A good deal of the country about here has been tutu and fern land, and possibly represents old Maori clearings.

In spite of the great coarseness of these Kaharoa and Te Pu soils there are mitigating circumstances which improve the prospects of the settler on these lands and reconcile him to his lot. One would think that the climate is warmer and the land more sheltered from winds than are most pumice lands, but the great factor in combating adverse soil conditions must be the proximity of land free from bush sickness and suitable for change paddocks. One other factor is the freedom from the counter-attraction of more remunerative forms of industry. There is no sawmilling trade or tourist traffic to absorb the energies of the settlers, and consequently the community is purely a farming one; the interests of all are identical. The visitor is impressed with the fine type of settlers and the way they are combining for the common good; so that even on the worst class of country-the soil of which is so coarse and dry that the stock have to be changed twice a yearthere is a healthy optimistic tone about the district which is most cheering and helpful to the investigator of a difficult problem.

## CLEANING OF MILKING-MACHINES.

J. W. SMITH, Dairy Instructor, Palmerston North.

In the course of his visits to farms for assisting and instructing farmers in dairy-work the writer has found many and varied methods of cleaning milking-machines in vogue, and is satisfied that there is a laudable desire on the part of users to keep their machines in a clean condition, and to carry out the work in a way which will ensure the longest possible working-life of all parts, particularly the rubberware.

In many cases more time is spent on the work of cleaning than is really necessary, the life of the rubbers is shorter than need be, and, in addition, too much faith is placed in the supposed merits of more or less costly commercial preparations for cleaning dairy appliances. Some cleansing-material is necessary to remove greasy deposits left by the milk, and no material will effect this more thoroughly or at a lower cost than a solution of soda. Either washing-soda or caustic soda may be used. Care and judgment must be exercised in using soda solution, for should any get into the milk the effect is disastrous, especially when the milk is for making into cheese. Furthermore, damage may result to the machine or other apparatus to which a soda solution is applied if the latter is not promptly and completely removed after use.

## THE CAUSTIC-SODA-AND-BOILING-WATER METHOD.

Of the many methods which have come within the writer's experience he would direct special attention to the caustic-soda-andboiling-water method, which a number of practical farmers have been using for about two seasons with excellent results in respect to the sanitary condition of the milk, the cleanliness of the machine, an extended life for the rubberware, and a considerable saving of time.