and excellent courses of lectures on the theory of electricity, magnetism, light and heat have been established in the University of Toronto under Prof. Loudon, in McGill University under Dr. A. Johnson, who has lately taken such an active part in promoting tidal observations, in Dalhousie under Prof. Macgregor, and in Queen's College, Kingston under Prof. D. H Marshall. These institutions, and also Laval University and the Seminary, possess some valuable apparatus, but no provision has been made for practical manipulation, except, perhaps, in the case of the University of Toronto, where, during the past year, a practical course has been introduced, which will, I sincerely hope, prove the dawn of a brighter future. This almost entire absence of laboratory and what might be called shop-work, very seriously hampers the first endeavours of those who have any leanings towards original research, and often results in hopeless discouragement. The professor also labours under grave disadvantages in having no means of giving his students a real education as opposed to mere instruction. There is no remedy for this state of things except by the building up of properly equipped laboratories. A more indirect, but grave, difficulty springs from the same source, which has already given rise to some controversy. It is often maintained that Canadians should have the first claim on all educational posts in this country, and *cæteris paribus*, I am myself of the same opinion, as they are undoubtedly better acquainted with the genius of the country and are consequently better able to avoid the many difficulties which beset the path of a foreigner. But, it would be utterly impossible at once to do justice to the interests of the student and to give the charge of any of the branches of science we are now specially considering to one who has merely received a theoretic education.

AN ALL-ESSENTIAL REQUISITE

in a teacher of science is that he should himself have been trained in the experimental school. That we have among us men well qualified by nature to undertake the work cannot be doubted when we see them sought after to fill chairs in other departments. But a little time since Dr. Osler was selected to fill an important post in the University of Philadelphia, and still more recently Cornell has filled her chair of philosophy by borrowing a man from Dalhousie. In one respect the choice of these men is a matter of pardonable pride, in another it cannot but be regretted that while yet perhaps in the first stage of development, they are lost to this country, which sorely needs them all. I have tried to give some idea of Canadian workers and their work, but although it is well not to overlook the near in admiring the far off, and although it may be well also occasionally, and for the sake of encouraging a wise emulation, to look at science from a *national* point of view, yet it must never be forgotten that the true significance of the life work of such men as we have been considering lies, not in their representation of this country or that, but in the fact that they form one detachment of the great army, which in every country of the world is endeavouring, with more or less success, to hold the citadels of truth and push ever farther back the confines of ignorance and error.