made the reputation of the famous Giessen laboratory and which is now almost universally adopted, especially in such laboratories as those of the Royal College of Chemistry, now the chemical department of the Royal School of Mines, London. A