a large amount of soil for examination. Mr. Green, Manager of the farm, writing in September, 1915, states, "This class of soil remains practically dry throughout the winter. After heavy rain the water lies on the surface and will not penetrate into the soil. It is difficult to secure a crop there, owing to insufficient moisture to germinate the seed. The soil is apparently full of rotten wood. If ploughed and left for a few months sorrel appears and spreads, making a thick mat of roots. The method I am adopting to bring this land into cultivation and to prepare it for permanent pasture is to apply lime and sow with rye-grass for the present; then stock heavily, feeding out mangels and hay during winter. I should be pleased if you could arrange to have the soil analysed, and would be glad to receive any suggestions as to treatment."

The soil contained the following constituents, calculated on the sample dried on the water-bath:—

	Per Cent.
Loss on ignition	34·740
Total nitrogen	0·726
Hydrochloric-acid extract—	
Phosphoric acid (P_2O_5)	0·132
Potash (K_2O)	0·041
Lime (CaO)	0·189
Magnesia (MgO)	0·069
Citric-acid extract—	
Phosphoric acid	0·074
Potash	0·024

I reported that the sample was a humus soil rich in available mineral plant-food, and suggested as a form of treatment an attempt to consolidate the ground by close stocking and feeding on the dry areas, thereby consolidating the soil by tramping and manuring the organic (peaty) matter of the soil by the animals. It will be seen that if one could imitate the action of the pestle and mortar on the soil during rain the same beneficial result might ensue as when the soil is so treated in the laboratory.

The next step was to examine the effect of exhausting a large quantity of the soil by a solvent. Some 30 lb. of the soil dried on the water-bath was therefore extracted by alcohol in an apparatus in which a constant stream of hot strong alcohol was allowed to percolate through the soil. The alcoholic extract on cooling deposited a mass of yellowish crystals of a scented wax which was found to be present to the extent of 0·8 per cent. of the dried soil. The air-dried crude wax commenced to melt at 65° C. and