

coal, mineral oil, phosphates and common salt also are found. The search after the precious metals, mining, the production of copper, iron and nickel are all departments of industry in which many graduates of the University have found and will, I venture to think, continue to find employment. It is to the men we send forth from this institution that we must look for the proper exploitation of our natural resources. While in past years most of our graduates entered the professions of medicine, law or of teaching now a large proportion are going, not only into mining and the other branches of engineering, but also into manufactures and commerce. The future of this country is in the hands of these men. Now that the School of Science has become an integral part of the University and constitutes our faculty of applied science, a stronger tie has been created between this department and that presided over by my colleague Professor Ellis than was possible heretofore. It should be the aim of the departments, then, to give our students a thorough all-round training in the principles of chemistry, not omitting reference to the practical application of these principles to the arts and manufactures. A chemist thoroughly trained in his subject by a course of study such as can be obtained in any of our universities is the man who is most fitted to apply his knowledge to whatever branch of industry he may find himself engaged in after he leaves his *Alma Mater*. I have heard it advocated that the universities and technical colleges should employ special lecturers, expert in their several spheres of chemical industry, to instruct students in the particular branch which it is to their ultimate intention to take up as their life-business. Where, I ask, are such men to be found? Is it likely that a manufacturer will enter into all the details of improvements in his own business that he has, after much experience, introduced for the benefit of his own or his employer's profit? In these days of keen competition, and of earnest striving to gain even a modest competency, any particular detail or device which will ensure a better yield of material or the production of a superior article than one's rivals in trade can produce is zealously guarded, as well it might be.

A general knowledge of the principles of the subject is the first great essential and whether it be metallurgy, brewing, calico-printing or dyeing that the young graduate proceeds to, he will always be able to adapt himself to his new surroundings and be of more use in improving the processes in which he is interested than if his whole time had been spent learning the details of his special work to the exclusion of the great general principles involved in the science. The man with energy and application, but whose academic and scientific training has been nil, has hitherto in many cases succeeded in coming to the front in whatever industry or business he may have taken up, how much more, then, may we expect to see the scientifically trained graduate (*ceteris paribus*) become a successful worker in any of the many great fields open to him.