

The cost of students has been somewhat larger than last year, owing to the higher price of meat during the latter part of 1890, and in consequence of an increased outlay for fuel, owing to the labour troubles of the same period. For the six months, July to December, 1890, the cost for food, fuel, and light was £12 12s. 2d. for each person in the establishment, and for the last six months £11 7s. 7d., or a total of £23 19s. 9d. per annum. Adding to this servants' wages, the cost was for the year £38 1s. 5d. for each student and member of the teaching staff; or, compared with the cost at Dookie College, adopting the same method of calculation, and including the same items, which resulted in the figures given by the late Royal Commission, the cost was: Dookie, 1889, £25 2s. 6d.; Lincoln, 1889-90, £27 3s. 5d., and 1890-91, £28 19s. 8d.

The College buildings are all in good order. Some improvements, such as the provision of a room for the farm overseer, were found necessary, and there was some expenditure upon improving the drainage, by which the whole of the drains can now be thoroughly flushed; but there will be little expenditure required next year beyond a little painting and casual repairs. It has been found necessary to furnish several bedrooms owing to the increased number of students, the cost of which was not included in the estimates.

Farm.—The farm year has been a most unsatisfactory one in consequence of the drought. The rainfall for 1890 was only 14·836 inches, the average being 26·739 inches (see meteorological tables, Appendix 3). All crops looked very well until November, but then began to suffer. The yield was the smallest yet harvested (see Appendix No. 5). Not only did the grain suffer, but grass, clovers, and green crops likewise, and, added to this, our turnip-crop, which promised exceedingly well, has been all but destroyed by the caterpillar of the diamond-back cabbage-moth (*Platella cruciferarum*), so that we have only about two-thirds the number of sheep we usually carry during the winter. The returns are therefore poor. But, beyond this, all experimental work initiated has been without reward. Nothing is much more disheartening than finding a season's time and trouble giving no results. Especially was this the case with the numerous manure experiments (see Appendix No. 8), but even the large number of wheats sown could not be judged as to value. The number of varieties of wheat has been increased to some eighty-five (see Appendix No. 7). I am indebted to Mr. Farrer, of Queanbeyan, New South Wales, for a great number of these wheats; others have come to me from England, America, Australia, and New Zealand. Of the hundreds of varieties of wheat tried on the farm (see former reports), but few have shown more useful qualities than those ordinarily grown and acclimatised in the colony. In fact, it is seldom that an imported wheat can be properly judged the first or second year of growth here. However, all but one of the wheats grown on the farm in the ordinary course are the produce of samples imported quite lately either by myself or others.

The new shearing-shed has been completed, and fitted with Wolseley shearing-machines. It has proved a great convenience to us. All the farm-buildings, machinery, and implements are in good condition, though more shed-room is required for the latter. We may be able to add to the available space during the year, under the supervision of the farm mechanic.

The only addition of importance to the implements has been the strawsonizer. This invention answers its purpose admirably, both as a distributor of manure and as a sprayer. This adds another to the number of implements first introduced on this farm. Of those more or less in general use, and which were first used here, may be mentioned the digging-plough, the disc-harrow, the water-drill, the cream-separator (in its early form), the hay-sweep, &c. The strawsonizer was specially imported with a view to trying to protect the turnip-crop from the cabbage-moth caterpillar already mentioned, but all applications have failed. These comprised kerosine emulsions and arsenical solutions of various strengths. The fact that the caterpillar works on the underside of the leaf presents a difficulty to treatment by spraying, but it was thought that by poisoning the leaves the caterpillar would be killed on reaching and feeding upon the poisoned spot. The increase of the insects was, however, so rapid that no practically good effect was noticeable. Birds, particularly the starling, collected in the infected crops in great flocks, but without perceptibly checking the ravages of this pest, which this year not only consumed all the leaves, but even penetrated the bulbs, often to the depth of a $\frac{1}{4}$ in. This attack is a most serious matter, as it materially affects the winter supply of mutton for freezing and export.

Much work has been done in improving the lower part of the farm in draining springs, filling up dangerous swampy places, which there abounded, and in general levelling, &c. This work has been continued every autumn whenever horses were available, and, I am glad to say, with results which are now very visible in the improved appearance of this portion of the College estate. I am not sorry to be able to say that there is not much more similar work to be done, as there is little to show for the expenditure to any one not thoroughly acquainted with the former condition of this part of the farm.

The supply of water in the water-races has not yet been sufficient to enable us to irrigate even experimentally, for which purpose, no doubt, the Selwyn County Council would have allowed us to use superfluous water. I understand that the supply will be next summer greatly increased, so that irrigation experiments projected some time since may then be put in hand. Last summer being an exceptionally dry one, the demand for water was greater than the races could always supply, so much so, that I had actually to cart water for some of the stock in November last. Under such circumstances it would be folly to attempt irrigation.

The sheep-crossing experiments have been continued, and promise fairly well, especially where there-fourths Leicester blood has been used. The half Leicester and merino crosses have not kept their size, though the quality is excellent. For netting on turnips I much prefer the three-quarter Leicester type, where the coarser woollen sheep have been rigidly culled.

The reports of the examiners in practical agriculture upon the farm, &c., have been before you.

Besides the various experiments with manures on roots and grain—those on wheat being given in detail in Appendix No. 7—many connected with the germination of grain under different condi-