

Nice view of a taper heel, don't you think, Rags?

And notice the converging fashion marks as well, Terry. Very slimming to the leg, and only found together with



SY-METRA Full Fashioned Hosierv

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THE UNIVERSITY AT THE CROSSROADS

(Written for "The Listener" by PROFESSOR I. A. GORDON)

FEW weeks ago I wrote a in the discovery of very gloomy article on the University. This week I hope to be more cheerful. Not that the causes of gloom have disappeared. Far from it. Our college roll at Victoria is over 2,000. My first-year class of 320 packs in somehow. There is talk of an increased grant . . . there is talk of army huts. But there was an item in the newspapers recently which overshadows these rumours, though its significance may not have appeared obvious. New Zealand is sending a group of four representatives to a conference of the Royal Society of London, the oldest organisation for scientific research in the world. The four men are the secretary of the Department of Scientific and Industrial Research, the head of the Cawthron Institute, and two University Professors, of chemistry and of bacteriology. This official recognition of the place of research work in the University, is welcome and timely, for the Dominion must soon make up its mind whether university work in this country is to go forward or go back. The answer lies almost entirely in the facilities provided for research.



What differentiates university education from every other kind of education is the emphasis laid on original work. There are many things to be done in a university. The duty of teaching and examining, the training for certain professions, the reassessment of the values on which our civilisation is built, the scholarly and balanced analysis of problems in science and economics and other fields of social significance—all of these fall to the lot of the university worker. But there is one thing common to all subjects and all departments. The true university worker is continually extending the frontiers of knowledge. He is a specialist, who knows something thoroughly, not because he has read it carefully in somebody else's text-book, but because he has done original work on the subject himself. This is why such stress is laid all over the world in appointing people to university work on concrete evidence that the man or woman is capable of independent work, whether it be in discovery or in judgment or in critical insight. What is research? I suppose to many people it is a new discovery, say in biology or in physics, like penicillin or the atom bomb. This is only one side (though a very important side) of research. Research is the application of critical intelligence and independent judgment to any problem that is capable of systematic study. Sometimes its "usefulness" is obvious, as

a new drug. Sometimes its "usefulness" is not so immediately apparent. Half an inscription is



turned up in Asia Minor; some scholar works out the details of Elizabethan printing. Who cares? For the moment perhaps only a handful of men and women; though the final result may be a revolution in our conception of history or a new insight into the plays of Shakes-

Fundamental and Applied Research

Scientists make the distinction between fundamental and applied research, fundamental research with no "practical" end in view, applied research with the practical job of finding a specific product such as a new plastic. It is significant that applied research can be built systematically only on a basis of fundamental research, which so can turn out in the end to be remarkably practical. A good example of this is in psychology, where the findings of fundamental research on the working of the human mind have in workshop and factory exceedingly useful results in the applied research of Industrial Psychology.

Research does not stop here. Insight and independent judgment set to the problems of politics, education, economics, history, literary criticism (to name but a few of the fields of human endeavour) all come within its scope. In the humanities, research often produces not so much new facts as a new synthesis, a new interpretation, and an original point of view.

A Choice Must be Made

To-day the University in this country stands at the crossroads, and a choice must be made which is of profound significance for the future of New Zealand. Does the University continue, as it has largely had to do in the past, to provide only the basic training for young undergraduates in the sciences and the liberal arts, or are we to develop in addition a research programme that will bring us in line with universities As a teaching institution. elsewhere? concerned with the primary training of young men and women, the University has (in spite of its obvious disabilities) done and continues to do a good job. Our young graduates are in most subjects up to English standards of competence and training and can compete on equal terms. But beyond that stage there is little or nothing. Staff and graduate students who look towards advanced work in their subjects are faced with the inadequacy of New Zealand libraries, the poverty of equipment, and the lack of contact with co-workers. As a