

While of course every system may be faulty, and while even the best system may not always supply the inventive, penetrating, persevering and intense qualities needed by the man of research, yet, as a general requirement such a man, following the best models, should have:

1. A thorough Primary and Secondary Education.
2. Training in a modern University, where the Science Option has been fully followed, or in a Technical College of University rank, in either case among students under competent science professors and where the aspirant has completed satisfactorily a practical science course.
3. A post-graduate course of several years absolutely devoted to the department in which the candidate is to specialize, and this under a professor who has a "fine frenzy" and devotion to his subject.
4. Certificates of competence, of skilfulness and of success in solving a prescribed problem.

Even under all the power and pressure of a great guiding intellect, the aspirant may at times fail. But that there is a certainty of a general average of fair results is seen when we but name over, and recall the work achieved and the impulse imparted by the

DEANS OF RESEARCH IN ENGLAND.

Lord Lister, London, in Preventive Medicine.

Sir H. H. Roscoe, London, in Chemistry.

Sir J. J. Thomson, Cambridge, Physics.

Sir Oliver Lodge, Birmingham, Physics.

Sir William Ramsay, London, Chemistry.

Sir William Slich, Oxford, Forestry.

Dr. Silvanus Thompson, London (Guilds School), Physics.

Dr. Ernest Rutherford, Manchester, Physics.

Sir James Dewar, Cambridge, Chemistry.

What then is Research?

1. *It is a great National Asset.* Think of what it would be to have a hundred men of high attainments and practical skill working under favorable conditions in Canada upon the hundred problems to which we have referred. Yes, we have had them, but we did not set them to work on our National Science problems. Our Commission met Canadians highly educated and occupying places of scientific distinction in twos and threes in New York, Cornell (Ithaca), Johns Hopkins (Baltimore), Washington, Pittsburgh, Buffalo, Madison, Wis., Minneapolis, Kansas, Missouri, California, Washington State—our brightest minds. From Toronto University alone there have gone to high educational positions in the United States hundreds of Canadians, and I have a list of graduates of the Guelph Agricultural College who have left Canada to hold high