

ON THE LAND

MARKET REPORTS.

At Burnside last week there was a large yarding of fat cattle, numbering 195 head, a good majority of which consisted of fine quality cattle. The sale opened with competition fairly keen, and the yarding was disposed of at prices on a par with the previous week's rates. Quotations: Prime bullocks £19 to £22 10s, medium £15 to £17, light and inferior from £9 upwards, prime heifers £12 to £14 10s, medium £10 to £12, aged from £7 upwards. Fat Sheep.—A large yarding, numbering 3200 head, consequently the market was over-supplied and prices for heavy sheep showed a decline of from 1s to 1s 6d per head, while lighter sheep showed a further decline of from 2s to 2s 6d per head as compared with the previous week's rates. Quotations: Extra heavy wethers to 32s 6d, heavy wethers 24s to 27s, good wethers 20s to 23s, lighter 14s 3d to 17s 6d, prime ewes to 22s 3d, good ewes 18s to 21s, light and aged ewes from 12s upwards. Pigs: A small yarding of mixed sorts. Competition was active, and the prices realised were well up to the previous week's rates. Best baconers made from 8½d to 9d per lb, and best porkers from 8½d to 9½d per lb.

Messrs. Donald Reid and Co. report as follows on their sale of rabbitskins, etc.:—Our regular fortnightly sale was held on Monday, when large catalogues were submitted to a full attendance of buyers. Though bidding was rather slow, skins were disposed of at on a par with previous sale's rates. We quote: Super winter does 70d to 78½d, first winter does, 62d to 69½d, second winter does 54d to 61½d, outgoing winter does 30d to 40d, super winter bucks 64d to 68½d, first winter bucks 56½d to 63½d, second winter bucks 42d to 55d, outgoing winter bucks 21d to 36d, incoming winter 53d to 59d, late autumn 39d to 45d, early autumn 24d to 36d, prime racks 12d to 13½d, light racks 9d to 10½d, summer 7d to 9½d, small 2d to 4d, prime winter black 100d to 119d, first winter black 75d to 98d, second winter black 60d to 70d, prime winter fawn 44d to 48d; autumn fawn 20d to 28d, mixed fawn 11d to 18d, first winter broken 20d to 24d, second winter broken 16d to 19d, mixed broken 3d to 12d, hareskin 14d to 19d, catskin, 2d to 6d.

POTASH FERTILISERS.

The English Board of Agriculture has just issued a timely leaflet (No. 335) on potash, and every gardener should obtain a copy (says *Popular Gardening*). The want of potash is particularly great in all light, porous, sandy soils; in clayey stiff loams there is essentially present a certain percentage of potash, not often readily available for plants, but certainly present there.

Of our garden crops which benefit greatly from potash, among the most important are potatoes, root crops of all kinds, peas, and the cabbage tribe; but all our plants need potash in order that they may be able to use the other manurial foods supplied to them. Plants, unlike many animals, cannot live on one or two foods alone; they need certain well-defined chemicals for their development, and no amount of one or two will "tell" unless a suitable proportion of all the others is there. If, then, we want our plants to absorb the phosphates and nitrates supplied we must also give them potash.

The cheapest potash fertiliser is kainit, but this, being slow-acting, is best used in the autumn. Sulphate and nitrate of potash should be used in spring roughly at the rate of 1cwt to 2cwt per acre—i.e., not over an ounce to the square yard, or, say, about 1½lb to the square rod. The manures are scattered over the soil and raked into the surface, or simply left on the surface to be forked in later or washed in by rains. As a rule they are best applied a few weeks before cropping.

The average reader is not likely to require more than a few stones of the manures, although if he buys more, he can store them quite well in a dry place. Both salts should have a guarantee of 48-50 per cent. potash, or muriate of potash, should have 80 per cent. purity—i.e., 80 per cent. pure muriate—and sulphate of potash 90 per cent. purity—i.e., 90 per cent. pure sulphate.

A NEW RIDDLE OF THE SOIL.

How to harness the organisms of the soils was one of the fascinating pieces of unpublished research work shown at the Royal Society to a *Daily Chronicle* (London) representative. This work of the highest importance to agriculture, is carried out in the Government laboratory at Rothamstead, under the direction of Mr. Cutler. "For a series of 200 days," said Mr. Cutler, "we have been taking records of these organisms, and the results are remarkable. First we showed by our experiments the presence in the soil of these organisms, and we are continuing our investigations to ascertain their life and their effects upon each other.

"It has generally been held that the little things called amoebae, of which one can get as many as 400,000 in one gramme of soil, live upon the bacteria in the soil. That is the case, but how far one set can control the other has not been arrived at.

"We have been making daily counts of the bacteria and the protozoas in natural field soil, and allowing the one to devour the other, with the result that we can show on records a curious inverse relationship between the numbers of the active amoebae and of the bacteria. It seems that the microbes are devoured by the other organisms up to a certain point, and then inversely the amoebae numbers fall, and so on.

"Why this is so is not known, but if this reproductive rhythm could be controlled farmers and consumers would be in a much happier position than they are to-day."

HAY-CROPPING ROTATION.

Tests carried out by the Victorian Department of Agriculture since 1913 with the object of determining the most profitable cropping system for the production of oaten hay, have shown that the average yield of hay could be greatly increased with profit to the haygrower by the adoption of a good system of crop rotation. During the past seven years the yields of hay have grown after bare fallow and after barley and bare fallow have been more than double the yield of the field on which hay was grown continuously.

The average annual net profit based on the capacity of a 300-acre farm, after allowing all costs, including labor, seed, manure, rent of land, and interest on capital, was as follows:—Hay grown continuously, £184; hay after bare fallow, £380; hay after barley and bare fallow, £314; hay after barley and peas, £120.

IMPROVING CONDITIONS.

A distinct improvement in the economic situation—as applied to Farm Implements, is at last indicated by the substantial reduction in prices recently put into effect by that well-known firm, BOOTH, MACDONALD & CO. LTD., whose line of Carlyle Farm Implements has established itself throughout the Dominion as one of the factors essential to success in N.Z. farming methods. Catalogue and latest price list will be posted on application, and the firm will be obliged if this paper is mentioned when enquiry is made.

COLLECT OLD STAMPS

Rev. Father Westropp (per Bert Gallien, Dunedin) begs to acknowledge parcels of stamps from the following:

E. S.; Mrs. H., Morrinsville; A. & D.C., Hildershorpe; Miss H., Sth. Dunedin; Mr. J. McD., Otago Central; Miss K. McC., Ashburton; M. J. F., Waikuaaiti; M. C. H., Marlborough; Miss J. H., Hinds; Sister P., Pukekohe; Sister M. B., Ohakune; Sister M. P., Port Chalmers; Miss B. M., Winchester; K. T., Mornington; A.L.R., Orepuki; J.W.H., Winton; Miss F., Oamaru; Mrs. O'D., Hastings; Miss N. A., Sth. Dunedin; Mrs. J. H., Marlborough; Miss M., Stratford; E. S., Pahiatua; Miss B. H., Wai-iti; F.E.B., Karawarewa; Master J.D., Pungarehu; Miss J. Q., Mangaonaho; Miss C., Fruitlands, O.C.

Readers of *Tablet*.—Please continue to send me stamps. Your parcels will be acknowledged in these columns.

B. GALLIEN,

N.E. Valley, Dunedin.