

ON THE LAND

THE CALIFORNIAN THISTLE.

The Victorian Agricultural Department's official journal says, regarding this pest:—

"Californian thistle (*Carduus arvensis*, L).—Plough deeply in autumn and spring, raking out the rhizomes after harrowing and rolling to break the clods. Summer fallow, ploughing when necessary. Next season plant a potato or other root crop which allows working between the rows, after adding ten to fifteen tons of farmyard manure per acre. This should be followed by any crop (drilled maize, cabbage, etc.) between the rows; then a grain crop, after which the land can be seeded down again in grass or clover, or both mixed. After this, any thistles reappearing will be from seed blown in from adjoining land or from impure seed. Where there are only a few thick patches, these can be dug deeply and the rhizomes forked out, piled, and burnt, the thinner patches being hand-pulled after rain or out as often as possible. Only continuous and well-directed labor extending over two or three years can clean land of this thistle."

A correspondent of the *Age* who has a thoroughly practical acquaintance with this thistle, and recognising the wrong character of the above directions, wrote to the department describing the issue of such advice as cruelty to landowners, and offered to send details of his practice, which had been proved successful by its results. The reply was a curt letter to the effect that the directions were by one of its officers who, it was suggested, probably knew more about the subject than the writer of the letter.

A main point in the foregoing is that anyone who has had experience with this thistle knows that the one thing to be avoided is any attempt to get rid of this pest by digging it up. That only makes it grow more vigorously, in sending out a network of roots extending from each plant to the other underground. Any breaking of the land only increases the growth, and grubbing out this thistle is impossible. The only effective method is to shave off the tops with a sharp, broad share as often as they emerge through the surface. A sharp, broad share in the plough without either coulter or mould-board is used. The result of this continued shaving-off process is that the plants die of asphyxiation, and afterwards the netted root growth, which extends deeply and in all directions, dies and rots in the ground.

A special circumstance in connection with this matter is the fact that some years ago, when the rich lands at Bungaree were threatened with ruin owing to the spread of this thistle, the Department of Agriculture expended a considerable sum of money in the employment of a Canadian expert, who was the first introducer of the asphyxiation method, and whose operations were entirely successful. In his report to the Government that officer explained that the ravages of the pest had been greatly increased owing to the attempts made by farmers to dig the thistles out before they were made aware of the proper practice. That report was supplied to the department, and doubtless could be found if searched for.

POTATOES FOR SEED.

Now that potatoes have all been lifted, and the tubers sorted and stored for the winter months, growers should turn their attention to the selection and treatment of tubers intended for seed purposes (says a writer in *Farm, Field, and Fireside*). Any that are to be planted early should be laid out thinly in any light place, with the object of rendering the young shoots or "spears" short, stout, and well coloured. The long, pale-coloured, and weakly shoots that are often seen are quite useless, and, as a general rule, it may be taken that they may be removed; but, on the other hand, the old maxim, "prevention is better than cure," will be well observed here.

Many people advise that seed tubers should be placed in heat for a time to start them, but though

this may be advisable in cold weather, and when time is an object, and the tubers are to be planted indoors, I do not encourage the practice of utilising a warm house or frame for starting tubers to plant subsequently in cold and possibly damp soil.

For all the earlier plantings the best plan is to lay out the seed in shallow trays or boxes of wood, which admits of direct or ready transport to the drills or furrows, the risk of breaking off any of the "spears" being thus reduced to a minimum.

The seed should be placed close together, each with the eye uppermost, and time should be devoted to the rubbing off of all growths but one, the strongest, of course, being allowed to remain on each tuber. The extra trouble will be well repaid by the result.

SUCCESS IN DAIRYING.

Success in dairying is dependent on at least three factors—namely, the feeding, the feeder, and the cows (says a writer in *Hoard's Dairyman*). It would be difficult indeed to say that any one of these is more essential to complete success than the other. These factors are so closely allied and so intricately interwoven that one can hardly be discussed without giving due consideration to the other two. "It always pays to feed a good cow up to her capacity of production, no matter how high-priced feed may be." Assuming this statement to be scientifically correct, it obviously becomes the duty of the farmer to ascertain first whether he has good or poor cows. From the standpoint of production there is only one way to ascertain this all-important matter, and that is by the scales and Babcock test. It seems well-nigh unbelievable that farmers will go on groping in the dark on this important matter, and guessing at the good and poor cows instead of making an effort to learn the facts. The complete satisfaction in knowing whether a herd is a liability or asset comes only to those who are diligently weighing and testing the milk from their individual cows and feeding according to milk production. The heavy producer is fed to her capacity; the low producer is fed commensurately with her production or eliminated from the herd. This knowledge of the individual cows in a herd antedates the relation which exists between the true dairyman and his herd. The dairy cow has been characterised the foster-mother of the human race. As a mother she is deserving of the consideration that can only come from those who know and understand her. This intimate knowledge is withheld from those who guess. The personal element enters as vitally in a dairy barn as in a schoolroom. A herd of dairy cows can no more be treated as a unit with complete success than a classroom of boys and girls can be taught and disciplined with the same tactics. That inadequate feeding is responsible for low production and unprofitable cows cannot be gainsaid, but before the method of feeding will be changed the feeder must undergo conversion. No doctrine will effect this conversion so completely as "business methods"—not an elaborate set of books nor a specialist to keep them, but just ascertaining by a few simple records whether Betsy is keeping the dairyman or the dairyman is keeping Betsy. These facts compiled by the dairyman from his own herd, and with his own knowledge, will make him a good feeder quicker than the most eloquent lecturer or longest array of experimental station data. When the dairyman begins keeping records on his herd his vision clears. He learns from hard facts and figures that cows have individuality and must be treated as individuals. This knowledge is the forerunner of better feeding, better care, greater interest, and ultimately greater profit.

It's most provoking to find, after moving, that your furniture has been scratched or otherwise injured as the result of unskilled work. Get us to remove it, and ensure careful expert handling. We have letters from people in all parts of the Dominion telling us how well we have removed their furniture. The New Zealand Express Co., Ltd.