in this way will produce the best educational results. We find that geometrical drawing is still taught on the old methods, and not applied to exercises requiring a grasp of geometrical principles. To be of any value the geometry must be applied to the construction of designs, patterns, plans, geometrical solids, and so on. For the ordinary school geometry we desire to bring under the notice of teachers "Preliminary Geometry," by Rawdon Roberts (Blackie and Sons, 1s.), and for more advanced exercises "Geometrical Drawing and Design," by J. H. Spanton (Macmillan and Co.).

Classes in more advanced handwork, including elementary agriculture, woodwork, botany, ambulance, dressmaking, swimming, science, &c., were recognised in twenty-one cases. At the Stratford District High School, where a centre consisting of rooms for science, woodwork, dairying, and for general purposes was established two years ago, pupils undertake a wide range of subjects, including woodwork, 2 classes; botany, 2; dressmaking, 1; science, 3; and dairying, 2. In dairying, in addition to classes for pupils of the school, during the winter holidays classes of a fortnight's duration were held for pupils from neighbouring schools, and were well attended. We cannot speak too highly of the way the staff have put their hearts into the work, and we believe that, as time goes on, their efforts will be more and more appreciated by the general public.

As we have received numerous inquiries as to the programme of work for dairying, it is evident that the desire for instruction in dairying is spreading; and for general information we here give the course which has been adopted: 1. Composition of milk—Water, fats, albuminoids, ash. Variation in quality in different breeds of cattle. 2. Structure of udder; milk-secretion; effect of cow's physical condition; variation in quality during period of lactation, colostrum, variation during one milking; importance of complete removal of milk; retention of milk; regularity and time of milking; methods of milking—wet and dry milking; treatment of cows, benefits of gentle handling and kind treatment. 3. Importance of cleanliness in the animal, in the byre, in utensils, in the dairy; means of securing cleanliness; washing prior to milking; the byre, site and structure; the utensils, material and methods of cleaning; bacteria; effect of temperature on germination and fermentation; sterilisation; pasteurisation; absorption of odours, &c., by milk. 4. The keeping of milk, cooling, stirring, aeration; mixing milk of successive milkings; carriage of milk to the factory; the dairy—site, structure, ventilation, and temperature. 5. Testing cows for the purpose of securing a good milking herd; breed of milking-cows; importance of good pasture and water; flavours and odours due to feeding—remedies; winter feeding; rugging; breeding; effect of age on lactation. 6. Separation of cream; shallow-pan and deep-setting systems; effects of dilution and temperature; the separator; skim-milk testing. 7. Ripening of cream; over-ripening; effect of temperature; testing starters and cultures; Wisconsin curd-test. 8. Churning and butter-making; effects of temperature; kind of agitation; effect of agitation; washing and working; salting; packing; defects in butter. 9. By-products of dairy; butter-milk; feeding animals on skim-milk; precautions in using separator-milk for animals; substitutes for removed fats. 10. Milk-supply; cleanliness, &c., as above; delivery in uniform quality; legal standard of quality; adulteration and detection. 11. Common diseases in milking-cows.

The practical work in connection with the above includes instruction in actual milking. Defective and efficient milking are shown. The milk drawn under different conditions of cleanliness, feeding, stages in any milking, &c., are examined by the microscope, by the lactometer, by the Babcock tester, and by its keeping-qualities, fermentation and sterilisation are shown, and elementary notions of bacteriology taught. The effects of aeration, cooling, &c., are shown by contrast with other samples not so treated, and their effects in the factory tests are demonstrated. Normal milk, cream, and skim-milk are submitted to tests. Milk is passed through a hand separator, and the churn and the butter-maker are used to make butter in small quantities. Each pupil keeps his own samples, numbering them, noting the conditions (cleanliness, temperature, condition of milking, &c.) and noting the results. The primary object of the course is to teach the pupil how to deal with the milk from the time it is grass to the time it reaches the factory—for the success of the dairying industry depends upon the condition in which the factory receives the milk. At the end of the two years' course an idea of the best methods of butter-making is given. Two cows are available for the use of the classes, and the Stratford Dairy Factory has been associated with the Technical School. Pupils visit the factory in order to watch the several processes of treatment, the testing, &c. The course is intended to extend over two years. Pupils are encouraged to bring milk from home, and test it in order to gain information which may lead to more efficient milking, to the better selection of stock, and so on. In this way it is hoped that the knowledge gained at the school will be carried to the homes, and be of general benefit to a most important industry.

It may not be out of place to describe one of the last lessons seen. A cow was brought in, its udder was well washed, and it was milked by one of the pupils. As the milking proceeded the milk was put into bottles with numbered labels attached, and thus were obtained samples of milk from the first drawn to the strippings. These were then tested by the Babcock tester, and the columns of butter-fat in the test-bottles showed in a most striking way the value of thorough and complete milking. The percentages of butter-fat were then computed, and graphs were drawn showing the improvement in the quality of the milk and its increased value as the milking proceeded. Of the practical value of such instruction in a dairying district there can be but one opinion; but we go farther and say that as an educational subject dairying is a valuable means of teaching many scientific principles, and is no mean substitute for a special course in science. A very casual glance at the programme above outlined will convince one that many of the fundamental principles of physiology, agriculture, and general science are taught through the milk as the medium.

We have, &c.,
W. E. Spencer, M.A., B.Sc.,
W. A. Ballantyne, B.A.,
Inspectors.

The Chairman, Taranaki Education Board.