

Meteorology.—Wind, dew, mist, and cloud. The barometer, thermometer, anemometer, and rain-gauge; methods of observing; atmospheric pressure; prevailing winds; temperature; distribution of rain; causes of variation in climate; influence of ocean currents; influence of mountains; laws of storms; characteristics of the New Zealand climate in relation to agriculture, &c.

Mechanical Drawing.—Drawings of parts of machinery, as toothed wheels, &c.; drawings illustrating construction of roofs, floors, &c.; plans and elevations of farm and other buildings.

TIME-TABLE.

Hours.	Monday.		Tuesday.		Wednesday.		Thursday.		Friday.		Saturday.	
	1st Year.	2nd Year.	1st Year.	2nd Year.	1st Year.	2nd Year.	1st Year.	2nd Year.	1st Year.	2nd Year.	1st Year.	2nd Year.
A.M.												
9 to 10 ...	Farm, carpenter, land-surveying, and book-keeping, as per "group" time-table.	Mechanical drawing	Meteorology	Farm and blacksmith, as per "group" time-table.	Physiological laboratory	Farm, &c., as per "group" time-table.	8.30 to 10—Chemical laboratory	Farm, &c., as per "group" time-table.	Book-keeping	Farm, &c., as per "group" time-table.	9 to 11—Examination.	Examination and farm, as per "group" time-table.
10 to 11 ...		Chemistry ...	Chemistry ...		10 to 12—Biological laboratory		Veterinary		Chemistry ...			
11 to 12 ...		Agriculture ...	Agriculture ...		...		Agriculture ...		...	
P.M.												
1.30 to 2.30		...	...		Chemistry ...		Veterinary ...		...	
1.30 to 3 ...		Chemical laboratory	Chemical laboratory		...		...		Chemical laboratory			
2.30 to 4 ...		...	...		Surveying and plotting		Mathematics		...			
3 to 4 ...		Botany ...	Geology ...		...		...		Geology ...			
4 to 5 ...		Mechanics ...	Mathematics		...		Botany ...		Physiological chemistry			

APPENDIX G.

SIR,—

School of Agriculture, Lincoln, 13th December, 1880.

In reply to instruction, I have the honour to submit my views as to the requirements of this school with respect to the teaching of natural-history subjects.

The subjects which should be taken by the Instructor in Natural History are as follows: Vegetable physiology and botany, physical geography and geology, entomology and ornithology, microscopy, horticulture, forestry, agriculture. His duties in connection with these subjects would include investigations into (amongst other questions) the life-history of injurious fungi, such as rust, of insect-pests as the aphis, turnip-beetle, &c., the value of birds, the adulteration of seeds, &c. There would naturally fall under his superintendence the botanic garden, kitchen-garden, plant-houses, plantations, forest-tree nursery, orchards, museum, and portion of experimental grounds.

In order to teach natural-history subjects in an agricultural school, it is, in my opinion, absolutely necessary that the teaching should be, as far as possible, brought into close connection with the conditions existing on the farm, and should largely consist of demonstrations in the field, as well as that the subjects should be treated of in the lecture theatre. For instance, the instructor in botany and vegetable physiology should illustrate and amplify the lectures by field classes, during which the habits of not only the cultivated plants, but more especially weeds, might be investigated. The same might be said with respect to entomology and other subjects: aphis, caterpillar, rust, &c., when they occur, must be brought under the student's notice *in situ*, their progress must be followed day by day, and there, upon the ground, should be applied what may have gone before in the lecture theatre. Then will the average agricultural student assimilate the lesson.

There are also many indoor experiments with growing plants that if conducted would go far to impress upon the student's mind many physiological facts connected with the feeding of plants and their growth generally. Such experiments would require time and supervision. Students should also be made familiar with the structure of plants. This can only be done by repeated demonstration with the microscope. The school should give a short course in horticulture. Very few people know how to graft or even prune a fruit-tree.

Forestry, again, is almost an unknown science. Bee-keeping, too, is a considerable industry in America, and a knowledge of the best systems might with advantage be imported.

Any one to do the work above set out would find it necessary to be at the farm every day during the week, and, if he had his heart in his work, would find the time at his disposal none too long.

In my report of the 25th September last I advocated, and gave my reasons for so doing, that all the instructors should be under the control of the Director of the school, and that they should be resident.

The Chairman, School of Agriculture Committee.

I have, &c.,

W. E. IVEY, Director.

APPENDIX H.

SIR,—

School of Agriculture, Lincoln, 28th September, 1880.

In accordance with your instructions, I have the honour to report my views with respect to the teaching staff required for this school.

The subjects that should be taught are as follows, and may be classed in five divisions, viz.: (1) Agriculture; (2) chemistry and physics; (3) vegetable physiology, botany, entomology, geology, and physical geography; (4) mathematics, mechanics, book-keeping, land-surveying, and levelling; (5) veterinary medicine and surgery. An instructor is required for each of these divisions.