

It is not my intention now to indicate how this may best be done, much less to dictate the steps to be taken by our Universities that within their halls agricultural sciences may be adequately recognized. I feel assured that if the governing bodies once realize that agricultural research work is worthy of university men—and their best men—ways and means will be forthcoming to find a place for it on their curricula.

In the mean time, there is one matter that I should like to emphasize; it relates more particularly to the work I am personally interested in—chemical work. It is the desirability of greater care and thoroughness in the teaching of analytical chemistry at our universities. I speak feelingly on this subject. Perhaps it is that this branch of chemistry is relegated to juniors who themselves are not well trained; possibly the classes are too large for close supervision and the individual guidance of its members, or possibly that analytical chemistry is not the vogue of to-day or thought very highly of in our universities as a part of a chemical education and therefore somewhat neglected. But whatever the cause, the fact remains that the larger numbers of our honour graduates in chemistry as they leave college are miserable analysts. They give little evidence of having been carefully trained in technique and manipulation. Their use and handling of apparatus and the conduct of analytical work is far from satisfactory. We ought to expect from these men a knowledge of correct methods in weighing, filtering, incinerating, the use of volumetric apparatus, the making and putting together of simple apparatus, and other every-day laboratory operations in analytical work, but they work as if they had "picked up" all the knowledge they have on such matters. The graduates of the English and Scottish Universities, I am sorry to say it, exhibit much better training; at least that is my experience. Reliable results, I am confident, cannot be obtained from sloppy, slipshod manipulation. In agricultural research work extreme accuracy is required—the highest accuracy obtainable. In this, I presume, it differs from much control work in manufacturing concerns. An error of .02 per cent in the amount of available potash in a soil may throw us all astray in the interpretation of the data. We do not expect from our recent graduates a knowledge of special methods used in agricultural work, but we do expect that the men should be able to perform correctly and fairly rapidly and with good technique those operations which form a part of all analytical procedure. And, if I may be permitted to say it, to give the men a hurried course of a fortnight or so towards the close of the college term in which a soil, a fertilizer, a cattle food and a dairy product is "put through" is worse than useless. The experience is, indeed, for it means