goes to the Agricultural College with the intention of following some branch of farming as his life's pursuit, his intellectual training will be *best* got by studying those scientific subjects which directly bear upon, or lie in the foundation of, the practice of farming as an art. Now even the simplest conception of farming requires the following subjects for its scientific explanation: geology, chemistry (inorganic and organic), botany, and vegetable physiology. And if we go a little farther, and take with farming its ordinary accompaniments, stock-raising, dairying, fruit-growing, etc., then the following scientific subjects are required in addition: animal anatomy and physiology, veterinary pathology, entomology, and bacteriology. These branches of pure science therefore, and their application to the practice of farming as implied in the subjects of agriculture proper, dairying, horticulture, live-stock practice, poultry practice, and apiculture, must constitute the body of every farmer's scientific education; and we find that these *are* the subjects prescribed in the two years' course at the Ontario Agricultural College.

But the farmer is not to be merely a skilled workman or artisan. He should also have *the power of expressing his own thoughts* clearly, and of following quickly and easily the thoughts of others, whether expressed in prose or poetry, and whether for purposes of learning or of enjoyment; that is, he should have had practice in English grammar and composition, and have made some study of literature. Again, he is to be *a business man*, and should know how to compute all sorts of ordinary measurements and values; that is, he should know the ordinary forms and methods of keeping accounts and transacting business (in other words, understand book-keeping), and have a knowledge of arithmetic and mensuration. He should also know how, when necessary, to express his ideas pictorially as well as by verbal description, as, for example, in drawing plans for buildings, outhouses, implements, etc. (no more useful knowledge than this); that is, he should have acquired some facility in drawing. He should know, too, something about the principles by which trade and commerce are carried on, and the principles upon which our system of monetary exchanges is based; that is, he should know something of political and social economics. Lastly, he is to be *a citizen*, and should have some acquaintance with the principles upon which modern governments (municipal and national) are (or ought to be) car-

Individual Practical Work in Botany.
Professor Panton supervising his class in the work of dissecting flowers, and describing their parts by drawing.