

introduced at first, like some tender exotic plant, we all know the remarkable growth it has had, and the fruit it has borne, under the care of such men as Magnus and Regnault, and Kirkhoff, and Thompson and Hertz.

The introduction of one experimental subject paved the way for others; and some people wondered where it would end, and if the universities, losing their sacerdotal selectiveness should become mere schools for the people. But should there be an end? Why should the university not include every worthy subject which rests upon a truly scientific basis, and be thus a university in deed as well as in name?

In very early times the university undertook the care of medical studies, and certainly there is no subject in the world which is either more senselessly arbitrary, as in the case of ancient medicine, or more rigidly experimental, as in the present practice of medicine.

Queen's has been, as far as she has gone, a very good illustration of the gradual absorption into her curriculum—practised by all growing universities—of those subjects which from time to time have arisen through the progress and growing needs of the country.

When I first came here the curriculum included in all, classics, mathematics, logic and rhetoric, metaphysics, a small amount of English literature, and some remnants of Christian apologetics in the form of Paley's evidences and natural theology.

Chemistry had been introduced some years before for medical students only.

The first notable addition to the arts course was natural science, including botany, zoology, geology, and chemistry. And Christian Apologetics were dropped.

Then came the additions of French and German and history, with an increase in the amount of English literature.

The last two additions which have been made up to the present time are Political Science and Biology. But it should be remembered that over and above these additions to the available subjects of study in Queen's has been added a large amount of higher work in all the subjects enumerated.

But Queen's has not been peculiar in thus lengthening her cords and strengthening her stakes by this expansion of her teaching powers, and her consequent means of usefulness. Similar extensions have taken place in some of the older universities of Great Britain. About 15 years ago I was shown through the chemical department of Cambridge university by Prof. Living, who had then nothing but apologies to make for his meagrely appointed laboratories and his decidedly shabby accommodation.

Being in England as a delegate from Queen's to the University Extension Congress held in London this summer, I spent some time in Cambridge, and I was delighted in the change that had taken place in the chemical department, the extensive laboratories and appliances, and the commodious buildings in which they were housed. Similar changes are evident at Manchester and other places. In fact the Briton is waking up to the idea that chemistry, like many other experimental subjects, is not a subject for medical students only, but that it has possibilities in itself, both as an educational subject and as a factor in the higher civilization, that cannot be ignored.

Great changes have come over the spirit of men's dreams in the last fifteen years. There is a world of struggling, poverty-stricken humanity to be redeemed and raised, if possible, to a higher level of mental activity and of bodily comfort. And this cannot be done by men shutting themselves up in cells, and wearing garments of haircloth, and scourging themselves with lashes, and living the lives of recluses and mendicants; but by men becoming less egoistic and more altruistic in their lives and in their ideas.

Nature has shown us in her own particular way how little she cares for the individual, and how jealous she is for the safety and good of the race, and if we follow to some extent her teaching we cannot be far wrong. Mere culture is good enough in itself, but the university which confines itself to the giving of what was formerly called culture is a mere fossil in the present age of activity in behalf of the masses. The modern university, to be up to the times, must include to a proper extent everything which is designed to make men into higher types of citizens, and to fit them for service in the ranks of the true philanthropist and the true reformer.

On these grounds we press the claims of chemistry, which, although an experimental, and to some extent a technical, subject, has brought health and comfort and a sense of joy to many a household.

On these grounds we press the claims of biology, which, by showing us our relationship to the lower animals, has made us merciful to them, and which has thrown a flood of light upon human diseases, and by pointing out the means for their prevention has proved a boon to society.

On these grounds we press the claims of political science, which, to a considerable extent, is as experimental as chemistry and biology; for all statistics and all law-making, and all attempts at building up a nation, belong to the experimental rather than to any other line of development.

No subject can be ignored because it is experimental, or to some extent technical, for there is a science in technology, and that people will succeed