## LUCERNE - CULTURE.

## CENTRAL OTAGO EXPERIENCE.

Among the lucerne hay shown in the Department's winter-show exhibit this year were samples grown by Mr. J. M. Love, of Galloway, Central Otago. A stand of 25 acres of lucerne has been established by Mr. Love at his farm on the Manuherikia River, concerning which Mr. A. Macpherson, Fields Instructor for the South Island, supplies the following note:-

The area was sown broadcast in the spring of 1914, the seeding being 14 lb. per acre. The first year the crop was cut and left as mulch; the second year two cuts of hay were obtained, and the lucerne was afterwards grazed with sheep, 950 being carried on the area for four months and a half (August to middle of December, 1915). A crop and a half-crop of hay was afterwards secured, the last cut being ob ained in March, 1916. A mob of sheep was then put on to fatten (middle of March to middle of May). The soil is a light sandy loam, with a free subsoil, and is eminently suitable for lucerne-growing. Mr. Love has secured eight stacks of excellently cured lucerne hay, and estimates that he will have about 60 tons of hay, for which a ready sale is assured in Dunedin. Besides this he will have sufficient hay left to keep an increased number of cattle and sheep in abundance of feed until next spring. Mr. Love is of opinion that lucerne alone is too laxative for feeding ewes with lamb. He had no trouble, however, in grazing other sheep, and had no bloat. The feeding-off with sheep in this case, however, has allowed the grasses and weeds to come away, which will be a source of trouble in the future.

## LUCERNE AND CALIFORNIAN THISTLE.

The Department is conducting several tests for determining the power of lucerne to smother out Californian thistle. interim report on two of these trials now proceeding in Taranaki under the co-operative experiment system is furnished by Mr. A. F. Wilson, Fields Inspector, Stratford, as follows:-

Mr. P. J. Groshinski's Area, Te Wera.—This land was limed and ploughed on the 16th November, 1915, but it was too wet to sow until 29th December, 1915. Before sowing the ground was well worked. The lucerne took well, and was cut twice, when 12 in. and 18 in. high respectively. After the last cutting it got away from the thistle. On 17th April, 1916, the owner put his weakly lambs on the lucerne, and they did very well on it; it stopped their scouring, and they did much better than other sheep on rape and pasture. Since Mr. Groshinski