

It will be recognized that at an institution such as a mental hospital the provision of an ample supply of milk is essential. For this purpose, as already indicated, a herd of fifty cows is maintained at Tokanui. A number of these are registered Shorthorns, the sire being from imported stock. Naturally the farm also provides the inmates of the Hospital with potatoes, vegetables, fruit, &c. It is proposed in future contributions to deal with the growing of root crops and lucerne, dairying, &c.

SELECTION OF SEED-POTATOES.

By W. H. TAYLOR, Horticulturist.

THE significance of the old saying "Like begets like" is doubtless appreciated by every one, yet very few apply the principles involved to so important a crop as are potatoes. It is quite common experience for a farmer to grow an admirable crop for one or two years, and then a very meagre crop. Bad seasons or something too mysterious to be understood is usually set down as the cause.

There are doubtless a number of factors that may be at work to cause failures, and some of these may be beyond the powers of a grower to alter. It is well known that environment and soil have effect on tubers for seed purposes, but little or nothing is known on that phase of the question as it affects potato-growing in New Zealand. That environment does have great effect is proved by the transformation that takes place, for instance, in the well-known variety Up-to-Date. In the South Island, particularly in Otago, it exhibits its true form, a half-round with a somewhat rough skin. Sets obtained from there and planted in the North Island produce fluke-shaped tubers with a smooth skin. This alone is evidence of the need for investigation. In other ways there is no lack of information or knowledge, and many failures can be distinctly traced to bad practice. It is a general custom to select the seed-tubers from the crop after it is harvested. All sizable tubers are sold; the discards are then sorted, and those large enough are kept for seed. The sets are all small; although most of them are fair seed-size, some are really too small, but would be good enough if they were of a good strain.

Unfortunately, it is practically impossible to keep a strain strong by such methods of seed-selection. When a crop is lifted some of the hills give nothing but small tubers, while others give a preponderance of small ones with a few large. In both instances there is evidence of deterioration or possibly disease. Hills that are good have but few small tubers. It is evident that when seed is saved in an indiscriminate manner many of the tubers will be from hills that have shown deterioration, the proportion being dependent on the extent of such deterioration. The longer the process is carried on the weaker the strain becomes. It must be evident that this indiscriminate way of saving seed-tubers is attended by very grave risks. Even if large or medium-sized tubers were selected in place of small ones there is an almost undiminished