

1908.
NEW ZEALAND.

EDUCATION: MANUAL AND TECHNICAL INSTRUCTION.

[In continuation of E.-5, 1907.]

Presented to both Houses of the General Assembly by Command of His Excellency.

No. 1.

EXTRACT FROM THE THIRTY-FIRST ANNUAL REPORT OF THE MINISTER OF EDUCATION.

MANUAL AND TECHNICAL INSTRUCTION.

CONSIDERABLE progress continues to be made in the several education districts in connection with the establishment and conduct of classes for manual and technical instruction. In districts in which the controlling authorities or the managers, as the case may be, have appointed directors or superintendents there is evidence of a decided advance, in face of many real difficulties and hindrances, towards the goal in view—namely, the establishment of organized technical schools, providing graded courses having a direct bearing on local requirements in the way of science, art, and technology. It is to be hoped that the time is not far distant when attendance at a technical school shall mean not, as has been too often the case in the past, merely attendance at one or two classes, not necessarily connected, but attendance at a definite course of instruction. The advance referred to, while due in some measure to the provision made by the Government for free technical education, has been brought about by the continued efforts of those in charge of the schools, supplemented by the enlightened attitude, in many cases, of employers who have done and are doing a good deal to encourage attendance at classes. Valuable assistance in the same direction has also been rendered by many local bodies, and industrial and trade associations. Assistance of a practical nature in the shape of monetary contributions continues to be received by controlling authorities and managers. These contributions are to be regarded as evidence of local interest in the work, and, with the Government subsidy of £1 for £1, have made a welcome addition to the funds of the classes concerned.

During the year applications by controlling authorities for new or additional buildings and equipment for classes have been favourably entertained so far as available funds and other circumstances permitted. In one or two instances the estimate by the controlling authority of the actual requirements of a centre in the way of buildings seems at present hardly to have been borne out by returns of classes and attendance thereat. There is, however, reason to expect that in the instances referred to the accommodation provided will be fully taken up in the near future. The matter is in the hands of those in whose interest it is to use the opportunities now placed within their reach.

Reference was made last year to the establishment in certain districts of sub-centres in the smaller towns. This desirable extension of work continues to progress with results that appear to justify the experiment. Given suitable and convenient means of communication, there would appear to be no reason why technical schools in the larger centres of population should not, as parent schools, arrange for classes at convenient sub-centres. In any case it would seem to be desirable from many points of view for what may be termed the central technical school in a district to be closely in touch with such classes as may be established in adjacent townships. A good deal of well-meant, but, it is to be feared, wasted effort would probably be saved, and better results in other ways achieved thereby.

Over eighteen hundred (1,800) junior and senior free places were held at technical schools during the year, an increase of about two hundred. The proportion of junior free pupils qualifying for senior free places, entitling them to three years' additional free education, continues to be comparatively small, the total number of senior free pupils last year being only 146. The

demand on the part of free pupils for instruction in commercial subjects continues to be as marked as in previous years, nearly 60 per cent. of the pupils selecting commercial courses in preference to courses relating to industries, trades, or professions such as engineering. Day technical classes attended chiefly by free pupils who have passed thereto direct from the public school were held at several of the larger centres. The range of instruction at these classes is, generally speaking, secondary in character, and many of the subjects of instruction are such as may properly, and in many cases do, find a place in the curriculum of secondary schools. It is a question, in view of the youth of most of the pupils and of other considerations, whether the end in view would not be better attained by a preliminary course of instruction, without specialisation, at a secondary school in the case of those pupils who purpose following commercial or domestic pursuits.

The number of recognised classes in operation during the year was 5,851, as against 5,012 for the previous year. Of these classes, 4,459 were classes for instruction in various branches of handwork in connection with over a thousand primary and secondary schools, while 1,392 were technical and continuation classes for instruction in various branches of science, art, and technology. Of the latter, 791 were special classes under an Education Board or the Board of Governors of a secondary school as controlling authority; 487 were associated classes, conducted by managers representing the controlling authority, local bodies, and others contributing to the classes; while 114 were college classes under the governing body of a university college as controlling authority. Technical classes were held at over a hundred different places, an increase of nearly thirty.

Instruction in various branches of handwork is now a feature of the curriculum of most public and secondary schools. Cookery and woodwork among other subjects are now being taught in every education district. During the year 327 cookery classes and 280 woodwork classes were in operation. These classes continue in most cases to be conducted on the central system. In certain districts increasing attention is being given by controlling authorities to instruction in science on practical lines. Grants have been made by the Government for the erection and equipment of laboratories for individual practical work, with the result that a not inconsiderable number of laboratories are now available for the instruction of pupils attending district high schools and secondary schools.

Instruction in elementary agriculture was given in nearly four hundred schools during the year. In several districts this important branch of elementary education is in charge of itinerant instructors, who, in addition to supervising school gardens and experimental plots, also conduct training classes for teachers as well as classes for persons engaged in agricultural and pastoral pursuits. In three districts instruction was given in the principles and practice of dairying in addition to work in connection with school gardens. Altogether the progress made in the districts in which special attention is being given to agricultural instruction by controlling authorities cannot be regarded as other than satisfactory. Many of the classes have received valuable help in the way of voluntary contributions from local bodies, agricultural associations, and others interested in the work.

The special grants to Education Boards for the training of teachers have been increased this year. The grants have, on the whole, been well and wisely used, and most of the classes established for the benefit of teachers have been well attended. Special courses in the shape of summer and winter sessions have again been arranged for in some districts with very satisfactory results. These classes, together with the opportunities provided by the training colleges in the four large centres, should enable those taking up the profession of teaching in public schools to provide themselves with a not altogether inadequate equipment for their work. At the examinations of the City and Guilds of London Institute, twenty-one teachers passed the examination in cookery and five that in woodwork.

The total expenditure by the Government on manual and technical instruction for 1907 was £71,754 16s. 11d. The details are as follows: Capitation on all classes, £26,764 7s. 10d.; grants for material for class use, £1,008 11s. 2d.; grants for buildings, rent, and equipment, £22,862 11s. 1d.; subsidies on voluntary contributions, £13,482 11s. 6d.; free places, £4,131 11s. 2d.; railway fares of free-place holders, £784 18s. 3d.; railway fares of instructors and students, £869 12s. 2d.; inspection, £996 7s. 6d.; expenses in connection with the examinations of the Board of Education, South Kensington, and of the City and Guilds of London Institute, £840 3s. 6d.; sundries, £14 2s. 9d. The sum of £161 6s. 4d. was recovered by way of examination fees and from sale of material used at examinations, leaving a net expenditure of £71,593 10s. 7d. (Note: This total includes a subsidy of £10,000 on the contribution of the Auckland Savings-bank to the funds of the Auckland Technical College.)

No. 2. DETAILS RELATING TO MANUAL AND TECHNICAL INSTRUCTION.

TABLE A.—MANUAL AND TECHNICAL INSTRUCTION, 1907.—SPECIAL, ASSOCIATED, AND COLLEGE CLASSES.

School or Classes.	Subject of Instruction and Average Attendance.													Payments up to 31st December, 1907.																	
	Number of Classes.	Freehand (from the Flat and Round), Light and Shade.	Perspective and Geometrical Drawing.	Design and Ornament.	Drawing, Modelling, and Painting from Antique and Nature.	Machine-construction, Mechanical and Trade Drawing.	Architecture and Building-construction, Practical.	Practical Mechanics and Mathematics, Surveying.	Mechanical and Electrical Engineering, Telegraphy and Telephony.	Experimental and Natural Science (Chemistry, Botany, Magnetism, Electricity, Physics, &c.).	Woodwork, Ironwork, and Metal-work.	Wood-carving, Modelling and Repoussé Work.	Carpentry and Joinery, Cabinetmaking, Painters' and Decorators' Work.	Coachbuilding.	Plumbers' and Tinsmiths' Work, Iron and Brass Moulding, Blacksmithing.	Cookery and Laundry-work, Dressmaking, Millinery, Tailoring.	Wool-sorting.	Commercial Subjects.	English, Latin, French, German, Maori, Arithmetic, and Mathematics.	Music, Singing, and Elocution.	Training-classes for Teachers in Elementary Hand-work, Cookery, and Dressmaking.	Training-classes for Teachers in Drawing.	Training-classes for Teachers in Physical Measures in Elementary Agriculture, Nature-study, and Science.	Totals.	Capitation.	Grants for Buildings, Furniture, and Apparatus.	Rent.	Grants for Material.	Pound-for-pound Subsidy on Voluntary Contributions.		
Auckland Education Board—																															
Auckland Technical College :—	149	133																													
Technical classes, Dargaville	2																														
" " " " Whangarei	15																														
" " " " Hikurangi	5																														
" " " " Onehunga	2																														
" " " " Thames	21																														
" " " " Waihi																															
" " " " Te Aroha	3																														
" " " " Hamilton	2																														
" " " " Cambridge	1																														
" " " " Waihou																															
" " " " Papakura	2																														
" " " " Pukekohe	3																														
" " " " Huntly	1																														
" " " " Ngauwawa	1																														
" " " " hia																															
" " " " Te Kopuru																															
" " " " Paeroa	1																														
" " " " Kamo																															
" " " " Whakapara																															
" " " " School of Art	17	323	30																												
" " " " Technical Education Board—	33	3																													
Technical School, New Plymouth																															
Technical classes, Stratford	24	15																													
" " " " Opunake	1																														
" " " " Inglewood	4																														
Wanganui Education Board—	79	25																													
Technical School, Wanganui	3																														
Technical classes, Palmerston North																															
Technical School, Hawera	14																														
" " " " Feilding	21																														
" " " " Eltham	15																														

TABLE A.—MANUAL AND TECHNICAL INSTRUCTION, 1907—continued.

School or Classes.	Subject of Instruction and Average Attendance.														Payments up to 31st December, 1907.																
	Number of Classes.	Freehand (from the Flat and Round), Light and Shade.	Perspective Drawing and Geometrical Ornament.	Drawing, Modelling, and Painting from Antique and Nature.	Machine-construction, Mechanical and Trade Drawing.	Architecture and Building-construction, Practical Plane and Solid Geometry.	Practical Mechanics and Mathematics, Surveying.	Mechanical and Electrical Engineering, Telegraphy and Telephony.	Experimental and Natural Science (Chemistry, Botany, Magnetism, Electricity, Physics, &c.)	Woodwork, Ironwork, and Metal-work.	Wood-carving, Modelling and Repousse Work.	Carpentry and Joinery, Cabinetwork, Painters, and Decorators Work.	Coachbuilding.	Plumbers and Tinsmiths Work, Iron and Brass Moulding, Blacksmithing.	Cookery and Laundry-work, Dressmaking, Millinery, Tailoring.	Wool-sorting.	Commercial Subjects.	English, Latin, French, German, Maori, Arithmetic, and Mathematics.	Music, Singing, and Elocution.	Training-classes for Teachers in Elementary Hand-making, Cookery, and Dress-making.	Training-classes for Teachers in Drawing.	Training-classes for Teachers in Physical Measurements, Elementary Agriculture, Nature-study, and Science.	Totals.	Capitation.	Grants for Buildings, Furniture, and Apparatus.	Rent.	Grants for Material.	Pound-for-pound Subsidy on Voluntary Contributions.			
Wanganui Education Board— <i>ctd.</i>																															
Technical classes, Mangatoki	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	33	33 5 9	..	..	..	..	..
" " Marton	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	140	53 4 7	277 19 11	..	..	0 13 9	60 0 0	..	
" " Taihape	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	23 13 8	..	..	..	..	..	..
" " Mangaweka	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	5 13 5	..	..	..	..	..	..
" " Hunterville	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	14 8 4	..	..	..	..	..	..
" " Turakina	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	9 12 9	..	..	..	..	..	..
" " Waverley	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	52	4 8 1	..	5 0 0	..	..	..	15 0 0	..
" " Bull's	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	72	..	..	..	..	..	..	..	..
" " Ashurst	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	57	7 13 4	..	..	..	..	..	..	..
" " Kaponga	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	53	..	..	..	..	..	..	..	..
" " Aputi	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	54	..	..	2 8 0	..	..	..	25 0 0	..
" " Manaia	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	78	..	..	..	..	..	..	100 0 0	..
" " Patea	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	33	..	..	1 5 0	..	..	..	..	..
" " Rongotea	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	..	..	..	..	..	..	..	..
" " Normanby	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	36	..	..	..	..	..	..	..	..
" " Pohangina	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	..	..	..	..	..	..	..	..
" " Matapu	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	51	..	1 8 0	..	0 12 10	..	..	..	..
" " Halcombe	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..	..	..	..	..	..
" " Bunnythorpe	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	..	..	..	..	..	..	..	..
" " Kimbolton	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	..	..	..	..	..	..	..	..
" " Colyton	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
High School Board, Palmerston																															
North—																															
Technical School	29	32	..	..	54	7	3	..	7	19	..	13	..	11	9	..	21	..	57	8	..	..	241	163 11 1	111 2 6	..	..	..	..	..	..
Wellington Education Board—																															
Technical School, Wellington	170	547	..	26	57	76	48	254	146	31	36	7	83	81	88	1912	..	362	..	..	..	..	3,754 3,755 5 7	263 0 6	475 0 0	178 16 5	315 0 0	..	..	..	..
Technical classes, Wellington	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	107	19 8 0	..	..	..	..	..	..	..
" " Masterton	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27	18 18 0	..	..	..	..	..	..	..
" " Carterton	4	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

[illegible]

TABLE A.—MANUAL AND TECHNICAL INSTRUCTION, 1907—continued.

School or Classes.	Subject of Instruction and Average Attendance.														Payments up to 31st December, 1907.																			
	Number of Classes.	Freehand (from the Flat and Round), Light and Shade.	Perspective and Geo-metrical Drawing.	Design and Ornament.	Drawing, Modelling, and Painting from Antique and Nature.	Mechanical and Trade Drawing.	Architectural and Building-construction, Practical Plane and Solid Geometry.	Practical Mechanics and Mathematics, Surveying.	Mechanical and Electrical Engineering, Telegraphy and Telephony.	Experimental and Natural Science (Chemistry, Botany, Magnetism, Electricity, Physics, &c.).	Woodwork, Ironwork, and Metal-work.	Wood-carving, Modelling and Repousse Work.	Carpentry and Joinery, Cabinetmaking, Painters' and Decorators' Work.	Plumbers' and Tinsmiths' Work, Iron and Brass Moulding, Blacksmithing.	Cookery and Laundry-work, Dressmaking, Millinery, Tailoring.	Wool-sorting.	Commercial Subjects.	English, Latin, French, German, Maori, Arithmetic, Music, Singing, and Elocution.	Training-classes for Teachers in Elementary Hand-work, Cookery, and Dress-making.	Training-classes for Teachers in Drawing.	Training-classes for Teachers in Physical Measurements, Elementary Agriculture, Nature-study, and Science.	Totals.	Capitation.	Grants for Buildings, Furniture, and Apparatus.	Rent.	Grants for Material.	Pound-for-pound Subsidy on Voluntary Contributions.							
North Canterbury Education Board—continued.																																		
Rangiora Technical Classes Association	4	..	..	..	..	..	..	..	..	..	..	..	..	..	34	13	..	..	..	..	..	..	47	79 16 3	..	..	..	..	..
Ashburton Technical Classes Association	12	..	..	..	..	3	..	..	..	..	5	..	..	..	73	17 15	..	..	..	..	..	..	113	65 2 6	..	2 5 0	9 9 6	80 17 0	..		
Lyttelton Technical Classes Association	1	..	..	..	..	..	..	..	..	..	..	..	..	..	15	..	..	..	..	..	..	..	15	..	..	40 0 0	..	..	10 0 0	..	
South Canterbury Education Board—																																		
Timaru Technical Classes Association	22	10	..	8	5	..	13	..	7	10	7	9	..	10	32	160	..	..	..	..	..	..	271	162 15 10	112 3 6	..	36 12 0	173 10 0	..	..		
Waimate Technical Classes Association	18	25	..	..	5	..	..	..	..	15	..	11	9	..	40	51	22	45	..	..	..	..	223	67 2 3	..	..	..	..	43 18 6	..	
Temuka Technical Classes Association	9	..	..	..	15	..	..	..	..	17	..	12	11	15	45	12	..	..	..	..	..	..	127	137 11 9	4 3 2	3 12 0	39 17 6	121 14 0	..	..		
Pleasant Point Technical Classes Association	2	..	..	..	..	..	..	..	..	..	..	..	..	..	22	..	..	..	..	..	..	..	22	51 11 7	16 10 0	5 0 0	6 12 4	16 10 6	..	..		
Technical classes, Timaru	4	..	..	..	..	..	..	..	..	..	..	..	..	..	18	14	..	..	..	..	34	33	85	22 6 7	..	..	..	..	..	..
Morven	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	..	..	..	..	..	..	..	..
Otago Education Board—																																		
School of Art, Dunedin	53	330	55	13	43	..	22	..	..	55	..	21	36	17	194	434	551	13	..	..	..	..	463	263 18 9	224 0 0	..	52 8 8	249 0 0	..	..	..
Dunedin Technical School	73	..	..	..	..	..	..	..	67	..	..	..	..	..	..	..	..	..	..	..	..	1,419	658 0 5	224 0 0	..	..	..	..	..	..	..
Technical classes, Dunedin	3	..	..	..	..	..	..	..	..	9	..	..	..	11	37	81	60	..	..	25	23	37	85	46 4 0	..	..	48 11 3	55 9 6	..	..	..
Oamaru Technical Classes Association	27	4	..	..	..	..	..	..	..	..	..	..	17	..	..	..	..	..	..	..	..	..	219	125 11 9	357 16 5	55 0 6	48 11 3	55 9 6	..	..	..
Associated classes, Ngapara	2	..	..	..	..	..	..	..	..	..	..	..	..	..	18	..	..	..	..	..	..	18	..	..	3 0 0	..	..	..	..	..	..
Technical classes, Palmerston	2	..	..	..	..	..	..	..	..	..	..	..	..	..	36	..	..	..	..	..	..	36	31 5 6	..	..	..	..	..	..	..	..
Waikouaiti	1	..	..	..	..	..	..	..	..	..	..	..	..	..	23	..	..	..	..	..	..	23	25 16 9	..	..	..	..	..	..	..	..
Tapanui	3	..	..	..	..	..	..	..	..	..	..	..	..	..	55	..	..	..	..	..	..	55	..	..	..	..	..	..	..	..	..
Southland Education Board—																																		
Technical School, Invercargill	37	33	38	4	32	15	..	13	7	9	64	114	176	246	186	937	370 11 9	13 1 8		
Technical classes, Gore	15	5	7	7	8	..	32	46	58	29	17	209	71 10 6	8 12 6		
Technical classes, Bluff	11	9	12	9	14	12	..	17	41	82	305	71 1 3		
Mataura	9	6	35	10	..	18	11	84	37 15 3		
Country continuation classes..	2	37	37	12 16 1		
Totals	1392	1951	137	179	717	506	337	668	628	850	367	274	484	385	2,470	107	5238	2,969	143	379	810	1,273	20867	13602	3	519449	13	10953	2	41008	11	212857	19	3

TABLE A1.—CAPITATION PAYMENTS up to 31st December, 1907, to Controlling Authorities of Special, Associated, and College Classes on account of certain Subjects of Technical Instruction.

Subjects of Instruction.	Auckland Education Board.	Managers of the "Elam" School of Art.	Taranaki Education Board.	Wanganui Education Board.	Board of Governors, Palmerston North High School.	Wellington Education Board.	Managers of the Masterton Technical School.	Hawke's Bay Education Board.	Board of Governors, Gisborne High School.	Board of Governors, Dannevirke High School.
Freehand, blackboard, model, brush drawing, light and shade	£ s. d. 275 5 7	£ s. d. 339 19 6	£ s. d. 23 9 9	£ s. d. 6 17 9	£ s. d. 66 10 0	£ s. d. 533 5 0	£ s. d. 7 10 0	£ s. d. 17 13 0	£ s. d. ..	£ s. d. ..
Geometrical drawing, perspective, plane and solid geometry, .. paper-work, cardboard modelling	115 17 3	12 1 9	23 19 5	15 13 9	12 7 6	55 9 0	..	..	..	..
Design and ornament ..	..	..	..	2 10 6	..	27 3 6	..	..	..	..
Drawing, modelling, and painting from nature and antique..	29 0 7	..	..	62 1 6	17 6 3	262 0 9	2 2 6	6 9 6	..	22 7 6
Architecture and building construction and drawing, quantity surveying	29 12 1	..	1 16 0	12 14 6	1 6 0	87 4 6	3 5 6	..	..	..
Mechanical drawing, machine construction and drawing ..	84 3 3	..	..	6 1 6	..	100 12 0	..	6 7 6	..	..
Practical mechanics, practical mathematics, surveying ..	364 8 2	..	..	..	..	141 19 0	..	..	..	..
Mechanical and electrical engineering, steam, workshop practice, wiremen's work	51 0 3	..	..	..	..	97 2 3	..	..	..	..
Experimental science (chemistry, physics, magnetism and electricity, telegraphy, physical measurements)	145 12 6	..	2 4 6	13 4 9	6 6 6	45 3 6	..	..	..	..
Natural science (botany, nature-study, agriculture, physiology, horticulture, physiology)	183 14 4	..	13 6 10	27 14 6	..	54 3 9	..	..	..	..
Photography and process work ..	..	..	..	14 2 3	2 11 0	..	19 3 0	22 2 6	14 15 0	..
Woodwork and ironwork ..	81 13 1	..	1 16 0	2 3 0	..	35 8 0	4 1 0	..	2 17 0	..
Wood-carving ..	..	19 11 9	2 18 6	48 0 10	9 2 6	15 9 3	..	..	..	..
Repousse and jewellery work ..	..	..	..	3 8 0	..	..	..	5 11 0	..	..
Carpentry and joinery, cabinetmaking, and coachbuilding ..	87 19 0	..	..	2 18 6	4 1 6	254 15 0	..	..	..	..
House and coach painting and decorating, signwriting ..	..	..	..	8 16 0	28 10 6	25 17 9	9 16 0	28 7 0	..	8 10 3
Plumbing ..	67 1 9	..	4 16 0	..	..	186 12 6	..	..	..	..
Metal work, tinsmiths' work, iron and brass moulding ..	38 11 6	..	..	..	..	..	..	..	..	..
Smithing and farriery ..	3 17 3	..	..	..	..	..	..	..	..	..
Bootmaking ..	..	..	..	..	..	..	..	..	..	..
Cookery and laundry-work ..	65 3 0	..	..	12 1 9	0 18 0	81 5 6	..	48 15 6	..	..
Dressmaking, millinery, tailoring, needlework ..	164 13 9	..	21 15 6	134 17 5	1 14 0	61 17 9	8 11 6	39 19 3	9 5 0	..
Home nursing ..	..	..	..	12 2 6	..	..	..	..	..	..
Wool-sorting ..	..	..	..	..	..	..	..	..	..	..
Commercial subjects ..	1,010 11 3	..	17 18 9	116 3 5	12 1 4	1,471 10 1	39 6 3	24 0 4	8 7 0	..
Languages ..	78 3 9	..	6 10 9	24 15 10	2 14 9	28 10 6	..	..	2 15 6	..
Arithmetic and mathematics, syllabus subjects ..	56 17 10	..	7 2 10	4 4 9	2 18 0	412 2 0	..	..	..	..
Vocal music, elocution ..	..	..	..	7 4 5	1 3 3	..	..	..	..	..
Totals ..	2,933 6 2	401 13 0	127 14 10	537 17 5	169 11 1	3,980 14 1	93 15 9	199 5 7	37 19 6	30 17 9

TABLE A1.—CAPITATION PAYMENTS, &c.—continued.

Subjects of Instruction.	Marlborough Education Board.	Nelson Education Board.	Westland Education Board.	Board of Governors, Canterbury College.	Managers of the School of Domestic Instruction.	North Canterbury Education Board.	South Canterbury Education Board.	Otago Education Board.	Southland Education Board.	Totals.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Freehand, blackboard, model, brush drawing, light and shade	4 2 10	25 12 9	..	259 3 9	..	31 16 6	11 13 0	134 16 6	106 5 9	1,874 1 8
Geometrical drawing, perspective, plane and solid geometry, paperwork, cardboard modelling	..	11 10 3	..	90 13 0	..	34 10 6	..	56 19 6	..	429 1 11
Design and ornament	..	..	..	146 16 6	..	..	5 12 6	4 19 6	..	187 2 6
Drawing, modelling, and painting from nature and antique	0 15 5	19 3 0	..	386 16 9	..	..	24 15 2	42 8 3	27 0 6	902 7 8
Architecture and building construction and drawing, quantity surveying	..	4 14 0	..	66 17 3	..	8 2 6	9 8 6	13 10 6	18 13 0	257 4 4
Mechanical drawing, machine construction and drawing	..	..	..	106 12 0	..	3 10 9	..	12 11 0	13 10 9	333 8 9
Practical mechanics, practical mathematics, surveying	..	..	..	31 19 0	..	31 12 3	..	19 14 0	4 18 0	594 10 5
Mechanical and electrical engineering, steam, workshop practice, wireman's work	..	..	..	117 19 6	..	..	24 8 9	30 7 6	..	320 18 3
Experimental science (chemistry, physics, magnetism and electricity, telegraphy, physical measurements)	..	6 19 0	..	7 11 0	..	34 19 0	15 14 3	71 0 3	108 4 3	456 19 6
Natural science (botany, nature-study, agriculture, physiology, horticulture, physiology)	..	22 0 3	3 15 6	..	..	24 0 3	13 3 7	33 14 0	40 14 0	416 7 0
Photography and process work	..	16 12 6	..	1 18 9	..	53 7 0	5 12 0	..	2 9 6	21 1 6
Woodwork and ironwork	..	9 8 0	28 13 6	2 19 6	..	6 18 0	36 10 3	25 12 0	13 5 0	284 5 1
Wood-carving	..	..	..	52 6 9	..	..	..	..	..	246 0 10
Repousse and jewellery work	..	..	..	..	..	..	..	..	..	3 8 0
Carpentry and joinery, cabinetmaking and coachbuilding	..	..	..	4 19 6	..	88 0 3	9 14 3	13 19 4	12 15 6	476 15 4
House and coach painting and decorating, signwriting	..	..	..	22 13 0	..	13 3 0	7 1 0	7 1 0	..	71 13 3
Plumbing	..	11 7 6	..	..	..	22 15 0	13 11 6	23 16 3	4 9 0	418 9 3
Metal work, tinsmiths' work, iron and brass moulding	..	..	..	..	..	..	..	..	..	38 11 6
Smithing and farriery	..	..	..	..	..	..	13 11 6	..	..	17 8 9
Bootmaking	..	..	..	..	..	..	..	..	..	3 2 6
Cookery and laundry work	12 8 0	13 2 9	..	83 4 0	83 4 0	83 6 9	52 1 9	46 5 6	14 18 6	513 11 0
Dressmaking, millinery, tailoring, needlework	5 9 6	53 0 2	..	42 3 6	42 3 6	177 16 9	82 9 7	191 18 6	48 6 9	1,043 18 11
Home nursing	..	..	..	..	..	34 12 0	21 16 10	..	..	12 2 6
Wool-sorting	..	..	..	..	..	..	..	..	..	56 8 10
Commercial subjects	20 9 3	86 7 0	10 3 0	24 15 3	..	370 1 5	101 4 7	221 19 3	50 13 6	3,585 11 8
Languages	{ 8 0 8	11 1 0	..	..	..	32 2 10	..	102 4 7	41 17 3	338 17 5
Arithmetic and mathematics, syllabus subjects	..	16 19 8	..	..	..	36 9 0	..	94 0 1	49 1 7	679 15 9
Vocal music, elocution	..	..	..	..	..	..	..	3 19 8	6 12 0	18 19 4
Totals	51 5 8	307 17 10	42 12 0	1,324 1 6	125 7 6	1,082 3 9	441 8 0	1,150 17 2	563 14 10	13,602 3 5

TABLE B.—MANUAL AND TECHNICAL INSTRUCTION, 1907.—SCHOOL CLASSES.

Controlling Authority.	Total Number of Schools.	Subjects of Instruction and Number of Classes in each Subject.													Payments up to 31st December, 1907.								
		Elementary Handwork.	Drawing in Light and Shade, Blackboard Drawing and Design.	Cookery.	Dressmaking.	Needlework.	Woodwork.	Elementary Science.	Elementary Physiology, Health, and First-aid.	Swimming and Life-saving.	Elementary Agriculture.	Dairying.	Elementary Physical Measurements.	Totals.	Capitation.	Grants for Buildings, Rent, Furniture, and Apparatus.	Pound-for-pound Subsidy on Voluntary Contributions.						
Education Board, Auckland ..	221	408	125	72	..	59	72	3	1	1	87	..	..	828	£ 3,090	s. 11	d. 0	£ 11	s. 5	d. 0	£ 31	s. 1	d. 6
Board of Governors, High School, Thames	1	..	2	1	1	..	1	3	..	..	..	..	..	8	53	17	2	..	..	..	..	..	..
Board of Governors, High School, Whangarei	1	..	..	1	..	..	2	..	..	..	..	..	..	3	19	2	6	..	..	..	..	..	..
Education Board, Taranaki ..	50	120	25	16	3	10	17	2	4	2	22	4	3	228	388	0	8	..	..	..	13	10	0
Board of Governors, High School, New Plymouth	1	..	4	1	..	..	2	6	..	..	..	..	1	14	22	8	4	..	..	..	..	..	..
Education Board, Wanganui ..	150	255	238	23	3	22	22	3	1	6	75	21	15	684	1,203	17	8	..	..	..	..	..	..
Board of Governors, Wanganui Girls' College	1	..	..	4	4	..	..	..	..	1	..	..	..	9	17	7	6	..	..	..	..	..	..
Board of Governors, High School, Palmerston North	1	..	4	1	..	..	1	6	..	..	1	..	..	13	85	6	11	15	6	9	..	..	..
Education Board, Wellington ..	117	262	70	31	1	16	12	6	9	5	52	1	8	473	1,210	12	1	1,103	10	0	172	16	9
Board of Governors, Wellington Girls' College	1	..	3	..	..	..	..	5	3	1	..	..	..	12	29	8	9	..	..	..	..	..	..
Education Board, Hawke's Bay ..	55	72	24	36	25	3	28	10	2	4	11	..	..	215	731	15	1	99	10	0	..	..	..
Board of Governors, Napier Girls' High School	1	..	..	2	..	..	..	..	..	..	..	..	..	2	14	12	6	..	..	..	..	..	..
Board of Governors, Dannevirke High School	1	..	..	..	..	..	1	..	..	..	..	..	..	1	18	15	0	..	..	..	..	..	..
Education Board, Marlborough ..	28	50	16	11	..	2	6	..	3	1	10	..	..	99	187	0	1	241	13	9	..	..	..
Board of Governors, High School, Blenheim	1	..	..	1	..	..	1	7	..	..	..	..	..	9	14	16	9	2	6	0	..	..	..
Education Board, Nelson ..	52	67	14	14	13	14	13	..	18	15	23	..	2	193	795	18	0	..	..	..	40	0	0
Board of Governors, Nelson Girls' College	1	..	..	4	1	..	..	2	3	..	..	..	..	10	71	15	0	..	..	..	..	..	..
Education Board, Grey ..	11	14	..	12	..	..	..	..	..	..	..	..	..	26	105	19	9	..	..	..	..	..	..
Education Board, Westland ..	15	14	..	4	..	3	2	2	..	..	5	..	..	30	53	8	5	..	..	..	..	..	..
Education Board, North Canterbury	110	220	14	32	..	29	39	2	..	35	25	..	..	396	1,453	7	6	504	14	9	..	..	..
Board of Governors, Canterbury College—																							
Boys' High School, Christchurch	1	..	4	..	..	..	3	6	..	..	..	..	1	14	13	15	0	61	15	4	..	..	..
Girls' High School, Christchurch	1	..	7	2	2	..	8	1	1	..	..	..	..	21	45	17	2	..	..	..	..	..	..
Board of Governors, Ashburton High School	1	..	..	2	..	..	2	..	..	2	..	..	..	6	81	13	0	..	..	..	..	..	..
Education Board, South Canterbury	45	95	6	14	1	14	16	12	2	2	9	..	1	172	453	12	3	107	15	8	12	3	6
Board of Governors, Timaru High Schools—																							
Boys' High School ..	1	..	..	..	..	..	2	4	..	1	..	..	..	7	58	10	0	..	..	..	..	..	..
Girls' High School ..	1	..	1	1	1	..	3	..	..	..	..	..	..	6	14	0	0	7	7	8	..	..	..
Education Board, Otago ..	118	205	16	25	1	29	22	3	3	2	62	..	27	395	1,559	16	10	272	0	0	150	0	0
Board of Governors, Otago High Schools—																							
Boys' High School ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	11	0	..	..	..	205	0	6
Girls' High School ..	1	..	..	2	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Education Board, Southland ..	163	370	68	13	23	29	14	1	3	2	16	..	32	571	1,233	2	5	32	10	0	..	..	..
Board of Governors, Southland High Schools—																							
Boys' High School ..	1	..	..	..	..	..	2	..	..	..	..	..	..	2	34	1	0	..	..	..	..	..	..
Girls' High School ..	1	..	1	2	1	..	6	..	..	..	..	..	..	10	92	5	1	..	..	..	..	..	..
Totals ..	..	1,153	2,152	642	327	80	230	280	100	53	81	398	26	904,459	13,162	4	5	2,459	14	11	624	12	3

TABLE C.—RECEIPTS (BY WAY OF CAPITATION) OF AND EXPENDITURE BY EDUCATION BOARDS AS CONTROLLING AUTHORITIES OF SCHOOL CLASSES ON MAINTENANCE OF CLASSES FOR THE YEAR ENDING THE 31ST DECEMBER, 1907 (EXCLUSIVE OF EXPENDITURE OUT OF SPECIAL GRANTS FOR BUILDINGS, EQUIPMENT, ETC.).

Subjects of Instruction.	Education District.							
	Auckland.		Taranaki.		Wanganui.		Wellington.	
	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Elementary handwork ..	776 6 10	685 4 10	158 5 1	119 7 9	399 2 8	409 17 1	532 7 1	470 18 6
Needlework ..	189 0 0	189 0 0	67 18 9	53 13 10	106 8 9	113 3 9	77 16 3	76 3 9
Woodwork ..	942 8 5	1,321 6 11	20 8 0	188 9 3	200 0 1	465 13 4	..	243 0 8
Cookery ..	822 17	71,047 13 4	..	112 18 8	..	346 5 0	328 10 0	492 4 8
Dressmaking ..	..	..	12 8 1	6 13 4	7 15 0	2 9 6	18 15 0	..
Elementary agriculture ..	332 17 1	674 6 11	64 0 4	135 9 9	238 17 11	608 19 3	153 19 4	559 0 4
Dairy-work ..	..	..	17 17 6	6 8 10	164 5 0	332 2 6	..	..
Elementary physiology ..	7 11 1	7 11 1	18 1 0	7 16 4	7 16 9	..	52 19 3	3 3 9
Swimming and life-saving ..	4 17 6	9 9 11	4 10 0	4 18 0	26 2 6	17 17 6	..	..
Elementary physical measurements ..	7 0 0	..	12 5 1	..	37 10 0	83 12 2	38 5 10	14 8 10
Elementary science ..	7 12 6	5 5 0	12 6 10	7 9 0	15 19 0	5 14 4	7 19 4	89 1 2
	3,090 11	03,939 18	0388 0	8593 2 9	1,203 17 8	2,385 14 5	1,210 12 1	1,948 1 8

Subjects of Instruction.	Education District.							
	Hawke's Bay.		Marlborough.		Nelson.		Grey.	
	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Elementary handwork ..	139 2 8	170 18 3	53 17 2	47 13 2	116 2 11	164 5 8	41 9 9	14 0 6
Needlework ..	31 17 6	39 1 6	17 10 0	12 18 0	83 18 0	91 13 0	..	6 13 4
Woodwork ..	134 5 0	227 13 5	..	65 2 7	124 10 0	172 16 6	8 0 0	1 6 9
Cookery ..	231 5 3	378 1 10	64 10 0	110 9 8	179 12 6	281 15 4	..	92 0 8
Dressmaking ..	92 16 0	176 19 2	..	..	42 15 0	101 10 10	..	..
Elementary agriculture ..	54 1 2	41 6 0	27 13 5	88 3 10	137 6 6	350 12 11	56 10 0	26 0 10
Dairy-work ..	..	..	..	..	..	..	..	..
Elementary physiology ..	20 10 0	22 13 11	15 1 6	..	80 1 1	2 8 0	..	..
Swimming and life-saving ..	1 12 6	2 9 3	0 18 0	..	24 2 0	2 7 6	..	..
Elementary physical measurements ..	26 5 0	..	7 10 0	..	7 10 0	9 1 6	..	..
Elementary science ..	..	29 17 0	..	..	..	..	..	..
	731 15 1	1,089 0 4	187 0 1	324 7 3	795 18 0	1,176 11 3	105 19 9	140 2 1

Subjects of Instruction.	Education District.									
	Westland.		North Canterbury.		South Canterbury.		Otago.		Southland.	
	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Elementary handwork ..	11 18 5	6 12 10	361 4 1	215 1 11	196 4 9	61 0 0	353 14 7	316 19 9	315 5 10	262 10 2
Needlework ..	..	..	173 10 0	176 1 6	71 11 6	67 10 9	175 10 9	186 6 0	210 9 9	214 12 3
Woodwork ..	9 10 0	31 2 9	391 7 4	611 4 4	36 15 5	152 0 3	283 10 0	290 0 4	207 11 6	256 17 6
Cookery ..	..	35 8 1	257 13 1	389 1 1	44 5 0	234 9 4	421 9 3	365 10 5	210 0 0	223 8 11
Dressmaking ..	..	..	0 15 0	..	2 17 4	..	2 3 1	..	91 10 0	9 9 3
Elementary agriculture ..	32 0 0	30 18 8	150 2 0	257 1 0	56 12 6	13 3 8	180 8 1	137 18 9	49 1 11	117 1 11
Dairy-work ..	..	..	..	..	..	..	..	..	..	..
Elementary physiology ..	..	..	..	..	5 0 4	..	16 12 8	9 5 1	6 1 3	1 14 0
Swimming and life-saving ..	..	..	113 1 0	113 3 0	5 17 6	..	1 11 3	5 17 10	3 5 0	10 12 6
Elementary physical measurements ..	..	..	2 10 0	..	16 4 1	..	120 9 6	44 11 9	139 17 2	184 19 5
Elementary science ..	..	10 11 0	3 5 0	3 5 0	18 3 10	14 3 1	4 7 8	69 19 11	..	..
	53 8 5	114 13 4	1,453 7 6	1,764 17 10	453 12 3	542 7 11	1,559 16 10	1,426 9 10	1,233 2 5	1,281 5 11

SUMMARY.

Education Districts.			Receipts.	Expenditure.	Education Districts.			Receipts.	Expenditure.
			£ s. d.	£ s. d.				£ s. d.	£ s. d.
Auckland ..	..	..	3,090 11 0	3,939 18 0	Westland ..	..	..	53 8 5	114 13 4
Taranaki ..	..	..	388 0 8	593 2 9	North Canterbury ..	..	..	1,453 7 6	1,764 17 10
Wanganui ..	..	..	1,203 17 8	2,385 14 5	South Canterbury ..	..	..	453 12 3	542 7 1
Wellington ..	..	..	1,210 12 1	1,948 1 8	Otago ..	..	..	1,559 16 10	1,426 9 10
Hawke's Bay ..	..	..	731 15 1	1,089 0 4	Southland ..	..	..	1,233 2 5	1,281 5 11
Marlborough ..	..	..	187 0 1	324 7 3					
Nelson ..	..	..	795 18 0	1,176 11 3	Totals ..	..	..	12,467 1 9	16,726 11 9
Grey ..	..	..	105 19 9	140 2 1					

TABLE C1.—RECEIPTS (BY WAY OF CAPITATION) OF AND EXPENDITURE BY GOVERNING BODIES OF SECONDARY SCHOOLS, AS CONTROLLING AUTHORITIES OF SCHOOL CLASSES, ON MAINTENANCE OF CLASSES FOR THE YEAR ENDING THE 31ST DECEMBER, 1907 (EXCLUSIVE OF SPECIAL GRANTS FOR BUILDINGS AND EQUIPMENT, ETC.).

Subjects of Instruction.	Secondary Schools.																			
	Whangarei High School.		Thames High School.		New Plymouth High School.		Wanganui Girls' College.		Palmerston North High School.		Wellington Girls' College.		Dannevirke High School.		Napier Girls' High School.		Marlborough High School.		Nelson Girls' College.	
	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.
Drawing and painting ..	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Science, experimental and natural ..	..	..	6 10 0	..	9 9 2	12 10 0	..	..	10 6 8	..	6 13 9	0 11 0	..	..	..	..	14 16 9	..	2 5 0	..
Swimming and life-saving ..	..	..	11 8 5	6 3 10	10 19 2	..	..	..	25 5 0	5 9 7	22 15 0	..	..	..	..	..	..	..	..	..
Woodwork ..	14 18 6	14 18 6	13 2 6	..	..	..	..	..	22 0 3	8 12 4	..	..	1 2 6	..	..	..	..	..	..	..
Cookery ..	4 4 0	4 4 0	17 16 3	..	..	..	..	..	112 10 0	27 15 1	10 1 10	..	18 15 0	0 14 12	6 19 1	4	..	..	63 15 0	..
Dressmaking and advanced needlework ..	..	..	5 0 0	..	2 0 0	..	11 13 4	..	..	..	..	..	..	..	..	..	..	..	5 15 0	..
	19 2 6	19 2 6	53 17 2	6 3 10	22 8 12	10 0 17	6 204 13	8 85 6	11 29 3	9 29 8	9 0 11	0 18 15	0 16 2	6 14 12	6 19 1	4 14 16	9	..	71 15 0	..

Subjects of Instruction.	Secondary Schools.																			
Christchurch Girls' High School.		Christchurch Boys' High School.		Ashburton High School.		Timaru Girls' High School.		Timaru Boys' High School.		Otago Girls' High School.		Otago Boys' High School.		Southland Boys' High School.		Southland Girls' High School.				
Receipts.	Expendi- ture.	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.			
Drawing and painting ..	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Science, experimental and natural	12 5 0	0 15 2	7 10 0	
Swimming and life-saving	21 13 4	1 18 4	9 5 0	7 11 0	
Woodwork	0 10 6	1 6 0	1 5 0	41 15 0	37 14 0	34 1 0	30 3 5	
Cookery	7 15 0	11 4 0	36 15 1	
Dressmaking and advanced needlework	3 13 4	6 10 0	0 6 6	
	45 17 2	45 17 2	15 13 0	18 0 1	10 81 13	9 95 5	0 14 0	0 6 6	58 10 0	37 14 0	36 15 1	7 11 0	34 1 0	30 3 5	592 5	148 16 7	

SUMMARY.

Secondary Schools.	Secondary Schools.		Secondary Schools.	
	Receipts.	Expenditure.	Receipts.	Expenditure.
Whangarei High School ..	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Thames High School ..	19 2 6	19 2 6	13 15 0	47 17 10
New Plymouth High School ..	53 17 2	6 3 10	81 13 0	35 5 0
Wanganui Girls' College ..	22 8 4	13 10 0	14 0 0	0 6 6
Palmerston North High School ..	17 7 6	204 13 8	58 10 0	37 14 0
Wellington Girls' College ..	85 6 11	29 3 9	..	36 15 1
Dannevirke High School ..	29 8 9	0 11 0	7 11 0	..
Napier Girls' High School ..	18 15 0	16 2 6	34 1 0	30 3 5
Marlborough High School ..	14 12 6	19 1 4	92 5 1	48 16 7
Nelson Girls' College ..	14 16 9	..	..	..
Christchurch Girls' High School ..	45 17 2	15 3 6	695 2 8	619 10 6
Total ..	..	..	..	..

TABLE D.—JUNIOR AND SENIOR FREE PLACES AT TECHNICAL SCHOOLS OR CLASSES, 1907.
["J" represents Junior; "S" Senior.]

School or Classes.	Subjects and Number of Pupils.																Totals.	Capitation for Year ending 31st December, 1907.	
	Commercial Work.		Iron and Woodwork, Painters' Work, &c.		Electrical Engineering, Machine-drawing, &c.		Art, Pure and Applied.		Applied Mathematics and Applied Drawing.		Domestic Economy.		Plumbing.		Other Subjects.				
	J.	S.	J.	S.	J.	S.	J.	S.	J.	S.	J.	S.	J.	S.	J.	S.			
Auckland Education Board—																		£. s. d.	
Technical College, Auckland	168	13	32	3	24	5	9	..	83	1	63	1	9	1	6	..	394	24	860
Technical classes, Whangarei	4	3	4	..	..	..	..	..	..	..	..	..	..	..	..	..	8	3	6
" " Thames	14	7	3	1	..	..	..	..	2	..	8	2	..	..	3	1	30	11	51
" " Turua	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
" " Kamo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18
" " Dargaville	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
" " Hikurangi	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
Taranaki Education Board—																			9
Technical School, New Plymouth	..	1	1	..	1	..	1	..	..	..	1	..	..	..	1	..	5	1	14
Technical classes, Stratford	1	1	..	..	..	..	2	1	..	..	1	..	..	..	..	..	4	2	7
Wanganui Education Board—																			16
Technical School, Wanganui	37	5	7	..	5	..	11	..	..	..	20	..	3	..	6	..	89	5	380
" " Hawera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13
" " Feilding	11	..	1	..	..	..	3	..	1	..	6	..	1	..	5	..	28	..	12
" " Eltham	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0
" " Marton	3	..	..	..	..	..	..	..	..	..	4	..	..	..	1	..	8	..	6
Technical classes, Mangatoki	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
" " Ashhurst	6	..	..	..	..	..	..	..	..	..	7	..	..	..	..	..	13	..	8
" " Apiti	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	..	17
" " Halcombe	..	..	..	..	..	..	..	..	..	..	1	..	..	..	6	..	8	..	0
" " Pohangina	7	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	7	..	..
" " Bull's	8	..	..	..	..	..	..	..	..	..	4	..	..	..	..	..	12	..	..
Palmerston North High School Board—																			0
Technical School, Palmerston North	6	..	..	..	..	..	..	..	..	..	4	..	5	0	..	..	15	..	18
Wellington Education Board—																			0
Technical School, Wellington	213	33	54	10	12	7	10	2	1	3	10	1	..	..	..	12	300	68	1,317
" " Petone	12	..	..	..	4	..	2	..	3	..	..	..	..	..	..	..	21	..	9
Technical classes, Carterton	7	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	8	..	3
Technical Classes Association, Masterton	18	2	7	..	..	..	6	1	..	..	6	..	1	..	..	..	38	3	11
Marlborough Education Board—																			2
Technical classes, Canvastown	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
Havelock	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	4
Nelson Education Board—																			5
Technical School, Nelson	10	..	1	..	..	..	5	..	..	..	1	..	..	..	3	..	20	..	0
North Canterbury Education Board—																			6
Technical College, Christchurch	106	10	38	..	..	..	..	..	6	..	31	..	..	..	..	..	181	10	1,317
Canterbury College Board of Governors—																			9
School of Art, Christchurch	..	..	..	..	..	..	32	..	..	..	..	..	..	..	..	..	32	..	0
South Canterbury Education Board—																			7
Technical School, Timaru	22	..	5	..	5	..	3	..	3	..	2	..	..	..	..	..	40	..	18
Otago Education Board—																			0
Technical School, Dunedin	195	10	11	..	2	..	16	1	8	..	39	..	2	..	11	7	284	18	371
" " Oamaru	18	1	4	..	..	..	..	..	..	..	4	..	..	..	..	..	26	1	68
Southland Education Board—																			3
Technical School, Invercargill	40	..	5	..	2	..	19	..	4	..	3	..	..	..	6	..	79	..	6
Technical classes, Gore	17	..	..	..	..	..	..	..	1	..	6	..	..	..	..	..	24	..	33
" " Bluff	17	..	3	..	4	..	12	..	..	..	2	..	..	..	..	..	38	..	16
" " Mataura	3	..	..	..	..	..	..	..	1	..	1	..	..	..	1	..	6	..	9
Totals	953	86	176	14	59	12	182	5	113	4	225	4	21	1	49	20	1,728	146	4,131

TABLE E.—SUMMARY OF EXPENDITURE BY GOVERNMENT ON MANUAL AND TECHNICAL INSTRUCTION FOR THE YEAR ENDING 31ST DECEMBER, 1907.

	£	s.	d.	£	s.	d.	£	s.	d.
Capitation—									
School classes	13,162	4	5						
Technical classes	13,602	3	5						
							26,764	7	10
Subsidy of £1 for £1 on contributions—									
School classes	624	12	3						
Technical classes	12,857	19	3						
							13,482	11	6
Grants—									
Buildings, apparatus, and rent—									
School classes	2,459	14	11						
Technical classes	20,402	16	2						
				22,862	11	1			
Material for technical classes				1,008	11	2			
							23,871	2	3
Railway fares of instructors							754	11	4
students attending registered classes							115	0	10
free-place holders							784	18	3
Expenses in connection with examinations—									
Science and Art, Board of Education, South Kensington				305	6	2			
City and Guilds of London Institute				534	17	4			
							840	3	6
Inspectors—									
Salaries				762	10	0			
Travelling-expenses				233	17	6			
							996	7	6
Free places at technical schools							4,131	11	2
Sundries							14	2	9
							71,754	16	11
Less recoveries (examination fees, £142 2s. 6d.; proceeds of sale of material used at examination, £19 3s. 10d.)							161	6	4
Total							£71,593	10	7

TABLE F.—BOARD OF EDUCATION, SOUTH KENSINGTON.—ART AND SCIENCE EXAMINATIONS, 1907.
[“C” represents candidates; “P” passes.]

Subjects of Examination.	Auck-land.		New Ply-mouth.		Hawera.		Wanga-nui.		Feilding.		Palmer- ton North.		Wel- lington.		Napier.		Nelson.		West- port.		Grey- mouth.		Christ- church.		Timaru.		Dunedin.		Inver- cargill.		Totals.		
	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	
Art—																																	
Freehand drawing ..	37	34	1	1	4	3	7	5	1	0	2	2	1	1	1	..	14	12	1	0	1	1	8	6	2	2	23	14	18	10	120	91	
Model drawing ..	25	17	1	0	3	0	6	3	1	1	7	7	5	3	..	..	11	3	1	0	2	1	5	2	4	5	17	7	18	2	107	52
Geometrical drawing ..	22	14	..	..	2	2	4	4	..	..	2	2	1	0	..	..	..	..	..	..	..	..	4	4	..	..	7	3	..	..	41	29
Perspective drawing ..	2	2	..	..	1	1	1	1	1	1	3	3	1	1	..	..	..	..	..	..	..	..	0	0	..	..	5	4	..	..	15	12
Blackboard drawing ..	2	1	..	..	1	0	1	0	..	..	4	1	..	..	..	..	6	1	..	..	3	1	2	2	1	0	14	4	18	0	52	8
Drawing in light and shade ..	8	6	..	..	..	..	1	1	..	..	3	2	..	..	..	..	7	2	..	..	..	..	2	2	..	..	4	4	..	..	27	18
Memory drawing of plant-form ..	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	3	..	..	8	7
Drawing from life ..	..	3	..	..	..	..	1	1	..	..	..	..	..	2	1	1	..	..	..	..	..	..	..	..	..	..	6	5	1	0	14	12
Painting from still life ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Painting ornament ..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Design ..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	7
Anatomy ..	..	..	..	..	..	..	..	..	..	..	1	1	1	0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	4
Drawing from the antique ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	0
Modelling the head from life ..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Modelling from life ..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Principles of ornament ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2
Students' works ..	2	1	..	..	..	..	2	0	..	..	..	..	..	..	..	..	2	0	..	..	..	..	7	3	..	..	..	..	..	..	13	4
Science—																																	
Practical plane and solid geometry ..	5	4	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	8	7
Machine construction and drawing ..	37	24	..	..	..	..	..	..	..	..	..	..	8	4	..	..	..	..	..	..	..	..	..	..	..	..	5	4	1	1	51	33
Building construction and drawing ..	12	11	1	1	..	..	..	3	3	..	1	0	6	6	..	..	..	..	..	..	..	..	2	2	1	1	7	5	3	2	33	28
Mathematics ..	1	1	2	2	7	6
Applied mechanics ..	4	2	..	..	..	..	..	..	..	..	..	..	3	2	..	..	..	..	..	..	..	..	1	0	..	..	4	3	..	..	11	6
Steam ..	4	3	1	1	6	4
Theoretical inorganic chemistry	7	6	..	1	1	1	1	0	6	4
Magnetism and electricity ..	..	3	..	..	3	2	2	2	1	1	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	0	13	10
Botany ..	4	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	0	..	..	1	0
Physiology ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Hygiene	1	1	1	1	6	6
Human physiology ..	..	..	..	..	1	0	2	2	..	..	..	..	2	0	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	7	3
Agricultural science and rural economy ..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	5
Practical mathematics ..	4	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	4
Totals ..	173	131	3	2	16	9	39	30	4	3	28	23	35	23	1	1	40	18	2	0	11	8	44	32	10	8	114	66	62	16	582	370	

TABLE G.—CITY AND GUILDS OF LONDON INSTITUTE.—TECHNOLOGICAL EXAMINATIONS, 1907.
[“C” represents candidates; “P” passes.]

Subjects of Examination.	Auckland.		Whangarei.		Waikato.		Wanganui.		Wellington.		Masterton.		Dannevirke.		Napier.		Blenheim.		Nelson.		Grey-mouth.		Christchurch.		Timaru.		Dunedin.		Invercargill.		Totals.		
	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	
Plumbers' work (preliminary)	19	11	..	..	..	..	..	..	2	2	1	1	0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24	14
Principles of plumbing (ordinary)	2	2	..	..	..	..	..	..	5	3	1	1	0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26	17
Plumbers' work, practical (honours)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	7
Plumbers' work, practical (ordinary)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24	1
Plumbers' work (honours)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	7
Plumbers' work (ordinary)	7	7	..	..	..	..	..	..	3	3	3	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26	18
Plumbers' work (honours)	4	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	5
Carpentry and joinery (preliminary)	8	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	8
Carpentry and joinery (ordinary)	4	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	5
Carpentry and joinery (honours)	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3
Cabinetmaking (ordinary)	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Cabinetmaking (honours)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Mechanical engineering (ordinary), Part I	6	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	7
Mechanical engineering (ordinary), Part II	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	1
Mechanical engineering (ordinary), Part II	..	..	..	..	..	..	..	..	1	1	6	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	5
Electric light and power (preliminary)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	4
Electric light and power (ordinary)	2	2	..	..	..	..	..	..	..	..	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	5
Telegraphy and telephony (ordinary)	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Telegraphy (honours)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Telephony (honours)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Telephony (honours)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Woodwork, first year	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	3
Woodwork, first year final	3	1	2	0	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	61	54
Plain cookery	9	6	16	15	..	..	..	..	3	3	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	3
Dressmaking	2	1	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	3
Millinery	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	4
Plain needlework	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2
Tailors' cutting (ordinary)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2
Wiremen's work	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	3
Totals	78	55	20	17	6	4	26	20	23	12	13	6	17	8	12	9	4	4	16	8	2	1	14	13	11	6	20	15	1	1	263	179	

TABLE H.—RETURN OF STAFFS OF TECHNICAL SCHOOLS AND CLASSES conducted by the Undermentioned Bodies as Controlling Authorities or Managers, as the case may be, during the Year ending 31st December, 1907.

Auckland Education Board,—

Department of Technical Education and Manual Training.—Director, £600. Assistant Director, £245 19s. 5d. Instructor in Agriculture, £400. Chief Clerk, £126 17s. 8d. Clerk, £67 10s. Two typists, 1 at £67 10s., 1 at £40.

Auckland Technical College.—Twenty-four instructors, at salaries or allowances ranging from £335 6s. 8d. to £9 10s. Caretaker, £114 2s.

Manual Training Centres, Auckland.—Nine instructors, at salaries or allowances ranging from £235 12s. 6d. to £6.

Thames Technical Classes.—Superintendent (also instructor), £20. Eight instructors, at salaries or allowances ranging from £35 to £5.

Thames Manual Training School.—Superintendent (also instructor), £200 7s. 6d. Instructor, £178 6s. 8d.

Whangarei Technical Classes.—Four instructors, at salaries or allowances ranging from £43 1s. 2d. to £6 5s. 10d.

Whangarei Manual Training Centre.—Superintendent (also instructor), £200. Instructor, £160.

Sundry country classes.—Three instructors, at salaries or allowances ranging from £80 to £10 7s.

Managers of the "Elam" School of Art.—Director, £450. Four instructors, at salaries or allowances ranging from £80 to £37 10s. Two attendants, 1 at £39, 1 at £26.

Taranaki Education Board,—

New Plymouth Technical School.—Director (also Inspector of Schools) £68 16s. 8d. Superintendent, £5. Secretary, £5. Clerk, £13 11s. Fourteen instructors, at salaries or allowances ranging from £77 12s. to £6 13s.

Stratford Technical School.—Superintendent, £10. Secretary, £5. Six instructors, at allowances ranging from £8 to £5.

Inglewood Technical Classes.—Two instructors, 1 at £20 7s. 4d., 1 at £4 11s.

Training classes for teachers at various centres.—Nine instructors, at allowances ranging from £21 19s. to £1.

Itinerant instructors in woodwork, £131 5s.; in cookery, £97 10s.; in agriculture, £76 8s.; and in dressmaking, £88 4s. 6d.

Wanganui Education Board.—Superintendent of Manual and Technical Instruction (also Inspector of Schools), £16 13s. 4d. Director (also Director Wanganui Technical School), £25. Clerk, £100. Superintendent, Northern District, £229 3s. 4d. Superintendent, Southern District, £50.

Wanganui Technical School.—Director, £300. Thirty-five instructors at salaries or allowances ranging from £269 12s. 10d. to £2 10s.

Hawera Technical Classes.—Five instructors at salaries or allowances ranging from £62 10s. to £5.

Feilding Technical Classes.—Fifteen instructors at allowances ranging from £46 to £1 1s.

Eltham Technical Classes.—Seven instructors at allowances ranging from £34 16s. to £7.

Marton Technical Classes.—Eight instructors at allowances ranging from £19 2s. 5d. to £4 10s.

Waverley Technical Classes.—Four instructors at allowances ranging from £9 to £5.

Patea Technical Classes.—Four instructors at allowances ranging from £25 to £8.

Taihape Technical Classes.—Four instructors at allowances ranging from £28 19s. to £4.

Technical Classes at Sundry (Thirteen) Country Centres.—Twenty-six instructors at allowances ranging from £60 to £4 18s.

Training Classes for Teachers.—Twelve instructors at allowances ranging from £30 to £2 2s.

Other Instructors.—Cookery, 2 instructors—1 at £150, 1 at £130; 3 assistants at allowances ranging from £20 to £2 10s. Woodwork, 2 instructors—1 at £210, 1 at £160 8s. 4d. Agriculture—1 instructor at £300.

Dairywork—1 instructor at £250.

Board of Governors, Palmerston North High School,—

Palmerston North Technical School.—Director, £25. Twenty instructors at salaries or allowances ranging from £225 to £4 4s.

Wellington Education Board,—

Carterton Technical Classes.—Secretary, £6 6s. Three instructors at allowances ranging from £20 to £10.

Pahiatua Technical Classes.—Two instructors, 1 at £34 17s. 6d., 1 at £12 10s.

Special instructors.—Woodwork—1 at £200. Cookery—1 at £125, 1 at £100, 1 at £35, 1 at £19 10s. Agriculture—1 at £300.

Wellington Technical School.—Director, £650. Registrar, £150. Clerk, £80. Librarian, £52. Thirty-five instructors at salaries or allowances ranging from £340 to £30.

Petone Technical School.—Secretary, £10. Eight instructors at salaries or allowances ranging from £60 to £28 7s.

Managers of the Masterton Technical School.—Secretary, £45. Nine instructors at salaries or allowances ranging from £76 to £13.

Hawke's Bay Education Board,—

Napier Technical School.—Director, £22 18s. 4d. (one month). Secretary, £15. Clerk, £15. Seven instructors at salaries ranging from £215 to £50 8s. 10d.

Board of Governors, Gisborne High School,—

Gisborne Technical School.—Secretary, £62 10s. Nine instructors at salaries or allowances ranging from £158 10s. 6d. to £5 5s.

Board of Governors, Dannevirke High School,—

Dannevirke Technical School.—Five instructors at various allowances based on fees and capitation.

Marlborough Education Board,—

Special instructors.—Cookery, £110; woodwork, £80; agriculture, £300 and £100 travelling-allowance (itinerant instructor for Nelson, Marlborough, Grey, and Westland Education Boards); various technical classes, 5 instructors at allowances based on fees and capitation.

Nelson Education Board.—Superintendents for district: The Inspectors of Schools, without salary. Registrar, £36. Instructor in Agriculture (see Marlborough).

Nelson Technical School.—Sixteen instructors at allowances based on fees and capitation.

Westport Technical Classes.—Six instructors at allowances based on fees and capitation.

Reefton Technical Classes.—Four instructors at allowances based on fees and capitation.

Other country centres.—Three instructors at allowances based on fees and capitation.

Grey Education Board,—

Greymouth Technical School.—Director: The Inspector of Schools (without salary). Five instructors at salaries or allowances ranging from £120 to £5. Instructor in Agriculture (see Marlborough).

Westland Education Board.—Two instructors—agriculture (see Marlborough), and cookery, £30.

North Canterbury Education Board.—Director School of Woodwork and Cookery Classes (also Director Christchurch Technical College), £100. Instructor in Agriculture, £300. Three Instructors in Woodwork—1 at £160; 1 at £3 10s. a week; 1 at 3s. 6d. an hour.

Kaiapoi Technical Classes.—Six instructors at allowances ranging from £30 to £6.

Other country centres.—Four instructors at allowances ranging from £30 to £10.

Christchurch Technical College.—Director, £500. Secretary, £96 11s. Clerk, £58 5s. 7d. Twenty-seven instructors at salaries or allowances ranging from £183 19s. 8d. to £5.

Ashburton Technical School.—Director and Secretary £50. Six instructors at salaries or allowances ranging from £86 5s. to £8.

Lyttelton Technical Classes.—Four instructors at allowances ranging from £19 to £5 8s.
 Akaroa Technical Classes.—Four instructors at allowances ranging from £26 to £10.
 Rangiora Technical Classes.—Three instructors at allowances ranging from £55 10s. to £28 10s.
 Canterbury College Board of Governors,—
 School of Engineering.—Professor in Charge, £800. Eleven instructors at salaries ranging from £325 to £40.
 School of Art.—Director, £500. Twelve instructors at salaries or allowances ranging from £200 to £10.
 South Canterbury Education Board.—Director, £250 16s. 6d. Special instructors for woodwork, £223 13s. 6d.; for cookery, 1 at £174 8s., 1 at £71 18s. 11d.
 Timaru Technical School.—Sixteen instructors at allowances ranging from £50 to £4. Caretaker, £18.
 Temuka Technical School.—Director, £50. Seven instructors at allowances ranging from £40 to £12.
 Waimate Technical School.—Director, £20. Secretary, £10 10s. Twelve instructors at allowances ranging from £28 7s. 5d. to £3 10s. Caretaker, £14.
 Pleasant Point Technical Classes.—Director, £15. Secretary, £15. Two instructors, 1 at £15, 1 at £12 12s.
 Otago Education Board.—Special instructor for cookery, £130. Special instructors in woodwork—1 at £154, 1 at £24, 1 at £10.
 School of Art.—Principal, £400. Six instructors at salaries ranging from £120 to £25.
 Dunedin Technical School and Sub-centres.—Director and Secretary, £175. Registrar, £25. Seventeen instructors at salaries and allowances ranging from £120 to £8.
 Oamaru Technical School.—Secretary, £40. Eleven instructors at salaries or allowances ranging from £80 10s. 6d. to £10.
 Southland Education Board.—Director, £50. Secretary, £45. Special instructor for woodwork, £200; and for cookery, £122 14s. 9d.
 Invercargill Technical School.—Twenty instructors at allowances ranging from £36 7s. 6d. to £10.
 Gore Technical Classes.—Eleven instructors at allowances ranging from £16 5s. to £5.
 Bluff Technical Classes.—Nine instructors at allowances ranging from £22 5s. to £10 15s.
 Maitauro Technical Classes.—Eight instructors at allowances ranging from £21 to £5.
 Other country centres.—Two instructors, 1 at £8 17s., 1 at £3 11s. 3d.

No. 3.

REPORT OF THE INSPECTORS OF TECHNICAL INSTRUCTION.

SIR,—

We have the honour to report as follows on the state and progress of manual and technical instruction in the Dominion during the year ending 31st December, 1907.

A. MANUAL INSTRUCTION.

During the year recognised school classes for instruction in various branches of handwork were held at 1,153 primary and secondary schools, as against 995 in 1906. The total number of classes for all subjects was 4,459, an increase of 620. Details of the number of school classes in the several education districts and of the subjects of instruction are given in Table B, page 9. It is apparent from the particulars furnished by the controlling authorities of primary-school classes that in an increasing number of instances the media employed by teachers in connection with instruction in those branches of elementary handwork to which most attention is now being given—namely, modelling, brush and blackboard drawing, paper and cardboard work, and brick-laying—are being used as instruments of education in relation to the general work of the standards. Thus we find modelling correlated with geography, nature-study, and elementary design; brush drawing with elementary design and nature-study; paper and cardboard work with elementary arithmetic, mensuration, and geometrical drawing; bricklaying with oral composition, drawing, and elementary mensuration. In other words, exercises in handwork, instead of being confined to specific instruction in one or other of the above-named branches, are in many districts becoming slowly but surely merged in the general school curriculum as methods rather than as subjects of instruction. This method of treating elementary handwork, if adopted generally in the schools—and we hope that such will be the case before very long—should prepare the way for simplifying still further regulations and forms relating to instruction in handwork.

As regards classes for instruction in what may be termed the more specialised forms of handwork, woodwork was taught in 280 classes, as compared with 188 in the previous year. Most of these classes are conducted at centres conveniently located and well equipped for the purpose. Speaking generally, a noticeable advance has been made both in the quality of the instruction and in the work of the pupils. The defects to which attention has been drawn in previous reports are not so apparent, and in the case of some centres really good work has been accomplished. We would like to see more evidence of attempts to bring the instruction into closer contact with other subjects of the school syllabus. At present the instructor in charge of a centre, and itinerant instructors visiting groups of centres, do not appear in many cases to be in touch with the general work of the schools from which the classes are drawn. As a consequence woodwork too often comes to be regarded as an outside or extra subject, unrelated to other subjects of the school course. The value of a course in woodwork might, we think, be improved by the inclusion of exercises in free-hand sketching from the pupils' own work, and in practical arithmetic and mensuration.

The number of classes for cookery was 327, an increase of over a hundred classes. Most of these classes are also conducted on the central system. As in the case of woodwork, and for the same reasons, there is little evidence of any connection between the instruction in cookery and that in other subjects. In most cases the instruction, so far as it relates to the practice of cookery, is satis-

factory. We have no desire to depreciate the value of this part of the instruction, but we are glad to notice that in some districts earnest and fairly successful efforts are being made to give the cookery lessons a higher educational value by using the familiar occupation of cooking as an aid to mental training. In one district a circular has been issued to cookery instructors setting forth in detail the kind and amount of theoretical instruction (as distinguished from demonstrations) that must form part of the course in cookery; arrangements being made at the same time whereby the instructors themselves may become familiar with the elementary scientific principles underlying the practice of cookery. Speaking generally, instructors in cookery have yet to learn that the goal towards which the instruction should tend is similar to that to which all practical instruction should be directed—namely, the training of the pupil's intelligence through familiar occupations, the useful application of the methods of science, and incidentally the acquisition of general manipulative skill.

Dressmaking and advanced needlework have been taken by eighty classes, as against sixty-four for the previous year. In most cases satisfactory work has been done, and evidence is not wanting that excellent results, from all points of view, are obtainable without having recourse to mechanical aids in the shape of chart systems.

There has been a considerable increase in classes taking elementary physical measurements; ninety classes were in operation, an increase of thirty-one. The reminder in our last report that the educational value of the work was often in inverse proportion to the amount of ground covered seems to have been not without effect. In one district special attention has been given to the construction of simple apparatus by the pupils for class use. Included in the apparatus was a number of simple balances. These did not, it is true, reach a high standard of mechanical excellence, but the essential parts were sufficiently accurate for the purpose in view, and made it possible for the pupils to carry out a useful series of exercises in weighing. In this connection it is suggested that much more general use of the woodwork classes might be made in connection with elementary physical measurements. The designing and preparation of drawings of apparatus within the capacity of the pupils might with advantage form part of a course in physical measurements. If to the equipment of the woodwork shop were added a few simple appliances for metal-working, the construction of useful and approximately accurate apparatus might well be undertaken by pupils. Additional interest and utility would be given to the course in woodwork, and pupils would be afforded an opportunity of gaining a more intelligent insight into the purpose and use of the simple apparatus required for an elementary course in physical measurements. The regulation regarding the time to be given to individual practical work by the pupils appears in some instances to have been wrongly interpreted by instructors. Demonstrations by the instructor with the assistance of certain members of the class cannot be regarded as complying fully with requirements. It should be understood that half of the whole time given to the instruction is to be spent by each pupil in individual practical work.

Considerable progress has been made in the organization of classes for subjects relating to rural pursuits. During the year 424 classes for elementary agriculture and dairy-work were in operation, as against 255 in the previous year. This increase may be taken as indicating that controlling authorities generally are realising the value of courses of instruction bearing directly on pupils' surroundings. Instruction in dairy-work has previously been confined practically to one district. We are now able to report a decided increase in the number of classes for this important subject. The appointment of a special itinerant instructor in the Wanganui District has made it possible for useful courses of instruction in the principles of dairying to be given in the northern and southern parts of this district. The total number of classes for dairy-work was twenty-six, as against two for the previous year. It has been advanced as a reason why children in dairying districts should not receive instruction in dairying at school that they have enough dairying in their homes. The conditions of life and labour in the dairying districts of the Dominion no doubt impose some measure of hardship on the children; but if those who consider that by making a course of dairy-work a part of the children's education you impose an additional burden upon them, could see the intense interest they take in the simple experiments, and the generally enthusiastic way they go about the practical work incident to the course, and could hear the intelligent answers given by most of the pupils to questions bearing on the value and meaning of the work done in the class, they would probably come to the conclusion that the instruction is not regarded by the children as "a burden grievous to be borne," but, on the contrary, is viewed rather in the light of a relief from the ordinary subjects of instruction. May not the attitude of the children toward the work be explained by the fact that in the classes in question they are dealing with a subject closely related to their life?

It seems hardly necessary at this stage to enlarge on the benefits likely to accrue to the pupil, the teacher, the school, and incidentally to the community from instruction in what is termed elementary agriculture, or, better, nature-study with an agricultural trend. Professor James says that manual training is the most colossal improvement that ever came into the schools of America, because the boys learn to work together and become co-operative instead of foolish little imps who are trying to get ahead of their fellows and crow over it. He points out that school gardens possess all these advantages of manual training with the added ones, over some forms of this discipline, of their feasibility almost anywhere, of easier inculcation of the sense of ownership, of working with the fundamental instead of the more accessory muscles, and of being essentially out-of-door work. The experience in America and Canada has been that devoting four or five hours a week, or even two hours a day, to nature-study and gardens on proper lines enables the pupils to accomplish more in the remaining time than they formerly accomplished in the whole time spent at school, and, further, that this work has given schools a new incentive, has raised the daily attendance materially, and has proved an "Open sesame" into both the

problems and interests of life to children always before considered dull. Those well qualified to express an opinion contend that the work has an ethical value in that it puts the child in the place of other people whose rights he has not appreciated before, and hence has failed to respect. The suggestion to a child that he may grow a tree of his own will give him a desire to do so. Some real knowledge of the amount of care, time, patience, and money, and of the chance of success or failure in raising the tree will, it is asserted, do more in getting a child voluntarily to respect public parks and gardens than all the police which a city can afford to place or watch over them. Referring to the æsthetic side of the work, it is contended that many country children, too young to feel the effect of more bushels of potatoes or more pounds of wool, have early formed their dislike for the farm, and that a flower-garden or pleasant yard would do more to content them with living on a farm than ten bushels more of wheat to the acre.

Dealing with the practical advantages of agricultural education in a bulletin recently issued by the Bureau of Education, Washington, Mr. J. R. Jewell says,—

“A proper correlation of agriculture with the other studies would furnish plenty of material for school use which would mean more to the children than would text-books, especially in arithmetic, composition, &c.

“Most of the pupils in our rural schools have but two sources of information—namely, the world around them and books. It is sad to think how little many of them get from either. Nature-study in the earlier years teaches the child to observe, inference gradually comes in as he combines his observations, until in the higher grades he reasons from cause to effect. Until within the last two decades the education of our schools was confined to thinking, the doing was limited to work with pen or pencil. Manual training is now recognised as of great educational value, but the impossibility of suitable equipment for wood, clay, and iron working prevents our rural schools from attaining to the efficiency of our city schools. School gardens make good this deficiency, and furnish the first opportunity for co-ordination between mental and motor activity. As the child grows and his interest enlarges he should be given larger opportunities for determining, guiding, exercising, and controlling his motor activities. There is almost as much need of nature-study with an agricultural trend, of school gardens, and of agricultural instruction, in many of our city schools as in the country. Before the introduction of manual training our educational system had made no provision for those pupils of a distinctly motor type. Many of them are now being lifted to a higher plane of life than before; and the introduction of gardening into the schools of cities of considerable size has saved a large number of others from dropping out of school without any broad life-interest, and with but a small part of what the school should give them. There are, moreover, in the schools of all our cities, surrounded by farming or horticultural industries, a considerable number of children who must eventually gain their livelihood in such work, to say nothing of the pupils from rural communities who come into the urban schools because of their superior advantages. Certainly, if the aim of education is to fit for life, these boys and girls should be taught according to their needs and not along some hard and fast course of study mapped out for those who wish to prepare for college. A large number of our cities now have manual-training high schools for children needing such training as they give, and it is right that it should be so.

“There is even more justification for the teaching of scientific agriculture, since it would probably tend to check the congestion of our cities, while the former has exactly the opposite trend. One extra teacher in a high school could give instruction in agriculture, open as part of an elective course for those who cared for it, along with most of the other scientific subjects, but with less language.

“It has not been possible to consider the need of a good agricultural education for the children of rural communities without touching, at almost every point, some argument for the educational value of agriculture. Before formal schools were thought of, the race made its progress by studying nature and by manual training; later the school came in to supplement these and finally usurped their place, absorbing all the time of the pupil in the consideration of books. Every race has dug its civilisation out of the ground; the boys are doing the same thing, successfully, in a number of our American schools. It is time for us to ask again, with Demolins, ‘Do our schools make men?’ Are they helping to maintain the superiority of the Anglo-Saxon? We have long believed that the painter, the designer, and the sculptor express the highest form of thought in their handiwork. Lately we have accepted working in clay, wood, and iron as true expressions of thought. In the same way exact and well-ordered thought is required in the problems of the farm, in bringing the various kinds of soil to the maximum of productivity, and in the handling of the complicated machinery at hand. Indeed, the value of elementary agriculture in the common schools is now recognised almost all over our country, and each year sees its introduction into one or more States. It is natural that this should be so long before there is much agitation for agriculture in our high schools, because a professionally trained teacher is not absolutely necessary in the elementary school to make the instruction valuable. Perhaps it is wise to have such a study as this, in which the pupils may know as much as, or more than, their teacher, who shall study with them, only using his larger powers for the skilful guidance of the children. To make a success of school gardens without having had experience in gardening is more difficult than with nature-study, but with foresight and pertinacity it can be done. In those States where the law has made such instruction mandatory upon elementary teachers, there are hundreds of cases where teachers have made a success of teaching elementary agriculture, although practically not at all trained for the work. But in the secondary schools this is impossible. There must be trained teachers in those schools to assure scientific instruction.

“A last argument, but by no means the least, for the educational value of agriculture in our schools is that in France and Belgium its introduction has materially raised the age of leaving

school—in many sections ‘from two to three years’ Government officials say. What statistics we have in the United States go to prove the same thing: in the agricultural high schools of Alabama, Wisconsin, and Minnesota there is constantly a large percentage of students who would have dropped out of school with only an elementary education had there not been the opportunity to learn of the things in which they were naturally interested. Agricultural high schools would be worth all they cost if they were attended only by those young people who otherwise would have dropped out of school.

“The economic value of up-to-date instruction in agriculture may seem to be so well recognised as to demand little more than a statement of its importance. But the essential thing to note is that our schools for the children of rural districts have not kept up with the wonderful progress made in agriculture. The workers in our experiment stations have discovered facts of the greatest importance to the masses of farmers, but the new truths are surprisingly slow in seeping down into the soil needing enrichment. Every farmer-boy ought to be taught how to choose the best seed-corn, but it has been impossible to get this information to the people of Iowa and neighbouring States through the public schools. Hence the railroads came to the rescue, and they are freely furnishing trains to carry over their lines agricultural-college lecturers who shall teach the farmers how to raise a fifth more corn through the careful selection of seed, and Iowa has already added \$8,000,000 a year to her income as a result. Many boys’ agricultural clubs are studying the selection of seed-corn, with the consequence that some Illinois boys are selling their corn for five times as much as their fathers are able to get for theirs.

“Our better agricultural colleges are not satisfied to train men to be able to produce more grain to the acre, or more pounds of meat from a suitably balanced ration, but the students are being shown how they may best become leaders among their fellows; how they may ‘make agriculture a live, progressive art, which in the future shall provide a more stable and satisfactory basis for thrifty, intelligent, refined, and happy rural communities, as well as a stronger guarantee for the manufactures, commerce, literature, art, and science of a higher civilisation.’”

The writer concludes a very interesting and instructive monograph as follows:—

“So far as experience has gone it has shown that,—

“1. Nature-study has already infused new life into our school system, and, when made a study of the relations of man to nature and to its forces, it produces that great educational result—viz., the proper response of the individual to his environment.

“2. Nature-study, better than any other study in the school curriculum, allows the teacher and the pupil to meet on the same plane, and really to know and to understand each other.

“3. The child himself becomes a lifelong economic force in nature as soon as he learns to look at it with understanding eyes.

“4. The ethical value of producing something cannot be overestimated; in this lies the only road to altruism open to the child, as well as a guarantee of his respect for the products of others.

“5. ‘The sentiments on which the highest religion rests are best trained in the children on the noblest objects of nature.’

“6. Neither the educational, the ethical, nor the economic value of nature-study overshadows its æsthetic value—its effect on the sentiments of the child. The psychological genesis of a genuine love of nature is the crowning result of nature-study.

“7. School gardens furnish to children the best possible means of giving expression to their thoughts through motor channels.

“8. Children having the advantages of gardening do much better work—as much as a third better in some cities, it is said—in their other studies than do other children in the same school.

“9. School gardens teach, among other things, private care for public property, economy, honesty, application, concentration, justice, the dignity of labour, and love for the beauties of nature.

“10. Nature-study and school gardens serve better than other agencies to ‘cultivate the critical discernment of beauty and excellence in nature and in human nature,’ as President Eliot has pointed out.

“11. School gardens have the advantage over all other school work of promoting the health of the child, especially in the case of incipient tuberculosis.

“12. In a number of our larger cities school gardens have transformed districts in the slums morally, socially, and æsthetically.

“13. Although half of the school-children of the United States receive all their instruction in the country schools, the education given them does not suitably prepare them for their lifework.

“14. Agriculture furnishes admirable subject-matter for many of the other school studies.

“15. In rural schools where other forms of manual training are perhaps out of the question for the present, practical agricultural work supplies the motor training needed by all and essential to the motor-minded.

“16. In at least two foreign countries the introduction of agricultural education has raised the age of leaving school between two and three years, and the same effect is observable in some of our own States. With this there is also an increased average attendance of the total school enrolment.

“17. The economic value of an agricultural education is seen on every hand. It is this which has materially increased, and in many cases doubled or tripled, the amount produced by the same land, numerous instances of which may be seen in every State of our country. More patent still, it is such an education which enables the smaller countries of northern Europe to compete with our American farmers.

"18. Agricultural education, and perhaps that alone, seems likely to prove the salvation of the South, and especially of the negro, who above all else needs to be given self-respect, and a higher code of morality through self-support.

"19. Practical ethics are best insured by making every citizen, at least potentially, a producer. For example, a small, well-managed farm school has proved more successful than any other means for reforming boys with criminal tendencies.

"20. The study of agriculture has its important artistic side: the problems of the farm and of farming demand as true and as artistic expression of well-ordered thought as do the 'arts and crafts,' whose artistic value we have recognised ever since the work of Morris.

"21. All these effects must bring a changed social status in their train. We have good reason to believe that one of the most important among them will be a lessening of the influx into the cities from the country, if not a setting of the tide in the other direction. This beneficial change is already under way in France and Belgium, and it is believed that giving the people an agricultural education has had its part in bringing this about.

"22. An agricultural education, better than any other, makes men, enables one always to fall on his feet, fills him with a lasting confidence that in any stress of circumstances he can obtain a comfortable livelihood from the earth.

"Finally, our rural communities need, and have a right to demand, a good, practical, and scientific education in agriculture. This must come largely through the secondary schools, since our agricultural colleges have assumed the important task of training agricultural experts. Nature-study should be taught in conjunction with gardening in every school, and agriculture should form a part of the curriculum of at least every rural primary school."

Speaking generally, it may be said that, in spite of not a few difficulties, hindrances, and disabilities, most of them unavoidable, matters relating to manual instruction are progressing satisfactorily in the several education districts. Experience is showing what forms of manual instruction are best adapted to the requirements of elementary education, and how best to use them as instruments in the all-round education of the child. In conclusion, it may not be out of place to quote here some remarks made by Sir Philip Magnus, President of the Educational Science Section of the British Association, in his presidential address last year. Speaking on the errors into which civilised countries have drifted in elementary education and how to correct them, he says,—

"If we are to avert the consequences that must overtake us through having equipped our children for their life struggle with implements unfitted for their use, we must consider afresh the fundamental ideas on which a system of elementary education should be based. Instead of excluding the child from contact with the outer world, we must bring him into close relationship with his surroundings. It was given to man to have dominion over all created things, but he must first know them. It is in early years that such knowledge is most rapidly acquired, and it is in gaining it that the child's intellectual activities are most surely quickened. It is unfortunate that we failed to realise this great function of elementary education when we first essayed to construct for ourselves a national system. The three Rs, and much more than that, are incidental parts of elementary education. But what is needed is a '*leitmotif*'—a fundamental idea underlying all our efforts, and dominating all our practice, and I venture to think that idea is found in basing our primary education on practical pursuits, on the knowledge gained from actual things, whether in the field, the workshop, or the home. Instead of fetching our ideas as to the training to be given in the people's schools from that provided in our old grammar schools, we should look to the occupations in which the great mass of the population of all countries are necessarily engaged, and endeavour to construct therefrom a system with all such additions and improvements as may be needed to adapt it to the varied requirements of modern life. By this process—one of simple evolution adjusted to every-day needs—a national system of education might be built up fitted for the nation as a whole—a system founded on ideas very different from those which, through many centuries, have governed the teaching in our schools. In the practical pursuits connected with the field, the workshop, and the home, and in the elementary science and letters incidental thereto, we might lay the foundation of a rational system of primary education. These three objects—the field, the workshop, and the home—should be the pivots on which the scheme of instruction should be fixed, the central thoughts determining the character of the teaching to be given in rural and urban schools for boys and girls. The problem of primary education is to teach by practical methods the elements of letters and of science, the art of accurate expression, the ability to think and to control the will; and the ordinary school lessons should be such as lead to the clear apprehension of the processes that bring the child into intimate relations with the world in which he moves."

The attached circular relating to local nature-observations, issued by the Superintendent of Education, Nova Scotia, is appended for the information of teachers and others interested in nature-study.

"FORM EMPLOYED IN THE PROVINCE OF NOVA SCOTIA FOR THE RECORD OF NATURE-OBSERVATIONS BY SCHOOL-CHILDREN.

"[To be handed promptly on its receipt by the Secretary of every School Board to each teacher employed within the school section.]

"Local 'Nature' Observations.

"This sheet is provided for the purpose of aiding teachers to interest their pupils in observing the times of the regular procession of natural phenomena each season. First, it may help the teacher in doing some of the 'nature' lesson work of the course of study; secondly, it may aid in procuring valuable information for the locality and province. Two copies are provided

for each teacher who wishes to conduct such observations, one to be preserved as the property of the section for reference from year to year, the other to be sent in with the return to the Inspector, who will transmit it to the Superintendent for examination and compilation.

“What is desired is to have recorded in these forms the dates of the first leafing, flowering, and fruiting of plants and trees; the first appearance in the locality of birds migrating north in spring or south in autumn, &c. While the objects specified here are given so as to enable comparison to be made between the different sections of the province, it is very desirable that other local phenomena of a similar kind be recorded. Every locality has a flora, fauna, climate, &c., more or less distinctly its own; and the more common trees, shrubs, plants, crops, &c., are those which will be most valuable from a local point of view in comparing the characters of a series of seasons.

“Teachers will find it one of the most convenient means for the stimulation of pupils in observing all natural phenomena when going to and from the school—and some pupils radiate as far as two miles from the schoolroom. The ‘nature-study’ under these conditions would thus be mainly undertaken at the most convenient time, without encroaching on school time; while, on the other hand, it will tend to break up the monotony of school travel, fill an idle and wearisome hour with interest, and be one of the most valuable forms of educational discipline. The eyes of a whole school daily passing over a whole school section will let very little escape notice, especially if the first observer of each annually recurring phenomenon receives credit as the first observer of it for the year. The observations will be accurate, as the facts must be demonstrated by the most undoubted evidence, such as the bringing of the specimens to the school when possible or necessary.

“To all observers the following most important, most essential principles of recording are emphasized: Better no date, no record, than a wrong one or a doubtful one. Sports out of season due to very local conditions not common to at least a small field should not be recorded except parenthetically. The date to be recorded for the purposes of compilation with those of other localities should be the first of the many of its kind following immediately after it. For instance, a butterfly emerging from its chrysalis in a sheltered cranny by a southern window in January would not be an indication of the general climate, but of the peculiarly heated nook in which the chrysalis was sheltered; nor would a flower in a semi-artificial, warm shelter, give the date required. When these sports out of season occur, they might also be recorded, but within a parenthesis to indicate the peculiarity of some of the conditions affecting their early appearance.

“These schedules should be sent to the Inspector with the annual school returns in July, containing the observations made during the whole school year, and back as far as the preceding July (if possible) when the schedule of the previous year was necessarily sent in.

“A duplicate copy of the schedule of observations should be securely attached to the school register for the year, so that the series of annual observations may be preserved in each locality. The new register has a page for such records.

“Remember to fill in carefully and distinctly the date, locality, and other blanks at the head of the schedule on the next page; for, if either the date, or the locality, or the name of the responsible compiler is omitted, the whole paper is worthless, and cannot be bound up for preservation in the volume of the Phenological Observations.

“By the aid of the table given in the form, the date, such as the 24th of May, for instance, can be readily and accurately converted into the annual date, ‘the 144th day of the year,’ by adding the day of the month given to the annual date of the last day of the preceding month (April in this case), thus: $24 + 120 = 144$. The annual date can be briefly recorded, and it is the only kind of dating which can be conveniently averaged for phenological studies. When the compiler is quite certain that he or she can make the conversion without error, the day of the year instead of the day of the month will be preferred in recording the dates.

“*Phenological Observations, Canada. (1906 Schedule.)*

“For the year ending July, 190 .

“Province : . County : . District : . Locality or school section : .

No. .

“The estimated length and breadth of the locality within which the following observations were made : x miles. Estimated distance from the sea-coast : miles. Estimated altitude above the sea-level : ft.

“Slope or general exposure of the region : .

“General character of the soil and surface : .

“Proportion of forest, and its character .

“Does the region include lowlands or intervalles ? ; and, if so, name the main river or stream : . Or is it all substantially highlands ? .

“Any other peculiarity tending to affect vegetation ? .

The most central post-office of the locality or region : .

Name and address of the teacher or other compiler of the observations responsible for their accuracy :

When first
seen.

When be-
coming
common.

Day of year corresponding to the last day of each month :—

Jan., 31. April, 120. July, 212. Oct., 304.
 Feb., 59. May, 151. Aug., 243. Nov., 334.
 March, 90. June, 181. Sept., 273. Dec., 365.

For leap-years increase each number except that for January by 1.

Wild Plants, &c. (Nomenclature as in 'Spotton' or 'Gray's Manual'.)

1. Alder (*Alnus incana*), catkins shedding pollen
2. Aspen (*Populus tremuloides*), catkins shedding pollen
3. Mayflower (*Epigæa repens*), flowering
4. Field horsetail (*Equisetum arvense*), shedding spores
5. Blood-root (*Sanguinaria Canadensis*), flowering
6. White violet (*Viola blanda*), flowering
7. Blue violet (*Viola palmata, cucullata*), flowering
8. Hepatica (*H. triloba, &c.*), flowering
9. Red maple (*Acer rubrum*), flower shedding pollen
10. Strawberry (*Fragaria Virginiana*), flowering
11. " " fruit ripe
12. Dandelion (*Taraxacum officinale*), flowering
13. Adder's-tongue lily (*Erythrum Am.*), flowering
14. Goldthread (*Coptis trifolia*), flowering
15. Spring beauty (*Claytonia Caroliniana*), flowering
16. Ground-ivy (*Nepeta glechoma*), flowering
17. Indian pear (*Amelanchier Canadensis*), flowering
18. " " fruit ripe
19. Wild red cherry (*Prunus Pennsylvanica*), flowering
20. " " fruit ripe
21. Blueberry (*Vaccinium Can. and Penn.*), flowering
22. " " fruit ripe
23. Tall buttercup (*Ranunculus acris*), flowering
24. Creeping buttercup (*R. repens*), flowering
25. Painted trillium (*T. erythrocarpum*), flowering
26. Rhodora (*Rhododendron rhodora*), flowering
27. Pigeon-berry (*Cornus Canadensis*), florets opening
28. Pigeon-berry (*Cornus Canadensis*), fruit ripe
29. Starflower (*Trientalis Americana*), flowering
30. Clintonia (*Clintonia borealis*), flowering
31. Marsh calla (*Calla palustris*), flowering
32. Lady's slipper (*Cypripedium acaule*), flowering
33. Blue-eyed grass (*Sisyrinchium ang.*), flowering
34. Twinflower (*Linnæa borealis*), flowering
35. Pale laurel (*Kalmia glauca*), flowering
36. Lambkill (*Kalmia angustifolia*), flowering
37. English hawthorn (*Crataegus oxyacantha*), flowering
38. Scarlet-fruited thorn (*Crataegus coccinea*), flowering
39. Blue flag (*Iris versicolor*), flowering
40. Ox-eye daisy (*Chrysanthemum leucanthemum*), flowering
41. Yellow pond-lily (*Nuphar advena*), flowering
42. Raspberry (*Rubus strigosus*), flowering
43. " " fruit ripe
44. Yellow-rattle (*Rhinanthus Crista-galli*), flowering
45. High blackberry (*Rubus villosus*), flowering
46. " " fruit ripe
47. Pitcher-plant (*Sarracenia purpurea*), flowering
48. Healall (*Brunella vulgaris*), flowering
49. Common wild rose (*Rosa lucida*), flowering
50. Fall dandelion (*Leontodon autumnale*), flowering
51. Butter-and-eggs (*Linaria vulgaris*), flowering
52. Expanding leaves in spring made trees appear green—(a) first tree, (b) leaf-
ing trees generally

Cultivated Plants, &c.

53. Red currant (*Ribes rubrum*), flowering
54. " " fruit ripe
55. Black currant (*Ribes nigrum*), flowering
56. " " fruit ripe
57. Cherry (*Prunus cerasus*), flowering
58. " " fruit ripe

							When first seen.	When be- coming common.
<i>Cultivated Plants, &c.—continued.</i>								
59.	Plum (<i>Prunus domestica</i>),	flowering	..	..	..	..
60.	Apple (<i>Pyrus malus</i>),	flowering	..	..	..	..
61.	Lilac (<i>Syringa vulgaris</i>),	flowering	..	..	..	..
62.	White clover (<i>Trifolium repens</i>),	flowering	..	..	..	..
63.	Red clover (<i>Trifolium pratense</i>),	flowering	..	..	..	..
64.	Timothy (<i>Phleum pratense</i>),	flowering	..	..	..	..
65.	Potato (<i>Solanum tuberosum</i>),	flowering	..	..	..	..
<i>Farming Operations, &c.</i>								
66.	Ploughing begun	..	..	..	..	..
67.	Sowing begun	..	..	..	..	..
68.	Planting of potatoes begun	..	..	..	..	..
69.	Shearing of sheep	..	..	..	..	..
70.	Hay-cutting	..	..	..	..	..
71.	Grain-cutting	..	..	..	..	..
72.	Potato-digging	..	..	..	..	..
<i>Meteorological Phenomena.</i>								
73.	Opening of (a) rivers, (b) lakes without currents	..	..	..	..	..
74.	Last snow (a) to whiten ground, (b) to fly in air	..	..	..	..	..
75.	Last spring frost (a) "hard," (b) "hoar"	..	..	..	..	..
76.	Water in streams, rivers, &c. (a) highest, (b) lowest	..	..	..	..	..
77.	First autumn frosts (a) "hoar," (b) "hard"	..	..	..	..	..
78.	First snow (a) to fly in air, (b) to whiten ground	..	..	..	..	..
79.	Closing of (a) lakes without currents, (b) rivers	..	..	..	..	..
80.	Number of thunderstorms (with dates of each) :—							
Jan.,	Feb.,	Mar.,	April,	May,	June,	July,	Aug.,	Sept.,
Dec.,			Oct.,	Nov.,				
Day of year corresponding to the last day of each month :—								
Jan., 31.	April, 120.	July, 212.	Oct., 304.	Going North or coming in Spring.	Feb., 59.	May, 151.	Aug., 243.	Nov., 334.
March, 90.	June, 181.	Sept., 273.	Dec., 365.	Going South or leaving in Fall.				
For leap-years increase each number except that for January by 1.								
<i>Migration of Birds, &c.</i>								
81.	Wild duck migrating	..	..	..	..	..	..	..
82.	Wild geese migrating	..	..	..	..	..	..	..
83.	Song-sparrow (<i>Melospiza fasciata</i>)	..	..	..	..	..	..	..
84.	American robin (<i>Turdus migratorius</i>)	..	..	..	..	..	..	..
85.	Slate-coloured snowbird (<i>Junco hiemalis</i>)	..	..	..	..	..	..	..
86.	Spotted sandpiper (<i>Actitis macularia</i>)	..	..	..	..	..	..	..
87.	Meadow-lark (<i>Sturnella magna</i>)	..	..	..	..	..	..	..
88.	Kingfisher (<i>Ceryle alcyon</i>)	..	..	..	..	..	..	..
89.	Yellow-crowned warbler (<i>Dendroica coronata</i>)	..	..	..	..	..	..	..
90.	Summer yellowbird (<i>Dendroica aestiva</i>)	..	..	..	..	..	..	..
91.	White-throated sparrow (<i>Zonotrichia alba</i>)	..	..	..	..	..	..	..
92.	Hummingbird (<i>Trochilus colubris</i>)	..	..	..	..	..	..	..
93.	Kingbird (<i>Tyrannus Carolinensis</i>)	..	..	..	..	..	..	..
94.	Bobolink (<i>Dolychonyx oryzivorus</i>)	..	..	..	..	..	..	..
95.	American goldfinch (<i>Spinus tristis</i>)	..	..	..	..	..	..	..
96.	American redstart (<i>Setophaga ruticilla</i>)	..	..	..	..	..	..	..
97.	Cedar waxwing (<i>Ampelis cedrorum</i>)	..	..	..	..	..	..	..
98.	Nighthawk (<i>Chordeiles Virginianus</i>)	..	..	..	..	..	..	..
99.	Piping of frogs	..	..	..	..	..	..	..
100.	Appearance of snakes	..	..	..	..	..	..	..
<i>Other Observations and Remarks.</i>								

B. TECHNICAL INSTRUCTION.

Details of the work of the various technical and art schools and classes for the year 1907 will be found in the reports of the controlling authorities or the managers, as the case may be, attached to this report. The number of recognised classes for instruction in various branches of pure and applied science and art, technology and commercial instruction, and in subjects of general education, together with the average attendance thereat, are given in Table A, on pages 3-6.

The number of buildings already erected or in process of erection for the purposes of technical instruction is about forty. Additions to existing buildings have also been provided for where circumstances appeared to warrant them. During the year grants have been made to controlling authorities for the erection of buildings or for additions to existing buildings at Stratford, Feilding, Marton, Dannevirke, Nelson, Christchurch, Temuka, and Oamaru. The proposed Technical College at Auckland, to which reference was made in last year's report, has not yet been commenced, although funds are available for the purpose. It is to be hoped the preliminary arrangements will soon be sufficiently advanced to enable the Education Board in its capacity as controlling authority to provide a much-needed permanent home for its classes, which are at present conducted in several more or less unsuitable temporary buildings. In one or two cases it would appear that the provision made by controlling authorities in the way of buildings for technical instruction has been somewhat in excess of actual present requirements, as gauged by the number and size of the classes actually in operation at the places concerned. We have no doubt, however, that the present year (1908) will show a decided improvement in a state of affairs that cannot fail to have a prejudicial effect on the progress of technical instruction. As we have previously pointed out, where facilities for instruction have been provided out of the public funds, it behoves not only those to whose interest it is to advance their own education, but also local bodies, employers of labour, and others, to see to it that full advantage is taken of the opportunities that have been afforded. We are glad to say, however, that, generally speaking, there is no lack of evidence of sustained and increasing interest on the part of controlling authorities and managers of classes, local bodies and associations, and others, and of earnest effort on the part of those directly responsible for the conduct of classes in the various districts. Given these important and indeed vital factors, there should be little cause for anxiety as to the progress of technical education in New Zealand. A technical school in any district is largely dependent for its full success on the sympathy of employers. If they and their employees support and make use of the institution the school is likely to perform its true function. If they stand aloof the tendency is for the school to degenerate into a mere aggregation of unrelated classes. Controlling authorities and managers have been enabled by means of Government grants and otherwise to continue to add to and improve the equipment and apparatus for classes, with the result that the efficiency of classes in many of the more important subjects has been materially increased. Another important factor that should not be overlooked is a gradual but decided improvement in the quality and range of the instruction, due to a large extent to the fact that the teaching staff as a whole has, during the last few years, been considerably strengthened by the addition of a number of highly qualified instructors from other parts of the world and from the large centres of the Dominion. An earnest and in some instances a fairly successful attempt has been made, especially in the smaller centres, to more thoroughly adapt the subjects taught to the industrial needs of the district. In a young country, comparatively sparsely populated and with limited means of communication, how best to provide for local needs may be regarded as one of the most difficult problems controlling authorities have to face in the organization of a systematic and workable scheme of technical instruction. One phase of this problem is the difficulty of providing suitable instructors for special subjects. This to some extent has been overcome by the employment of itinerant instructors, and if controlling authorities in adjacent districts, having fairly good facilities for intercommunication, were able to see their way to co-operate in this matter this system could be extended, to the advantage of all concerned. Signs are not wanting of the growth of a healthy public opinion in favour of special courses of instruction being provided to meet the requirements of particular trades and industries. We constantly hear of controlling authorities being asked to establish certain classes by those who promise to support the classes if they are established. Workers, as well as employers, are realising that knowledge perfected by systematic study and training must be infused into the experience gained by centuries of practice, unless we are content to compete at very unequal odds with the thoroughly trained workers of other nations.

The number of approved classes continues to increase. In all, 1,392 classes were held during the year at 101 places, showing increases of 219 and 21 respectively. The number of persons receiving free technical education was 1,874, an increase of 216. Of these, 146 held senior free places, as against 14 during 1907. Particulars as to the subjects of instruction taken by free-place holders are given in Table D, on page 12. A glance at the table shows that, as in previous years, courses in commercial instruction find most favour with the majority of free pupils. We are glad, however, to notice that in certain districts there has been a decided increase in the number of free pupils taking up other courses, and, further, that there has been a drop of about 10 per cent. in the number taking commercial courses only. Day technical classes, held regularly for about twenty-five hours a week, as in secondary schools, have been carried on during the year in Auckland, Wellington, and Christchurch. These classes are composed almost entirely of boys and girls just fresh from the primary schools. The pupils receive free education, the qualification being, generally, the certificate of proficiency. Most of them, boys and girls alike, take up commercial courses; a few girls take up domestic courses. Most of the subjects of instruction included in these courses either are or may properly be included in the curriculum of a secondary school. When the age of, and the stage of education of these pupils are also taken into account, it seems

open to question whether it would not be in the best interest of junior free pupils destined for commercial or domestic pursuits, for such pupils to hold their free places at a secondary school, taking thereat suitable courses of instruction in preparation for more advanced definite courses in commercial instruction or domestic science at technical schools, which those who were qualified would attend as holders of senior free places.

Reviewing the work of the technical schools as a whole, we have to report that the art classes, except in a few isolated instances, continue to do sound, systematic work. The increased attention given to the various branches of applied art or art crafts, the emphasis laid on the fact that design is something more than an ingenious exercise on paper, and the insistence on the attendance of pupils learning an art craft at classes directly related to the craft, all go to show that the relation between the work done and the problem of production in the ordinary manufactories of to-day is beginning to receive attention at the hands of those responsible for the conduct of art classes; and, further, show that we are beginning to realise, as in the older countries, that art schools exist not merely to give instruction in drawing, painting, and abstract design, without relation to any craft or profession except that of the artist, but also to give a thorough and all-round training in art generally, and at the same time provide for the training of students in a specific art. Professor Lethaby, of the Royal College of Art, London, in a lecture to students of the Birmingham School of Art, says, "So far as I have observed the modern schools of art and their students, it has seemed to me that the greatest hindrance to success is lack of *definiteness*, the vague idea that art in general is a profession. . . . Art schools as I knew them in the past were adapted most for teaching the profession of *scholarship-gaining*. Even now, unless the student on entering an art school is already attached to some craft, and looks to the school for collateral instruction, or unless he has made up his mind for a special branch of art and specialises in that, little is to be expected but the expenditure of a few amusing years and his possible emergence as an art master." And, further, speaking of the work of schools of art generally, the professor says, "Nothing was known by the student of the grooves in which manufactures ran; no choice of employment was set before him; and the only categories he knew were those of the code: all his drawings were 'antique,' 'life,' 'advanced design,' or 'advanced shading from the cast.' In opposition to this false system of classification I would substitute a classification based on the practice of every-day craft life. Even elementary drawing I would have taught from such things as fine examples of lettering, heraldic design, and flowers, birds, and beasts, so that the student's intellect might be stimulated and his heart reached while his hand was drawing. At present copies are often dry abstractions, entirely wasteful and intellect-destroying. Then I would have it that every student entering a school of art should state what he or she intends to be, and should be put on studies germane to this purpose; the whole scheme should be such that the students should gravitate naturally into definite callings." It is gratifying to note that in some of our art classes an attempt is being made to stimulate the student's intellect and interest by a course of work on lines approximating to the course of study suggested by Professor Lethaby. For obvious reasons it is impossible in a young country to provide courses of instruction in our art schools, having a direct relation to all the crafts and industries of the district; but we note with pleasure that an attempt is being made to lift art-teaching out of the ancient and unnatural grooves into which it has fallen, and bring it into closer and more vital relationship with life. In two of our art schools an art course for holders of free places has been provided, and about sixty young persons have availed themselves of it. The course of instruction at both schools is so arranged that, while no encouragement is given to specialisation in any given direction, it is hoped that with the opportunities provided for the practical application of drawing, modelling, and design in a variety of art crafts, the students will eventually from one or other of these select a life calling. Excellent practical results have so far been achieved.

The courses of instruction and the attendance at classes for architecture and building construction and drawing may be said to be satisfactory. There is a tendency, however, in some of the classes to divorce the theory from its useful application, and to select examples for study from books rather than from models. Of course, this is largely due to the fact that at the smaller centres a suitable equipment of models is not available. This, however, will be remedied in time. We venture to express the opinion that if a few typical models were selected for study each year, and students sketched them, and then made drawings to scale of parts of buildings in which the principle illustrated in the model was used, it would afford a better training for the students than a large number of exercises in copying from models and flat copies. The excellent work in both the elementary and advanced classes at Auckland, Wanganui, Wellington, and Christchurch appears to call for special mention.

It is to be hoped that by some combined effort on the part of employers, Trades and Labour Councils, and the education authorities throughout the Dominion some scheme may be devised whereby the attendance at a course of technical instruction of a very much larger percentage of the youths engaged in the building and kindred trades may be insured.

It is satisfactory to note the increase in the number of young lads holding free places who are attending courses in woodwork, in which instruction in building construction and drawing is included.

We regret we are again unable to report much progress in the matter of the establishment of technical classes in two important branches of our staple industries—namely, agriculture and dairying. A good deal of attention, however, has been given in the majority of the education districts to the instruction of public-school teachers in nature-study, with an agricultural trend, and there is every reason to expect that these courses of instruction will bear an ample harvest by the quickening, through the primary-school classes, of a desire in the minds of our young people in rural districts for more advanced instruction. Classes in agriculture and dairying were

established in the Wanganui District, and the attendance of young farmers and those engaged in butter-factories may be regarded as satisfactory. We note that agricultural and pastoral associations are doing a good deal to encourage the work in the primary schools, and we think if similar encouragement were offered to adult classes a stimulus might be given to the work. It is a matter for regret that through a misunderstanding the attendance of butter-factory managers at the winter school, organized for their special benefit by the Auckland Education Board, was so small. The course of instruction, both from theoretical and experimental standpoints, was an excellent one.

Speaking generally, the number of students in attendance and the work done at the classes for carpentry, joinery, cabinetmaking, and carriage-building may be regarded as satisfactory. There are, however, certain matters connected with the classes in the smaller centres to which it is desirable to refer: (1.) The marked absence from these classes of those who are engaged in the trades; the students are mostly drawn from the ranks of amateurs. No objection can be advanced to a course of instruction of amateur carpenters and cabinetmakers forming part of the work of a technical school—on the contrary, such a course has its distinct advantages; but the class is technical in name only unless instruction in principles forms part of the course. Of these principles drawing may be regarded as fundamental, and no practical work at the bench, however simple, should be undertaken by a student unless he has first made a drawing of it in, at least, plan and elevation. In addition to this, the ordinary workshop practice of setting out details full size on suitable setting-out boards could with advantage be adopted. (2.) Circumstances seem to call for a closer co-ordination between the classes in carpentry and joinery and those in building-construction. In the solitary class for carriage-building the principles of the subject and the drawing connected therewith are taken on one evening, and the practical work on another. At the latter parts only of a vehicle are made, in order to illustrate the principles of construction, and to give students an opportunity of obtaining an insight into work (some of it very difficult) which in the ordinary course of their daily work would seldom come under their notice. Surely there is as close a relationship between building-construction and carpentry and joinery as between the theory of carriage-building and carriage-construction, and it is suggested that a similar mode of procedure might be adopted in the carpentry and joinery classes. Similarly, students taking building-construction should also have some instruction in practical work, and part of the practical exercises in the advanced course might be the construction of a series of models to scale of architectural details. The construction of such models would afford an opportunity for the exercise of the highest manipulative skill, and when the models were completed they would be of considerable value for elementary students. Surely the time has arrived when we should not be compelled to import models for elementary work. As the work in the advanced classes reaches a high standard it should not be a difficult matter to arrange for a supply of models to be constructed at the main centres for the smaller schools in the district.

It may be said that the courses of instruction in commercial work are fairly complete, and from the standpoint of attendances of pupils the commercial classes may be regarded as most successful. Reference to Table A shows that the total average attendance at classes for commercial subjects has again been considerably greater than at any of the other groups of subjects specified therein. For many reasons, this condition of things does not appear to be in the best interests of a country such as ours. Our national resources are only just beginning to be exploited, and in the near future the demand for an increasing number of skilled workers must arise; if, therefore, those who at the present moment should be undergoing a training which will equip them to eventually take their place among the workers are acquiring an equipment which will enable them to become distributors only, the consequences to the nation from a purely economic standpoint cannot be other than disastrous. In endeavouring to discover adequate reasons why so many students choose commercial rather than industrial courses at our technical schools, the question presents itself, have the facilities provided by controlling authorities for commercial instruction created a demand for it, or has a popular demand made it necessary that the courses of instruction should be provided? In other words, has the supply created the demand, or has the demand created the supply? There is no doubt that to provide instruction in book-keeping, shorthand, typewriting, commercial history, and commercial geography, and kindred subjects presents few organizing difficulties to controlling authorities. The establishment of commercial classes does not call for a large expenditure of either mental energy or money, while suitable instructors are more easily obtained than in the case of most other subjects.

A large proportion of the pupils in attendance at classes for commercial subjects are young girls, who are either already in offices or looking forward to employment in an office as a means of livelihood. For economic reasons most of these young girls are called upon at a comparatively early age to contribute to the household expenses of the family, and, as there is an increasing demand for female clerks, the possibilities of employment after passing through a two-years course of systematic instruction are fairly certain. The avenues to what is regarded in some quarters as polite employment present few obstacles, and the ranks of the workers in what used to be regarded as "woman's sphere" are steadily becoming depleted.

That it is part of the function of a technical school to provide systematic instruction in subjects related to commercial pursuits cannot be questioned, since both the business man and the distributor have an equal right with all other workers to facilities for acquiring a knowledge of the principles governing the conduct of a business; at the same time, it does seem that, whatever the reason may be, the number of students taking commercial subjects is unduly large when compared with the number taking other subjects of technical instruction.

There is no very marked increase in the number of attendances at classes in cookery. This is probably due to the increased facilities provided for the instruction of pupils in this subject at

both the primary and secondary schools, rendering the attendance of young persons at technical classes in this subject unnecessary. Any further extension of this work will probably lie in the direction of the training of professional cooks.

The large number of pupils attending classes for instruction in dressmaking shows that the demand for instruction in this subject is very general, and, although in a few isolated instances attempts have been made to make the classes truly technical, and to abolish the use of charts, much remains to be accomplished in this direction.

The classes for tailoring appear to command only a small number of students. A thoroughly systematic course of instruction and a good teacher should, we think, deserve more support at the hands of journeymen tailors and apprentices than appears to be at present the case.

Some attention has been given to home nursing in one district. There appear to be ample reasons for the extension of this work, especially where experienced trained nurses as instructors can be obtained.

In most of the classes in millinery the course of work suggested by the City and Guilds of London Institute has been adopted with excellent results.

Reviewing the work of the classes in mechanical and electrical engineering as a whole, we are pleased to note that increased attention is being given to the principles underlying these important branches of industry. The remarks referring to closer co-ordination of theoretical and practical work in the carpentry and joinery classes and classes for building-construction apply with equal force to classes for practical fitting and turning, and machine construction and drawing; there is, however, another matter in connection with the engineering classes that appears to call for attention—viz., the necessity for correlating the instruction in mathematics, including elementary geometry, with the instruction in drawing. The young engineer must learn mathematics not as an end in itself, but as a tool that is to be useful to him, and if mathematics is to be a useful tool, he must learn by using it. It would therefore appear to be an absolute necessity that the teacher of mathematics in an engineering class should himself be an engineer, or, in other words, the engineer who teaches the drawing should also teach the necessary mathematics connected with the drawing. If the students in attendance at the mechanical drawing classes simply draw from flat copies, there will be little need for the use of practical mathematics; but if after the preliminary lessons in the use of drawing-instruments have been given the course of instruction is arranged so that a knowledge of how the shape and proportions of the parts of machines drawn are arrived at (and this appears to be the natural and, therefore, the best way of teaching machine construction and drawing), then mathematics is a necessity. The difficulty of inducing students to attend a separate class in mathematics would be overcome if part of the time devoted to the instruction in drawing each evening was devoted to instruction in mathematics. This would mean less drawing, but we venture to express the conviction that it would mean more mental training for the students, and, more than this, it would make the drawing lessons of very much more practical value to them. As regards workshop practice, increased facilities in the way of machine tools and equipment generally are being provided as occasion demands and circumstances warrant. The equipment of engineering workshops is a costly matter, and calls for the greatest thought and care in adapting the equipment to the real as distinguished from the ideal needs of the course of instruction. We consider that for elementary, practical, mechanical, and electrical engineering a few substantial and accurate machines with simple accessories are all that is required for, say, a two-years course. Advanced work will require additional machinery, but the acquisition of this may with advantage be distributed over a period of years. Evidence is not wanting that a thoroughly educative course in elementary ironwork can be provided without an extensive and costly array of machine tools.

The attendance of pupils and the work at classes for instruction in theoretical and practical plumbing are such as to make these classes among the best in our technical schools. The action of local authorities and master and journeymen plumbers in requiring a workman to have a certificate before he can undertake certain branches of plumbing has rendered attendance at a course of instruction at a technical school a necessity to him, with the result that the majority of the classes are well attended, and, in most cases, excellent work is done. The hope is expressed that the time is not far distant when either similar or other forces will make it compulsory for all mechanics in all branches of industry to attend courses of instruction in the theory and practice of their trade.

The Art and Science Examinations of the Board of Education and the Technological Examinations of the City and Guilds of London Institute were conducted as usual by the Department. The results, which are given on pages 14 and 15, may be summarised as follows: Of 582 candidates who sat for the South Kensington Examinations, 370 passed; the number of students' works sent Home for examination in connection with art certificates was 13, of which number 4 were accepted by the examiners. The number of candidates who sat for the Institute's examination was 263, of which number 179 passed. At the Institute's examinations for teachers in cookery and woodwork, 21 teachers passed in cookery and 5 in woodwork. The examinations were held at twenty centres.

M. H. BROWNE,

E. C. ISAAC,

Inspectors of Technical Instruction.

The Inspector-General of Schools, Wellington.

No. 4.

MANUAL AND TECHNICAL INSTRUCTION IN THE SEVERAL EDUCATION DISTRICTS.

AUCKLAND.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

The report of the Director shows that no less a number than 1,150 students were in attendance at the Auckland Technical College during the year. A day-school for boys and girls has been established, with an attendance of 170. The three manual-training schools at Auckland, and those at Thames and Whangarei, have provided instruction in cookery and woodwork for the boys and girls of the upper standards of the primary schools. Instruction in brush drawing or other hand-work has been given in 231 schools. Systematic instruction in agriculture and nature-study has been given in ninety schools, and classes for the instruction of teachers have been held in various centres. The new Technical College, when erected, will provide ample accommodation for the classes which are now suffering from the disadvantage of inadequate accommodation.

Technical and Continuation Classes have been established at the larger centres of population, and classes for the technical training of teachers have been held at Auckland, Thames, and Whangarei.

EXTRACT FROM THE REPORT OF THE CHIEF INSPECTOR OF SCHOOLS.

In the upper classes of the larger schools suitable lessons of an illustrative and experimental character are given in elementary science; elsewhere nature-study and elementary agriculture are taken up. In the two latter, accurate notes of observations and of experiments and of practical work must be considered indispensable, and illustrative drawings and sketches should be made. As far as possible these should be the original work of the pupils. It is a good plan to place the notes on the right-hand page, and the sketches, with needful explanations, on the opposite page. Mr. Grierson remarks that nature-study is not sufficiently practical. "I have little hope of improvement in this matter with the present generation of teachers, who have little idea how to study nature themselves." Mr. Garrard finds nature-study "well taught," and remarks that "teachers are sparing no effort to make the teaching instructive and interesting." Mr. Purdie, while noting considerable improvement in nature-study, considers that school gardening is not proving successful, and Mr. Stewart takes much the same view. "The aim of the school garden," the latter says, "is misunderstood. In a number of cases a small school garden is attached to the school, and, valuable as it is in cultivating a love of flowers, it does not do the work a school garden should. The school garden should be the laboratory in which by experiments the children verify and supplement the knowledge of plant-life given in the schoolroom. The results there obtained will be by far the most valuable part of the instruction. In most of the smaller country schools the garden is either conspicuous by its absence, or else it is in a neglected condition. 'The School Garden,' by J. E. Hennessey (Blackie and Son; 1s.) is an excellent little manual that would be of great assistance to teachers taking up this subject. In every case drawing should be correlated with nature-study. The greatest mistake made by the majority of teachers is attempting to cover too much ground. In endeavouring to overtake the work planned they abandon the observational method, which gives the subject its real value."

Certain kindergarten exercises form a prominent feature in the training of the younger pupils. Paper-folding is very commonly taught, and the manipulation is very satisfactory, but it is seldom sufficiently correlated with drawing, which should be its invariable complement, and it is turned to little account for giving practice in oral expression.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF TECHNICAL EDUCATION.

Handwork in the Primary Schools.—It is generally conceded that the backbone of the educational system of New Zealand is the primary school, and the backbone of the primary school is certainly the teacher. In the Auckland District in 1907 there were 484 primary schools (including half-time schools) under the control of the Board, and engaged in these schools were 947 teachers. It is universally recognised that to arouse interest one must promote activity: that "to do is to know." That the way to learn is to learn by doing was not discovered by Froebel is true, but he it was who most clearly insisted on the accuracy of this principle. This doctrine has been undoubtedly responsible for the growth of laboratory methods of teaching, which, commencing in the kindergarten and the technical schools, have invaded even the most conservative colleges, and are sweeping up through the primary and down through the secondary, even into the grammar schools. If, in teaching a child, one can make him actually do something himself—can guide him to create something really his own—then one has found a means surer than any other of arousing dormant and holding vagrant faculties, has opened a clear path to whatever capabilities a child may have, has established at least one point of contact between the trained individuality of the teacher and the as yet nebulous individuality of the growing child. In the old-fashioned curricula what opportunity for this important business of creativeness was offered? As a rule, but one avenue was presented—the avenue of literary creation, admittedly the most difficult of all arts. Nevertheless, the old educationalists, feeling dimly the necessity for creativeness in education, set their pupils to the work of creating, and as a result we had in schools those worse than useless "compositions" on faith, hope, or charity, and in colleges that abomination of educational desolation, the writing of Latin verse.

With manual training, however—using the term in its broadest sense, so as to include even the occupations in the kindergarten school—the child is not compelled to lie to you and to himself by pretending to a literary power he cannot possess. One simply employs the natural instinct of the child to use its hands; one merely seizes upon that passion of most children to make something; one but leads into regulated channels the brimming enthusiasm of healthy youth, for the bending and shaping of inanimate things. The first step towards this real education is, of course, to secure smaller classes in the schools, and over those smaller classes to place in every instance teachers who know how to teach. The second step is to introduce into our school programmes, from the very first to the very last year of school, as much manual training as possible. For manual training, of whatever type, cannot be done by battalions; it must be performed by individuals. Handwork cannot be slurred over in chorus; it must really be done, each piece and process, under the teacher's eye.

Brush drawing, paper-folding, &c.: When the Newton, Newmarket, and Ponsonby Manual Training Schools were established in Auckland four and a half years ago, to provide training in woodwork and cookery for the boys and girls respectively who were in the upper standards of the primary schools, it was recognised that, in order to obtain the greatest efficiency from these schools, a systematic course of handwork, beginning with the commencement of the school life of the pupil, should be introduced. Steps were therefore taken to engage an expert from England, whose duty it would be to train the teachers in drawing and handwork, so that they could teach these subjects in their schools. As a result, four years ago, Mr. Harry Wallace, who was engaged in a similar position under the Burslem School Board, was appointed, and a year and a half later, on account of the rapid growth of the work, an additional appointment for the same purpose was made in the person of Mr. Francis C. J. Cockburn, of the Halifax Higher-grade School, England. The teachers of the Board have availed themselves very largely of these special classes provided for them, and during the past four years over seven hundred have been in attendance, and the result of the training they have received is shown in the high quality of the work now being done in their schools, which reflects the highest credit upon Messrs. Wallace and Cockburn and the teachers alike.

In a large number of the schools handwork, embracing such subjects as stick-laying, cane-weaving, paper cutting and folding, cardboard modelling, free-arm drawing, plasticine (clay) modelling, brush drawing, &c., are taught, from the lowest classes upwards. On account of its great value in co-ordination with nature-study and elementary agriculture, brush drawing has been taken up more than any other. In connection with this work it is necessary to issue a word of warning to teachers. Children taking up brush drawing, as a rule, are keenly interested in the work from the start, no doubt largely due to the fact that the normal child loves colours, and there is no necessity, under the impression that the interest would be increased, for them to commence their brush drawing from nature. Before nature-work is attempted the child should have some control over the brush, and be able to draw the simpler typical brush forms, and to use these to build up simple designs. As facility is obtained, nature-drawing can gradually be introduced, and, whilst interest has all the time been maintained, the quality of the nature-drawing will tend to become much less of the "impressionism" type, and far truer to nature. The number of schools in which brush drawing, &c., was taught in the Auckland District in 1907 was 231, the number of pupils receiving instruction being 21,487, an increase of 36 schools and 4,058 pupils over those of the previous year.

Needlework: The importance of this subject for girls, from the utilitarian as well as from the educational point of view, cannot be overestimated, especially in a country such as New Zealand, where the obtaining of domestic help is becoming increasingly difficult. Many teachers have never had an opportunity of receiving any systematic instruction in needlework, and I hope, when the new Technical College is erected, to be able to provide such training. Last year sixty-six sole-charge schools, having no female teachers, availed themselves of the financial assistance given under the Regulations for Manual and Technical Instruction and appointed sewing-mistresses. The number of children who received instruction in needlework was 946.

Swimming and life-saving: In this country, where waterways play so important a part, it is absolutely essential that every boy and girl should learn not only how to swim, but should also be able to render assistance in cases of drowning, and it is to be regretted that only two schools in the district took the subject up. The regulations of the Department demand only twenty half-hour lessons during the year, and for this course of instruction a payment of 2s. 6d. per annum is made for each unit of average attendance. As the Board has now decided that 75 per cent. of the capita-tion earned by such classes shall go to the teacher of the classes, it is hoped that a larger number of pupils will receive instruction, especially as there are so many rivers and creeks in the province, apart altogether from the facilities of the sea-shore, where such instruction could be given.

Other subjects: Three classes in elementary chemistry, one in physical measurements, and one in elementary physiology were recognised under the Manual and Technical Instruction Regulations during the past year.

Agricultural Education.—When I submitted to the Board in May, 1904, a scheme of agricultural education for Auckland, I pointed out the fact that New Zealand had to compete for the sale of its agricultural produce in the markets of the world, and that it was essential for our very existence that we should leave no stone unturned to make the education of those engaged in our chief industry—agriculture—as efficient as possible. The following extract from a letter written in May last by President Roosevelt to the President of the National Society for the Promotion of Industrial Education of the United States, a society, I may say, of which I am a member, is, I think, worth quoting:—

"As a people, there is nothing in which we take a juster pride than our educational system. It is our boast that every boy or girl has a chance to get a school training; and we feel it is a

prime national duty to furnish this training free, because only thereby can we secure the proper type of citizenship in the average American. Our public schools and our colleges have done their work well, and there is no class of our citizens deserving of heartier praise than the men and women who teach in them.

“Nevertheless, for at least a generation we have been waking to the knowledge that there must be additional education beyond that provided in the public school as it is managed to-day. Our school system has hitherto been well-nigh wholly lacking on the side of industrial training—of the training which fits a man for the shop and the farm. This is a most serious lack, for no one can look at the peoples of mankind as they stand at present without realising that industrial training is one of the most potent factors in national development. We of the United States must develop a system under which each individual citizen shall be trained so as to be effective individually as an economic unit, and fit to be organized with his fellows so that he and they can work in efficient fashion together. This question is vital to our future progress, and public attention should be focussed upon it. Surely it is eminently in accord with the principles of our democratic life that we should furnish the highest average industrial training for the ordinary skilled workman. But it is a curious thing that in industrial training we have tended to devote our energies to producing high-grade men at the top rather than in the ranks. Our engineering schools, for instance, compare favourably with the best in Europe, whereas we have done almost nothing to equip the private soldiers of the industrial army—the mechanic, the metal-worker, the carpenter. Indeed, too often our schools train away from the shop and the forge; and this fact, together with the abandonment of the old apprentice system, has resulted in such an absence of facilities for providing trained journeymen that in many of our trades most of the recruits among the workmen are foreigners. Surely this means that there must be some systematic method provided for training young men in the trades, and that this must be co-ordinated with the public-school system. No industrial school can turn out a finished journeyman; but it can furnish the material out of which a finished journeyman can be made, just as an engineering school furnishes the training which enables its graduates speedily to become engineers. We hear a great deal of the need of protecting our workmen from competition with pauper labour. I have very little fear of the competition of pauper labour. The nations with pauper labour are not the formidable industrial competitors of this country. What the American working-man has to fear is the competition of the highly-skilled working-man of the countries of greatest industrial efficiency. By the tariff and by our immigration laws we can always protect ourselves against the competition of pauper labour here at home; but when we contend for the markets of the world we can get no protection, and we shall then find that our most formidable competitors are the nations in which there is the most highly developed business ability, the most highly developed industrial skill; and these are the qualities which we must ourselves develop. We have been fond as a nation of speaking of the dignity of labour, meaning thereby manual labour. Personally I don't think that we begin to understand what a high place manual labour should take; and it never can take this high place unless it offers scope for the best type of man. We have tended to regard education as a matter of the head only, and the result is that a great many of our people, themselves the sons of men who worked with their hands, seem to think that they rise in the world if they get into a position where they do no hard manual work whatever—where their hands will grow soft and their working-clothes will be kept clean. Such a conception is both false and mischievous. There are, of course, kinds of labour where the work must be purely mental, and there are other kinds of labour where, under existing conditions, very little demand indeed is made upon the mind, though I am glad to say that I think the proportion of men engaged in this kind of work is diminishing. But in any healthy community, in any community with the great solid qualities which alone make a really great nation, the bulk of the people should do work which makes demands upon both the body and the mind. Progress cannot permanently consist in the abandonment of physical labour, but in the development of physical labour so that it shall represent more and more the work of the trained mind in the trained body. To provide such training, to encourage in every way the production of the men whom it alone can produce, is to show that as a nation we have a true conception of the dignity and importance of labour. The calling of the skilled tiller of the soil, the calling of the skilled mechanic, should alike be recognised as professions just as emphatically as the callings of lawyer, of doctor, of banker, merchant, or clerk. The printer, the electrical worker, the house-painter, the foundryman, should be trained just as carefully as the stenographer or drug clerk. They should be trained alike in head and in hand. They should get over the idea that to earn \$12 a week and call it ‘salary’ is better than to earn \$25 a week and call it ‘wages.’ The young man who has the courage and the ability to refuse to enter the crowded field of the so-called professions, and to take to constructive industry, is almost sure of an ample reward in earnings, in health, in opportunity to marry early, and to establish a home with reasonable freedom from worry. We need the training, the manual dexterity, and industrial intelligence which can be best given in good agricultural, or building, or textile, or watchmaking, or engraving, or mechanical schools. It should be one of our prime objects to put the mechanic, the wage worker who works with his hands, and who ought to work in a constantly larger degree with his head, on a higher plane of efficiency and reward, so as to increase his effectiveness in the economic world, and therefore the dignity, the remuneration, and the power of his position in the social world. To train boys and girls in merely literary accomplishments, to the total exclusion of industrial, manual, and technical training, tends to unfit them for industrial work; and in real life most work is industrial. The problem of furnishing well-trained craftsmen, or, rather, journeymen, fitted in the end to become such, is not simple—few problems are simple in the actual process of their solution—and much care and forethought and practical common-sense will be needed in order to work it out in a fairly satisfactory manner. It should appeal to all our citizens. I am glad that societies have already been formed to promote

industrial education, and that their membership includes manufacturers and leaders of labour-unions, educators and publicists, men of all conditions, who are interested in education and in industry. It is such co-operation that offers most hope for a satisfactory solution of the question as to what is the best form of industrial school, as to the means by which it may be articulated with the public-school system, and as to the way to secure for the boys trained therein the opportunity to acquire in the industries the practical skill which alone can make them finished journeymen."

With the sentiments expressed in the above I entirely agree, and it behoves those who are responsible for education in this country to keep constantly in mind the object of education. "To prepare us for complete living is the function which education has to discharge," said Herbert Spencer, and this interpreted in its broadest sense surely means that education should train the individual to be a good citizen, to take his correct position in the community, to render to the State the very best service in his power, and to feel his personal responsibility. It should develop skill in effort, love of labour, keenness of intellect, and joy of appreciation. Here in New Zealand, I am afraid we often lose sight of the fact that the towns are supported by the country. We are not a manufacturing country, nor are we likely to be for very many years to come, even if ever we are. Our climate is such as renders many agricultural pursuits highly successful, and these are undoubtedly the backbone of the country. That being recognised, it is necessary that we should by every legitimate means encourage our people to live in the country. The tendency in most countries to-day appears to be for the people to migrate to the towns, and for our well-being this must be prevented in New Zealand at all costs. We must give our children in the country some of the advantages enjoyed by the children in the towns, and our country education must be such as will train our children for "complete living" in the country, and make them feel the attractiveness of country life by bringing them into the very closest touch with nature—making known to them the message of star, rock, flower, and bird. Our one-room school must become the four-roomed consolidated school, so that a woman trained to teach domestic science and home economics, and a man trained to teach agriculture, may find here a fair salary, which will warrant them in thoroughly preparing for their important task.

With the arrival of the Board's expert in nature-study and agriculture, Mr. V. W. Jackson, B.A., of the Ontario Agricultural College, Guelph, in May, 1906, steps were taken to give teachers of the primary schools a preliminary training in nature-study and elementary agriculture on two days per week for a period of three months, or for a total period of twenty-six whole days. This procedure, which was found to work very satisfactorily, was continued during last year. During the summer vacation, in January and February, a summer school in agriculture was held at Onehunga for a period of twenty-four days for teachers who lived in the backblocks, and who could not conveniently attend any centre except in the holidays. Twenty-four teachers attended, and these were granted an extra fortnight's holiday by the Board. Forty-three teachers attended the classes at Papakura and Pukekohe during the months of March, April, and May, and forty-four at the Paeroa and Te Aroha classes in September, October, and November. A special short course was given to twenty-eight teachers attending the Auckland Training College in August. All these classes made considerable use of the Government experimental farms at Ruakura and Waerenga, which were visited, and where lectures on viticulture, fruit-growing, grafting, and budding, &c., were given by the various experts of the Agricultural Department, and I wish to express my appreciation to the Director of the Experimental Farms and to his colleagues for their courtesy and valuable assistance. During the past two years 239 teachers have attended courses of instruction in agriculture, and of these 168 gained the Board's certificates of competency. One of the results of this has been that the number of schools in which elementary agriculture is taught has largely increased.

During the year 2,061 pupils, at 90 schools, received instruction, as against 1,032 pupils, at 60 schools, during 1906.

In order to assist the teachers in carrying out this important teaching in their schools, a pamphlet, entitled "Some Experiments in Elementary Agriculture for the Auckland Public Schools," was issued in May last. This pamphlet gave a suggestive course spread over a period of two years, working on the basis of one hour per week, and dealt with (a) Indoor Experiments with Plants, (b) Outdoor Experiments with Plants, (c) Experiments with Soils, (d) Experiments with Milk. Bulletins and leaflets were issued from time to time during the year, and these, I believe, were found most helpful, and were much appreciated by the teachers. The following is a list of the leaflets, &c., issued: Circular A: The School Garden for March; hints on apparatus supplied to the schools; how to make a mercurial barometer. Circular B: The School Garden for April: movements of sun and stars; altimeter; Southern Cross clock. Circular C: The School Grounds for May; suggestions for improvement; winter cover-crops, and study of fruits; lesson on the magnetic compass—deviation and variation. Circular D: The care of fruit-trees during winter; June pruning Lesson, material and notes on "Fruits and Seeds." Card D: Classification of New Zealand fruits. Circular E: Top-dressing experiment (July); lesson on Solar and Civil Times. Card E: Time Chart for correcting Noon-posts, &c. (illustrated). Circular F: The School Garden for Spring—suggestions; an Illustrated Sheet of useful Garden Helps and Tool House. Card F: Plan of School Garden (illustrated). Card G: The Natural Orders of Garden Plants. Leaflet H: Treatment of Insect Pests and Plant-diseases: School Mixtures. Card I: Classification of Insects, Injurious and Beneficial. Card J: How to make a Sun-dial (illustrated). Score Cards for Dairy Cattle, Beef Cattle, Bacon Swine, and Mutton Sheep. Wall Pictures (14 in. by 20 in.) for School-room: (1) Good Types of Dairy and Beef Cattle; (2) Various Breeds of Colonial Sheep; (3) Best Breeds of Swine; (4) Weed-seeds, with descriptive text. Reviews of Nature-study Examinations for Teachers.

In order to encourage both teachers and pupils to beautify the school grounds, and also to stimulate the teaching of nature-study and elementary agriculture in the public schools, the Board

has decided to award prizes to schools and to individual pupils, as per scheme given below. In connection with this scheme, I wish to point out to teachers that the sole function of the school garden is not to show how large a crop of any particular kind can be raised on a given area under certain conditions with the aid of certain manures. The school garden should serve at least the following purposes: (1.) As a means of helping to beautify school grounds. (2.) As a means of making the pupils acquainted with plant-life, and of helping them to understand and take an intelligent interest in the properties of soils, the conservation of moisture, insect friends and foes, &c. Above all, it gives the live teacher an opportunity of vitalising the ordinary work of the school by correlating garden work with drawing, composition, arithmetic, and geography. As far as possible, all work should be done, and every operation faithfully recorded, by means of writing, drawing, &c., by the pupils themselves. For the teacher to perform the work and then to dictate to the pupils the notes they are to take is almost worse than useless. Teachers who adopt an intelligent scheme of co-ordination will be astonished at the improvement of their pupils in composition, drawing, arithmetic, &c. Again, it is very little use to grow, say, a large crop of potatoes if in growing them the pupils do not learn something about the way they grow, their roots, stalks, leaves, &c. (3.) It will make the child take a more intelligent and keener interest in the home garden if the training is directed by the teacher, as it should be.

Rewards to schools: For a series of consecutive photographs or drawings, or both, showing the indoor and outdoor work done in nature-study and agriculture during the complete school year. The merits of the scheme of work will be the basis of comparisons, and not the technique of the photographs or the drawings. Intelligible plans of the school garden, &c., will be as valuable as the best photographs of the same. The drawing note-books of three pupils may be submitted as a record of the indoor work, the same to be returned. A brief outline of the year's routine should accompany the illustrations. The best illustrated scheme of work will be reproduced in a standard agricultural periodical, and all drawings should be done in black ink for reproduction. Besides this public recognition, the school submitting the best scheme of work done will receive, and have the option of, an agricultural library, garden-seeds, nursery stock, or similar school aid, to the value of—first prize, £5; second prize, £3; and third prize, £1.

Rewards to individual pupils: In order to encourage individual and independent research amongst the pupils attending public schools in the Auckland District, the following awards will be made: (1.) Open to Standards III and IV: For a series of five drawings showing the development of the apple from the blossom. Drawings to be made by the pupil, with pen or brush and black ink, and twice natural size, for reproduction. Drawings to be sent to the Director of Technical Education, Auckland, before the 20th December, 1908. First prize, 10s.; second prize, 6s.; third prize, 4s. (2.) Open to Standards V and VI: For an original research on the codlin-moth, and an illustrated account of the same in an essay entitled "How I discovered the Habits of the Codlin-moth." To be sent to the instructor in nature-study, Technical College, Auckland, before the 15th February, 1909. First prize, 10s.; second prize, 6s.; third prize, 4s. (3.) Open to Standards III and IV: For brush drawings of six native grasses, the same to be named, with a short, self-observed description in each case. Successful candidates are liable to be asked questions concerning the submitted grasses. Drawings to be made with black ink, for reproduction, and sent to the instructor in nature-study before the 15th February, 1909. First prize, 10s.; second prize, 6s.; third prize, 4s. (4.) Open to Standards V and VI: For brush drawings from nature of six forage-plants, and working the same into some original design. Drawings may be made in colours, and sent to the instructor in nature-study before the 15th February, 1909. First prize, 10s.; second prize, 6s.; third prize, 4s. (5.) Open to Standards III and IV: For an original essay, entitled "Something I found out Myself about Plants." To be sent to the Director before the 15th March, 1909. First prize, 10s.; second prize, 6s.; third prize, 4s. (6.) Open to Standards V and VI: For an original essay, entitled "Something I found out Myself about Plant-foods." To be sent to the Director before the 15th March, 1909. First prize, 10s.; second prize, 6s.; third prize, 4s. In every case the headmaster of the school must certify that the work done is entirely that of the pupil.

Agricultural exhibit at the Winter Agricultural Show: At the Winter Agricultural Show, held at Auckland during May, an exhibit was arranged by Mr. Jackson showing some of the work done and the apparatus used in the public schools for the teaching of agriculture. Leaflets showing the scope of the work were distributed, and the exhibits aroused a considerable amount of interest. On the last day of the show Mr. Jackson delivered a lecture on "Nature-study," which was largely attended by teachers and by the general public.

During June and July last a Winter School for Managers and Assistants engaged in Dairy Factories and Creameries in the Auckland Province was held at the Technical College. The work dealt with included—(1) Composition of milk; (2) principles in milk-testing; (3) bacteria in milk; (4) ripening of cream, and test for ripeness; (5) butter-making process and principles; (6) cheese-making process and principles; (7) the dairy cow; (8) the mechanism of milking-machines; (9) a study of the different cream-separators by visiting the various agencies; (10) refrigerating apparatus and principles, by visiting various freezing-works and ships. This was the first school of the kind held in Auckland, and, unfortunately, only six dairymen attended; but these were so enthusiastic over the value of the instruction which they received that a similar school held this winter is sure to be largely attended.

Pupils who have passed a primary school in the Dominion, and have been successful in obtaining Standard VI certificates of proficiency, have the choice of free secondary education at a district high school, high school, or technical school. On entering our technical schools, before commencing to specialise, students receive a secondary education, which has a strong bias towards the career they eventually intend to adopt. In Auckland, whilst those whose intention it is to enter upon a

mercantile or industrial career are well catered for, no special provision has up to the present time been made, beyond that given in the primary school, for the training of those who eventually intend to make their living on the land. It has therefore been decided to establish a technical school at Hamilton having a strong agricultural bias. It is not intended that this school shall be an agricultural college, but rather a stepping-stone from the primary school to the agricultural college.

It is proposed that the institution shall provide training for boys and girls entering the school at about fourteen years of age, such as will have a direct bearing on farm life. The courses of study will include English, chemistry, botany, mechanics, woodwork, metalwork, practical mathematics, agriculture, land surveying and measuring, book-keeping, dairy-work, poultry and bee keeping, gardening, needlework, dressmaking, millinery, cookery, laundry-work, housewifery, hygiene, and physiology, a distinction, of course, being made between the instruction given to boys and to girls. The proposal for the establishment of such a school has been taken up with great enthusiasm by the people of Hamilton, who have subscribed a sum of £220, whilst the Hamilton Borough Council has granted an excellent site of 5 acres close to the town and to the railway-station. Application has been made to the Government for a grant in aid of the erection of the building, and it is hoped that the school may be working by the beginning of next year. Any report dealing with agricultural education in Auckland at the present time would be incomplete without reference to Mr. V. W. Jackson, the Board's instructor, to whom I wish to pay special tribute for the energy, ability, and enthusiasm he has shown in his work.

Cookery and Woodwork.—In July, 1903, manual-training schools were erected at Newmarket, Newton, and Ponsonby respectively, to provide instruction in cookery and woodwork to girls and boys respectively in Standards V and VI of the Auckland city and suburban schools. These proved so successful that similar schools were established in August, 1905, at Whangarei and Thames, the people of the district in each case contributing a substantial sum towards the cost of erection and equipment. At these centres the girls receive instruction not only in plain cookery, selecting and purchasing of foods, &c., but they are also given simple lessons in the chemistry of daily life, elementary hygiene, the physiology of digestion, &c., all the work, as far as possible, being illustrated by experiments, many of which are performed by the pupils themselves. As well as being instructed in the use of common woodwork tools, the growth and characteristics of timbers, the making of joints and models, the boys are taught practical geometry, applying it as far as possible to their exercises and models. There is no doubt that both of these subjects have a very high utilitarian as well as educational value, and I trust that before long every girl and boy in the province will receive instruction in cookery and woodwork respectively. Liberal sums have been subscribed at Hamilton, at Otahuhu, and at Cambridge to provide for manual-training schools at these places. Plans have been submitted to the Education Department, and it is hoped that these schools will be erected during the present year.

The number of pupils in attendance at the five manual-training schools last year was—for cookery, 1,279; and for woodwork, 1,515. Ten pupils also received instruction in woodwork at Bombay Public School, and eleven at Mayfield Public School, making a total of 2,815 girls and boys receiving instruction during the year, or 8½ per cent. of the pupils in attendance at the public schools of the province.

Training of Teachers.—Art and handwork classes: For the fourth year in succession classes in art and handwork for head teachers, assistant teachers, and pupil-teachers were conducted in the evenings and on Saturday mornings at the Auckland Technical College by Mr. Harry Wallace. Many of the teachers have been in attendance at these classes since their inception in 1904, and their enthusiasm for the work is quite remarkable. During the session excellent work, particularly in drawing and painting from nature, was done. At the examinations of the English Board of Education five teachers passed in freehand drawing in outline and seven in model-drawing. Dress-making, cookery, and woodwork classes for teachers were held at Auckland and at Whangarei. These were very satisfactorily attended, and appeared to be much appreciated. A cookery class was held at Thames for the teachers of the district, and woodwork classes were conducted at Auckland, Whangarei, and Thames. In connection with the woodwork instruction, an attempt is being made to correlate the course, as far as possible, with the ordinary work of the primary school, and the models made by the teachers embrace such objects as sun-dial, sun-stick, balance, &c. Both hygiene and physiology are most important subjects for the teacher, and it is very gratifying to be able to record that these classes, which were inaugurated last year, were largely attended, and the course of instruction given by the Assistant-Director, Mr. G. P. Darnell-Smith, was much appreciated by the teachers. Special classes in cookery, woodwork, art, and handwork, and nature-study and agriculture were arranged for the teachers undergoing a two years' course of training at the Auckland Training College, instruction being given by the staff of the Department of Technical Education and Manual Training.

In January, a summer school was held at the Technical College for a fortnight, to enable teachers from the backblocks to receive a short course of instruction in drawing and brushwork. One hundred and five teachers attended, and their enthusiasm and regularity of attendance resulted in excellent work being done. The Board generously gave an extra week's holiday to those who attended. That these summer schools do much good and are greatly appreciated is shown by the readiness with which the teachers give up a portion of their holidays to attend, by the enthusiasm shown at the classes, and by the grateful recognition given to the instructors: and I trust that the Board will in the future do all in its power to encourage teachers to attend these schools, both by its sympathy and by granting concessions to them, such as extension of holiday.

Continuation and Technical Classes in Country Centres.—Continuation and Technical Classes were conducted during the past year at Thames, Whangarei, Hikurangi, and Dargaville by local teachers, whilst itinerant instructors also visited certain centres to teach dressmaking and millinery.

respectively. Unfortunately, last winter was one of the wettest ever known in the Auckland Province, and as many of the students had to travel long distances, in some cases over roads which were little better than mud tracks, the attendance at the country classes very much suffered.

Thames: Classes, as in the previous years, were conducted at the Manual Training School and at the Kauaeranga Public School, Mr. W. H. P. Marsden acting as Local Superintendent, and discharging his duties in that capacity most successfully. The subjects taught included English, Latin, commercial arithmetic, commercial correspondence, commercial geography, shorthand, type-writing, book-keeping, cookery, dressmaking, millinery, trade drawing, machine construction and drawing, carpentry and joinery, practical mathematics, physical measurements, and singing. The number of individual students in attendance was eighty-one, and the number of class entries was 310. At the examinations held in November and December 138 papers were worked, and ninety successes were obtained. At the end of the session (November) a very successful exhibition of the work done by the students in the dressmaking, millinery, cookery, carpentry and joinery, and other classes was held.

Whangarei: Under the local superintendence of Mr. David Grant, who discharged his duties in a most satisfactory manner, classes in English, French, book-keeping, commercial arithmetic, shorthand, dressmaking, drawing, painting, building-construction and drawing, carpentry and joinery, and trade drawing were held. These were attended by sixty-eight individuals, the number of class entries being 140. Forty-four students entered for the Technical Examinations, held at the end of the session, and twenty-nine passed.

Hikurangi: Classes were held at Hikurangi in English, commercial arithmetic, commercial correspondence, book-keeping, dressmaking, and mining engineering. Twenty-seven students enrolled, and there were fifty-two class entries. These classes suffered more than any others from the inclemency of the weather.

Dargaville: Only two classes were held in Dargaville last year—viz., dressmaking and type-writing. Eleven students attended the former class, and twenty-two the latter.

Dressmaking and millinery classes: The success which the dressmaking classes, under Miss Bessie Campbell, met with the previous year led to the appointment of Madame Marion Westgarth as itinerant millinery instructor last session. Classes were held at various centres, and in most cases very satisfactory work was done.

Auckland Technical College.

Day and evening classes were held as in the previous year, the number of individual students having increased from 911 to 1,150. The day classes for boys and girls, which were inaugurated in 1906, continued to make steady progress last session, both as regards numbers and quality of work done. The attendance increased from 83 to 133, of which 61 were girls and 72 boys. Of these, 46 were pupils who had attended the previous year. The object of these day classes is to provide boys and girls who have passed the Sixth Standard of a public school, during the first two years of their attendance at the College, with a sound practical education, having a strong bias towards the business of life they are afterwards likely to adopt. At the end of two years the pupils should be well fitted to either enter practical life as apprentices, articulated pupils, clerks, &c., and continue their studies at the evening classes of the Technical College; or take up a specialised technical course in the College day classes. The courses of instruction last year were—(1) Science and technological; (2) preliminary commercial; (3) special commercial.

The Science and Technological Course is open to boys only, and it is intended specially for those who propose to take up a trade or profession. The curriculum embraces English Composition and literature, practical mathematics, handwriting and commercial correspondence, practical geometry, mechanical drawing, theory and practice of chemistry, theory and practice of physics, manual training (woodwork), manual training (metal-work), health talks, and military drill and marksmanship. In this course particular attention is given to practical science and workshop practice, and it is gratifying to note that employers who have taken pupils as apprentices after they have been with us two years have spoken in high terms of the training the boys have received at the College. The Preliminary Commercial Course, which is open to boys and girls, is intended for those who have definitely decided to enter commercial life as clerks. The subjects taught include English composition and literature, practical mathematics, handwriting and commercial correspondence, commercial geography, drawing and design, business methods and office routine, elementary science, book-keeping, shorthand, typewriting and military drill (for boys), physical culture (for girls). The majority of pupils taking up this course leave at the end of two years, and these readily find employment at salaries varying from £1 to £1 10s. per week. The Special Commercial Course is intended for students of either sex, who are at least sixteen years of age, and who, having received a secondary education, wish to qualify themselves for positions as typists, shorthand-writers, book-keepers, secretaries, &c. This course embraces English composition and literature, commercial arithmetic, book-keeping, shorthand, typewriting, handwriting, commercial correspondence, and business methods and office routine. In connection with these day classes I desire to record the fact that the staff and myself have received very hearty and sympathetic co-operation from the parents of the pupils, and that the pupils themselves have shown great earnestness in their studies. The work has been carried on in temporary and unsuitable premises, and has in consequence been much handicapped therefrom; but I feel sure that with the opening of the new College these day classes will be one of the most important features of technical education in this district, and that they will prove of the utmost value to the community.

During the past year a special class in woodwork for the boys of the Jubilee Institute for the Blind was inaugurated at the College. The class, at which thirteen boys attended, was in charge of Mr. A. D. Trendall, and excellent progress was made, some of the work turned out by the pupils being of exceptional merit.

The evening classes, as in previous sessions, were carried on in temporary premises, no less than six buildings in different parts of the city being utilised for the purpose. Most of these were quite unsuitable, and the disadvantage of having the different departments so scattered was very considerable. However, after five years' waiting, there is every possibility that a portion, at least, of the new College will be ready for occupation during next year. Speaking generally, the quality of the work of the evening classes was slightly in advance of that done in any previous session. The attendance, however, on account of the wet weather for three months during the winter, and also because of the great amount of sickness during that period, was not as regular as usual. A much larger number of papers were worked at the College examinations than in 1906, and the percentage of successes was higher.

Students of both day and evening classes entered for the Examinations of the City and Guilds of London Institute, and of the English Board of Education, London, in June and July last. Considerable success was achieved, particularly in plumbing; carpentry and joinery; freehand, model, and geometrical drawing; machine construction and drawing; and building construction and drawing. It is interesting to note that of all the London Polytechnics and Technical Institutes in one only—the London County Council School of Building, Clapham—was a larger number of successes in plumbing obtained. At Clapham two more passes were obtained than in Auckland, but the number of plumbers in attendance there was more than three times as many.

Continuation Classes were held to enable those pupils who had left the primary school without passing the Sixth Standard to attend and improve their general education before entering the technical classes of the College. When it was decided, at the beginning of 1905, not to admit students to the College who had not passed the Sixth Standard (except those over twenty-one years of age), it was necessary to make provision for these students, so as not to prevent them from eventually attending if they had made good their educational deficiency in the meantime. Accordingly, continuation classes were started, and for the past three years they have filled a decided want. Last year forty-five students of various ages received instruction from Mr. James Vuglar; some excellent work was done, and at the end of the year twenty-six passed the Sixth Standard examination, conducted by Inspector Goodwin, twenty obtaining certificates of proficiency (which grant them free instruction in the technical classes), and six receiving certificates of competency.

It will be thus seen that it is possible in Auckland, even for boys and girls of defective education, to attend evening classes which will eventually qualify them for five years' free tuition at technical classes.

In connection with the Home Industries Section of the International Exhibition, held at Christchurch at the end of 1906 and beginning of 1907, special classes of exhibits for technical-school students were arranged. Exhibits were sent from various classes of the Auckland Technical College and from the manual-training schools, and it is satisfactory to be able to record that the work was highly spoken of by the public and by the Press. The plumbing exhibit in particular, which gained four gold, five silver, and one bronze medal, as well as first order of merit with special mention, was considered by experts in the Dominion and from "Home" to be one of the finest ever got together. By special request of the Christchurch Technical College, this exhibit was donated to the College, to be placed in its museum as an incentive for the Christchurch students.

GEORGE GEORGE, F.I.C., F.C.S., Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Special Classes conducted at the Auckland Technical College.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance at beginning of year ..	8,008	4 4	Salaries of instructors ..	2,804	16 10
Capitation on special classes ..	2,326	15 5	Office expenses (including salaries, stationery, &c.) ..	370	14 4
Capitation on account of free places ..	843	10 0	Advertising and printing ..	128	7 5
Rent ..	226	0 0	Lighting and heating ..	114	2 5
Material ..	159	12 11	Insurance and repairs ..	16	1 5
Subsidies on voluntary contributions ..	10,392	7 0	Rent ..	210	4 4
Fees ..	542	6 11	Material for class use ..	327	2 6
Voluntary contributions ..	45	16 0	J. B. McLeod Prize Fund ..	2	14 0
Sales of apparatus ..	13	0 1	Postage ..	65	18 5
Rents from sites ..	18	7 6	Legal expenses ..	6	7 0
Sales of material ..	107	8 4	Architect, &c. ..	463	16 1
Interest on fixed deposits ..	271	14 0	Furniture, fittings, and apparatus ..	1,057	14 0
			Balance at end of year ..	17,387	3 9
	<u>£22,955</u>	<u>2 6</u>		<u>£22,955</u>	<u>2 6</u>

VINCENT RICE, Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Technical and Continuation Classes in Country Districts.

Centre.	Receipts.										Expenditure.										Totals.
	Balance at Beginning of Year.	Grants from Government.					Other Receipts.				Totals.	Balance at Beginning of Year.	Administration.					Furniture, Fittings, and Apparatus.	Travelling Expenses.	Balance at End of Year.	
		Capitation on Special Classes.	Capitation on Free Places.	Furniture, Fittings, and Apparatus.	Material.	Rent.	Fees.	Sales of Material.	Instructors.	Advertising and Printing and Lighting and Heating.			Rent.	Material.	Incidental Expenses.						
Whangarei	£ s. d. 216 2 2	£ s. d. 178 13 3	£ s. d. 51 8 9	£ s. d. 3 2 0	£ s. d. 5 18 6	£ s. d. ..	£ s. d. 55 14 0	£ s. d. 5 13 7	£ s. d. 516 12 3	£ s. d. ..	£ s. d. 265 5 1	£ s. d. 135 19 8	£ s. d. 7 19 11	£ s. d. 21 15 0	£ s. d. ..	£ s. d. 10 11 9	£ s. d. 20 0 0	£ s. d. 42 12 6	£ s. d. 516 12 3		
Waikato ..	44 1 7	42 3 3	..	..	..	55 4 0	120 2 0	0 3 8	261 14 6	..	175 11 0	7 19 11	21 15 0	..	7 15 9	6 0 4	..	261 14 6	
Turua ..	17 9 5	8 18 9	..	..	..	..	..	..	26 8 2	..	24 0 0	..	..	..	..	..	..	26 8 2	
Te Kopuru	2 5 3	8 7 3	..	..	..	..	..	..	10 12 6	..	..	..	..	..	..	0 8 8	..	10 12 6	
Thames ..	186 11 2	251 18 1	163 15 9	1 10 0	6 16 5	..	..	..	610 11 5	..	356 5 11	31 15 5	..	..	19 10 9	..	31 0 0	610 11 5	
Onehunga..	26 10 6	28 1 0	..	..	..	..	..	..	54 11 6	..	..	..	..	..	..	5 2 0	..	49 9 6	54 11 6
Kamo ..	3 10 9	12 6 0	10 19 0	..	..	..	..	..	26 15 9	..	20 4 5	..	..	..	..	..	..	6 11 4	26 15 9
Hikurangi..	..	53 17 8	9 10 3	..	..	..	15 19 6	..	79 7 5	..	7 4 9	25 18 0	1 6 3	1 2 0	..	..	..	43 16 5	79 7 5
Dargaville..	46 2 5	14 16 7	3 1 3	..	..	4 2 0	10 17 6	..	78 19 9	..	44 8 0	4 11 6	..	..	4 10 0	2 10 5	..	22 19 10	78 19 9
Totals ..	542 13 3	599 1 10	238 15 0	4 12 0	12 14 11	59 6 0	202 13 0	5 17 3	1,665 13 3	7 4 9	911 12 5	581 12 9	22 17 0	10 8 8	4 8 6	0 8 4	51 0 0	534 16 8	1,665 13 3		

VINCENT RICE,
Secretary.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE "ELAM" SCHOOL OF ART.

The attendance of students during the year has been more evenly distributed among the various classes than in any previous year, and this has naturally been an advantage to the staff of the school, and has enabled them to cope more satisfactorily with the work than was possible in some previous years, when some classes were almost too large and some very poorly attended. This year all classes have been well attended, and the attendance has been maintained up to the end of the year. An extraordinarily wet winter and the illness consequent thereon had the effect of reducing the attendance during that part of the year which is generally the best attended, but with this exception the attendance has been regular and the average good. 31,611 attendances were registered during the year. A great deal of excellent work has been done, and on two occasions the school made a very creditable display of its productions. At the International Exhibition at Christchurch, although the exhibit was only a small one, gold, silver, and bronze medals, and certificates were awarded to several students of the school, and the annual report of the Inspectors of Technical Education to the Minister contained the following: "The specimens of the work of art students exhibited at the Christchurch Exhibition provided a very interesting and instructive display. We would mention in particular the work of students of the 'Elam' School of Art, the Wellington Technical School, and the Canterbury College School of Art." The other display, also necessarily a small one, was at the Arts and Crafts Exhibition of the Auckland Society of Arts, and received a good deal of attention from both public and Press. I shall be very glad when the school is able to hold an annual exhibition of its work in its own rooms, as there is not sufficient opportunity of letting the public know what is being done. There are about 350 students on the roll of the school at the present time, many of these coming long distances from the country to attend the classes. The classes in modelling and wood-carving have been well attended, and excellent work has been done. These classes are becoming more popular every year, and I anticipate a considerable increase in the number of students in the coming year. Referring to these classes, the report of the Inspector of Technical Education on the school contains the following: "Specially good work is also done in carving and modelling."

E. W. PAYTON, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Associated Classes conducted at Auckland by the Managers of the "Elam" School of Art.

Receipts.			Expenditure.		
	£	s. d.		£	s. d.
Balance at beginning of year	68	1 6	Salaries of instructors	747	11 8
Capitation on associated classes	401	13 0	Office expenses (including salaries, stationery, &c.)	55	18 8
Rent	30	0 0	Advertising and printing	17	17 6
Furniture, fittings, apparatus	20	19 9	Lighting and heating	20	2 7
Subsidies on voluntary contributions	200	0 0	Insurance and repairs	2	1 8
Fees	38	3 0	Material for class use	5	3 1
From the trustees for the "Elam" School of Art	250	19 11	Life models	8	15 0
			Sundries	4	6 10
			Furniture, fittings, and apparatus	38	18 8
			Balance at end of year	109	1 6
	<u>£1,009</u>	<u>17 2</u>		<u>£1,009</u>	<u>17 2</u>

SAM. JACKSON, Chairman }
 E. W. PAYTON, Secretary } of Managers.

TARANAKI.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

The Education Department provided funds for the erection of a Technical School on St. Michael's Square. The building is one of the finest of its kind in the Dominion, being well equipped for present needs, and in most respects up to date. A plumbing-room has now been added to the building, and affords every convenience for the teaching of this subject. The wood-work-room at Stratford was fitted up for a cookery-room, and it was found necessary to approach the Department for a grant for a new woodwork-room. On the application being granted, a large room for the teaching of this subject was erected at the back of the main building. Elementary handwork was taken at thirty-eight schools, and sewing under the Manual Regulations at ten. In addition to the above, manual work, as defined by clauses 22-27 of the Regulations for Manual and Technical Instruction, was recognised in sixty-two cases, the subjects embracing woodwork; cookery, botany, dairying, advanced needlework, elementary agriculture, swimming and life-saving, elementary measurements, chemistry, and elementary physiology. Considerable progress has been made in technical education, especially agriculture.

EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

Handwork.—It is now universally recognised that, in our primary schools, we should aim at equipping the pupil not only in literary acquirements, but in such subjects as are likely to be of use to him after leaving school. He should be given the power to readily acquire any mechanical

occupation he may take up as his work in the future. We therefore think it most important that some form of handwork should be introduced into every school. We would go a step further, and express the opinion that regulations should be drawn up making attendance at technical schools compulsory, within certain limits, after the pupil has left school. In twenty-two of our schools, agriculture was recognised by the Department, and Mr. Morison, the Board's agricultural expert, reports that the work progresses favourably, and much useful work is being done. In a farming district, such as Taranaki, teachers might well consider the advisability of taking up agriculture, dairying, or some other kindred subject. At the beginning of this year instructors in woodwork and cookery were appointed, and classes were established at New Plymouth and Stratford. These were made centres for the neighbouring schools. As an evidence of how this privilege was appreciated, it is sufficient to remark that almost every school that could possibly come in took advantage of it, and close on seven hundred pupils attended these classes.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF TECHNICAL INSTRUCTION.

Technical and Continuation Classes were held at New Plymouth, Stratford, and Inglewood. The number enrolled was in some cases somewhat disappointing, but the students were regular in attendance, and the results of the examinations held at the end of the year gave evidence that highly satisfactory work had been done by the majority of the students. The various members of the staff have been punctual and regular in attendance, diligent in the discharge of their duties, and ever ready to assist in making the classes a success. The subjects of instruction included plumbing, carpentry and joinery, wood-carving, cookery, dressmaking, and various branches of art and commercial instruction. Saturday Classes for teachers were held during the year at New Plymouth, Stratford, and Opunake, but, although a large number of teachers entered for the several classes, the regularity of attendance fell far short of what might have been reasonably expected. The subjects of instruction included drawing, agriculture, woodwork, cookery, and elementary physical measurements.

Reports on the Agricultural and Dairying Classes are appended.

W. A. BALLANTYNE, Director.

Extract from the Report of the Board's Agricultural Instructor.

The work in connection with elementary agriculture is progressing favourably at most of the schools where the subject is being taught. Since making my first visit some eighteen months ago, much useful work has been done, and both teachers and pupils appear to be greatly interested in the work. Much delay was caused owing to the exceptionally wet weather experienced during the early spring. I am pleased to note that the instructions previously given have been generally well carried out. I refer particularly to the preparation of the soil, the laying-out of the grounds, the keeping of correct records, such as the kind, weight, and cost of manure, seeds sowed, when and how sowed, crops sold or valued at end of season, and profit on season's work. In this connection it may be stated that many teachers, besides requiring the children to keep full records, took advantage of the opportunity afforded for giving lessons in practical book-keeping for farmers. During the season many useful experiments were carried out, notably at Rahotu and Stratford (see special reports).

This year every school taking up agriculture is experimenting with various manures, and the results will be carefully recorded for future reference.

At Mahoe the work has been hindered partly owing to the teacher being away through illness, but mainly for the want of a suitable plot of ground. This, I understand, can be got from a settler close at hand. I would suggest that arrangements be made soon with a view to preparing for next year.

I would recommend a suitable plot being set aside for the work at Tikorangi. There is plenty of ground in the present site, but it is not well adapted for a school garden as regards either shape or position. With an expenditure of a few pounds in transplanting some trees and shrubs from their present very disorderly position, a very suitable plot could be made.

At West End I met a fine class of boys (twenty-nine), but the only place to give my lesson was in a private garden across the street. This is not satisfactory, as the boys do not feel at liberty to go and work in their gardens, when otherwise they might do so. I would strongly advise getting a small section somewhere close to the school.

At Urenui a very suitable plot can be got at the back corner of the grounds. This will not in any way interfere with the playground.

At present a long strip is taken right along the whole frontage at Bell Block, but a much more convenient site could be got by fencing in a small square which could afterwards be divided into suitable plots.

With a view to stimulating interest in agriculture and horticulture, the Stratford Horticultural and General Produce Society has taken up the matter most heartily, and is offering at its show to be held next March some twenty-five prizes, and in addition a beautifully worked banner for the school highest in the competition.

In conclusion, I desire to thank the various vendors for the gratuitous supply of both seeds and manures.

R. McK. MORISON.

Extract from the Report on Stratford Agricultural and Dairying Classes.

At Stratford the important subjects of agriculture and dairying were carefully dealt with; the practical and theoretical sides of each subject, and the bearing of the one on the other, were closely attended to. Experiments were made and carefully watched and noted. The subjects were

treated in such a way as to be of the greatest value to the children, both educationally and practically. In dairying the course of the work taken was as nearly complete as it is possible to take the subject in a school class. In agriculture a demonstration plot was used in which peas, beans, cabbages, and most of the ordinary kinds of vegetables were grown. Children's individual plots were attempted, but the only ground available was the site of an old dairy factory. This proved barren and useless, and the plots were therefore abandoned. A good deal of interest was taken in the farmers' plots, where, on ground of very poor quality indeed, experiments in growing turnips, mangolds, and carrots were carried out. The treatment as recommended by Mr. Aston, Chemist to the Agricultural Department, was generally adopted. The experiments in practical agriculture were carried out under the supervision of Mr. R. McK. Morison, the Board's instructor in agriculture, and the chemistry lectures were given by Mr. J. Hunter, M.A., first assistant master in the school.

Practical Work.—In growing turnips experiments were made with superphosphates, superphosphates and basic slag, bonedust and superphosphates, bonedust, superphosphates and kainit, and special turnip-manure. The section on which no manure was used raised a crop of 4 tons 12 cwt. per acre, and the manured grounds showed a remarkable increase at little cost. One and a half hundredweight of superphosphates per acre increased the crop to 25 tons 13 cwt. at a cost of 8s. 3d. per acre for fertiliser, or an approximate cost of 4s. 7d. per ton to produce; $1\frac{1}{2}$ cwt. each of superphosphates and basic slag, 25 tons 6 cwt., at 15s. per acre or 8s. 7d. per ton; $\frac{3}{4}$ cwt. bonedust and 2 cwt. superphosphates, 37 tons 9 cwt., at 16s. 3d. per acre or 5s. 8d. per ton; $\frac{3}{4}$ cwt. bonedust, 2 cwt. superphosphates and $\frac{1}{2}$ cwt. kainit, 38 tons 5 cwt., at 18s. 9d. an acre or 6s. 7d. per ton; special turnip-manure (3 cwt.), 27 tons 5 cwt., at £1 2s. 6d. per acre or 12s. 6d. per ton. The results of the experiments should give a clear idea of the comparative values of the manures used.

The crop of mangolds was planted late in the season and in very dry weather. The seed germinated well but many of the plantlets faded, though single specimens of the vegetable matured splendidly. The crop as a whole was for comparative purposes a failure. Similar manures were used in connection with the carrots, the yield being increased from 9 tons 17 cwt. 2 qr. 23 lb. with no manure to 15 tons 14 cwt. 1 qr. 15 lb. by manuring with superphosphates, bonedust, and potash. The most satisfactory results, however, were obtained with superphosphates and bonedust, the crop weighing 14 tons 11 cwt. 2 qr. 22 lb., the cost of production per ton being 2s. 8d., a little more than half that with the experiment with the three manures mentioned.

Theoretical.—The course of chemistry, fully illustrated with experiments, was opened by studying the preparation, properties, and uses of hydrogen, oxygen, nitrogen, carbonic-acid gas, chlorine, hydrochloric acid, ammonia, nitric acid. Then, after considering the functions of oxygen, carbonic acid, and nitrogen in the atmosphere, and the action of plants in appropriating carbon and liberating oxygen, artificial manures were studied; the elements contained in each, the percentage of solubility in water and then in acid were considered. Manures were classified into (1) phosphatic, (2) potassic, (3) nitrogenous, and (4) calcareous. One lesson was devoted to lime and its uses. Analyses were made in class of Lawe's superphosphates, James and Co.'s bonedust, Westfield's prepared guano, Westfield's turnip-manure. Samples of kainit and muriate of potash were also analysed, and lessons were given on the proper mixing of manures and the proper mixtures to apply to different crops and soils.

Dairying.—This subject was taken by Mr. A. R. Gatland, B.A., assistant master in the secondary department of the school. Lessons were given on the composition of the milk, water, fat, variation in quality during milking, bacteria, effect of temperature, germination, fermentation, sterilisation, keeping and cooling of milk, physical condition of the cow, importance of good pasture and good water, flavours and odours due to improper feeding. By the courtesy of the Chief Dairy Commissioner, Miss Breen, an expert in buttermaking, visited the school twice during the year and gave instruction in practical buttermaking. She took the children through a course of work, including the testing of the milk, butter-fat, separating or skimming milk, churning and buttermaking. The Board's Inspectors were present at Miss Breen's concluding lesson, and can vouch for the value of the work done.

F. TYRER, Superintendent.

Extract from the Report on Rahotu School Gardens and Farmers' Plots.

These classes were instituted rather late in the preceding year, consequently sufficient time was not allowed for the proper preparation of the ground. The Agricultural Committee enclosed for the above purposes 1 acre of the horse-paddock adjoining the school playground. The soil was pretty much in its natural condition, consisting of dales and downs covered with ferns and noxious weeds of all descriptions. The ploughing of the ground was excellently performed by one of the members of the Agricultural Committee.

Immediately after the ground had been broken up the demonstration and practice plots were laid off by the pupils under the direction of the demonstrator.

The unevenness of the ground entailed a very considerable amount of hard labour.

1. *Demonstration and Practice Plots.*—When the ground had been properly levelled, the part chosen for the school gardens was divided into thirteen practice plots, each 30 ft. by 10 ft., and three demonstration plots, each 30 ft. by 20 ft. As two demonstration plots were considered quite enough for all practical purposes, the remaining one was handed over as a flower-plot to the care of twelve girls. Each practice plot was tended by two pupils, and, owing to a spirit of emulation and a sense of proprietorship, they took a great interest in their respective plots.

The first seeds were planted on the 17th October, 1906. The nature and conduct of the various experiments will be found epitomised in the attached Table I.

To show the action of plants underground, two demonstration boxes with glass fronts were set in operation in the schoolroom. In these were planted diverse seeds close up against the glass, and the growth and action of the roots could be observed every day. One of the boxes was reserved for monocotyledonous and the other for dicotyledonous plants. Attention was drawn to the seed-leaves, especially in the bean-plant, and the difference between the axils of these and of those of the true leaves educed from the pupils.

Several experiments were tried in inoculating the soil with nitrogen-fixing bacteria. These proved a failure owing to the lateness in planting the seeds (leguminous plants). A failure, however, often implants a more useful lesson than a success.

The meteorological and geographical apparatus for "observation lessons" will be set up during the present season, 1907-8. It is also proposed to procure a couple of Langstroth bee-hives to give the pupils a knowledge of apiculture. It would be useless to procure these until sufficient shelter is provided for the bees.

Before leaving the practice plots it is only right to mention that Messrs. Nimmo and Blair, Dunedin, generously donated a dozen packets of their famous flower-seeds. During the summer and autumn the flower-pot was a mass of bloom, thereby showing that nearly every seed germinated.

The best thanks of the Agricultural Committee are also due to Newton King, Esq., who supplied gratuitously the whole of the manures for the pupils' sections as well as for the farmers' experimental plots.

Farmers' Experimental Plots.—The remaining part of the paddock was divided into nine experimental plots, each half a square chain ($\frac{1}{20}$ acre) in area, being one chain long and half a chain wide.

The ground was disc-harrowed and cleared of fern-roots. The seeds were carefully planted with a Planet Junior drill having a manure-box attached, so that both manure and seeds were committed to the ground at the same time.

A reference to Table 2 will show the nature of the experiments and the results.

The growing of the seeds—Monarch swedes—was begun on the last day of 1906, and finished on the 3rd January, 1907. We were very fortunate in getting an excellent braird owing to rain falling on the 1st, 2nd, and 4th January. This gave the plants a good start, and enabled them to resist the ravages of the black-fly. They continued growing very luxuriantly until about the end of February, when a disastrous blizzard swept over the paddock and materially retarded their growth. The leaves assumed a yellow appearance from the fungi carried by this noxious wind. The cabbage family and leguminous plants assumed the same appearance from the same cause.

A sample of the soil was forwarded to B. C. Aston, Esq., Chief Chemist, Agricultural Department, Wellington, with a request from the ex-director for an exhaustive analysis. Mr. Aston replied that this would be too expensive, and would serve no useful purpose, but that he would make a series of pot experiments. These he has carried out, and the results are published in Bulletin 2.

Now, it may be asked by those interested, "Of what use are all these experiments and expenditure of labour and money?" I should reply that by a careful study of Table 2 a good many things may be learned. On comparing the tabulated results of our plots with those obtained by the Chief Chemist in his pot experiments, it will be found that the application of basic slag and superphosphates (*vide* line, Plot 2) will add materially to the yield in the turnip family. Again, taking Newton King's No. 3 bag (Plot 8), by the addition of bonedust and a little kainit a very surprising result is seen—viz., an increase of upwards of 3 cwt. of turnips per acre. Again, compare the cost per acre of the last-mentioned mixture—viz., 15s.—with the others, and we find it is the cheapest, with one exception, of all the applications. Mr. Aston's experiments show that basic slag acts up to its reputation on oats and rape (the latter belongs to the turnip family), but fails—as it also does on Westland silt—with clover (leguminous family), a result which he imagines is caused by the oxidation of the iron in the basic slag interfering with the nitrogen-fixing bacteria of the root-nodules. From our experience, I would suggest that farmers using a combination of superphosphates and basic slag should apply these separately, as when mixed in the manure-box a chemical action takes place which causes them to "cake," thereby entailing extra labour and waste of time in reducing the "cakes" to powder. The results, then, obtained in our paddock exactly coincide with the pot experiments of the Chief Chemist, but they form no criterion of the capabilities of the soil. Had the ground been ploughed before the winter of 1906, and the oxygen of the atmosphere been permitted to permeate the soil thoroughly, the dormant plant-food would have been liberated more freely and made available for the sustenance of the plants. The yield per acre, I am convinced, would have been doubled—aye, even trebled.

A study of the above experiments and results should prove very interesting and instructive to the farmers of Taranaki.

JOHN T. CAMPBELL, Demonstrator.

Table I.—Rahotu School Gardens.—Demonstration and Practice Plots.

Rows No.	Seeds.	Date sown.	Manures.	Date of Germination.	Distance between Rows.	Weeds removed and Soil stirred.	Rain fell.
1	Intermediate carrots	17/10/06	Nil	29/10/06	In. 12	2/11/06	17/10/06
2	"	"	Bonedust	29/10/06	12	"	18/10/06
3	"	"	Bonedust and blood ..	29/10/06	12	"	23/10/06
4	Snowball turnips ..	"	"	22/10/06	12	"	25/10/06
5	" ..	19/10/06	Bonedust	23/10/06	12	"	27/10/06
6	" ..	"	Nil	23/10/06	12	"	28/10/06
7	Mixed turnip-radishes	"	"	23/10/06	12	"	31/10/06
8	"	"	Bonedust	25/10/06	12	"	4/11/06
9	French Breakfast radishes	"	Bonedust and blood ..	25/10/06	12	"	5/11/06
10	White Cos lettuce ..	"	Bonedust	26/10/06	12	"	..
11	"	"	Bonedust and blood ..	26/10/06	12	"	..
12	Parsnips	"	"	3/11/06	12	..	..
13	"	"	Phosphates	3/11/06	12	..	..
14	Brown Spanish onions	22/10/06	Nil	30/10/06	12	..	..
15	"	"	Bonedust	2/11/06	12	..	..
16	"	"	Bonedust and blood ..	2/11/06	12	..	..
17	"	"	Phosphates	5/11/06	12	..	..
18	Brown Globe onions..	"	Bonedust and blood ..	2/11/06	12	..	..
19	"	"	Phosphates	2/11/06	12	..	..
20	Cress	"	Bonedust and blood ..	26/10/06	12	..	..
21 and 22	Cabbage and cauliflower*	..	" .. ..	..	18	..	..
23 and 24	Brown Spanish onions*	..	Bonedust .. ..	..	12	..	..

* Method of transplanting taught.

Condition of soil.—Volcanic ejection; sandy loam; ground newly ploughed; turf not disintegrated, therefore good results not anticipated. In spite of the above disadvantages, by dint of regular working between rows a good tilth was secured, and very satisfactory results were obtained.

Table II.—Rahotu School Gardens : Farmers' Experimental Plots.

Seeds.—Monarch Swedes. Distance between rows, 18 in. ; number of rows, 22.

Plots.	Manures.	Weight per Plot.	Weight per Acre.	Estimated Cost per Acre.	Date of Germination		Rain fell.	Produce per Plot.			Experiments.
					Sown.	Germinated.					
1	Superphosphate	Lb. 17	Cwt. 3 ¹ / ₂	19/9	31/12/06	4/1/07	1/1/07 2/1/07 4/1/07	Cwt. qr. lb. 12 3 13	Tn. ct. qr. lb. 12 17 1 8	B. C. Aston's (T2).	
2	{ Basic slag .. Super-phosphate	8 ¹ / ₂ 8 ¹ / ₂	1 ¹ / ₂ 1 ¹ / ₂	{ 7/10 9/9	31/12/06	4/1/07	*	15 0 3	15 0 2 4	B. C. Aston's (T3).	
3	{ Bonedust .. Superphosphate	4 ¹ / ₂ 11 ¹ / ₂	0 ¹ / ₂ 2	{ 5/3 13/-	31/12/06	4/1/07	8/1/07 9/1/07 10/1/07	14 1 21	14 8 3 0	B. C. Aston's (T5).	
4	{ Bonedust .. Superphosphate Potash .. Sulphate ..	4 ¹ / ₂ 11 ¹ / ₂ 2 ¹ / ₂	0 ¹ / ₂ 2 0 ¹ / ₂	{ 5/3 13/- 14/-	1/1/07	5/1/07	12/1/07 13/1/07 14/1/07 15/1/17 18/1/07	13 3 0	13 15 0 0	B. C. Aston's (T6).	
5	No manure ..	Nil	Nil	Nil	1/1/07	5/1/07	18/1/07	2 3 11	2 16 3 24	Standard.	
6	{ Pure bone .. Superphosphate Guano .. Potash ..	7 3 ¹ / ₂ 1 ¹ / ₂ 1 ¹ / ₂	2 ¹ / ₂	16/3	3/1/07	6/1/07	..	13 2 17	13 13 0 4	Newton King's No. 1 Bag.	
7	{ Pure bone .. Guano .. Superphosphate Thomas phos- phate	7 1 ¹ / ₂ 1 ¹ / ₂ 1 ¹ / ₂	2 ¹ / ₂	22/6	3/1/07	6/1/07	..	12 3 13	12 17 1 8	Newton King's No. 2 Bag.	
8	{ Nitrate of soda Potash .. Pure bone .. Superphosphate Basic slag .. Kainit ..	0 ¹ / ₂ 0 ¹ / ₂ 8 ¹ / ₂ 1 ¹ / ₂ 1 ¹ / ₂ 1 ¹ / ₂	2 ¹ / ₂	15/-	3/1/07	6/1/07	..	18 0 19	18 3 1 16	Newton King's No. 3 Bag.	
9	Fison's turnip- manures	14	2 ¹ / ₂	15/-	3/1/07	6/1/07	..	14 1 21	14 8 3 0	Newton King's No. 5 Bag.	

available at Hawera. From Mr. Hintz's report, it will be seen that classes were conducted at different centres in the district. In all, the people of the Northern District subscribed £323 14s. 4d. towards the erection of technical buildings. In the Central District, under Mr. Varney's supervision, the Marton Technical School, comprising a science-room, a woodwork-room, a cookery-room, and a class-room, was completed, and opened by the Hon. the Minister of Education on the 24th August. At Taihape sufficient money was subscribed locally to justify the Department in making a grant this year of £470 towards the erection of a school, and, at Bull's, the amount raised should produce a liberal response from the Department. An engineering department has been added to the Wanganui School, and Mr. Denis Seaward, A.R.C.A., is being brought from England to take charge of the art department. The total amount subscribed in the Central District towards the erection of technical buildings is £266 10s. 2d. Day technical classes have been started at Wanganui, with what success the Board will be in a position to determine by the end of the year. In the Southern District, which till the close of the year had been under the supervision of Mr. Amos, there was a great extension in the technical work. The Feilding Technical School, comprising science, art, woodwork, cookery, plumbing, and class rooms, a handsome structure in brick, will be ready for occupation when the classes start this year. Mr. H. Fossey, whose experience at Home and in the Dominion has been varied and ample, has been appointed to the directorship. Under his direction the school may be expected to prove of immense benefit to the large and prosperous district in which it is situated. During the year the sum of £424 4s. was raised in the Southern District towards the construction of technical buildings.

Training of Teachers.—Saturday classes for the training of teachers were held continuously throughout the year. Science was taken at Palmerston North, Marton, and Wanganui; cookery at Wanganui and Palmerston North; handwork at Wanganui and Hawera; and dairying at Hawera. Certificates of merit were awarded to the students at the end of the courses of lessons, and there can be no doubt but a great deal of excellent work was done. In this connection there should be mentioned a highly successful summer school, conducted by Dr. Marshall, of Otago University, who lectured continuously for a week on the physical geography of the district. A winter school, for the benefit of uncertificated teachers and teachers from remote schools, was held in June, and five teachers, selected by the Inspectors, enjoyed the privilege of a three-weeks attendance at the Training College, Wellington.

School Handwork.—It appears from Mr. Varney's report that interest in this form of school-work continues to grow. Last year (1906) handwork was taken in 121 schools, and in the year to which this report refers it was taken in 153 schools.

School Technical Classes.—During the year there was a great expansion in the volume of work done in the classes that come under this heading. The Board was fortunate in securing the services of Mr. R. Browne, whose classes in dairy-work, twenty-one in number, evoked intense interest among the pupils. Mr. Grant continued his work in connection with school agriculture, and at the end of the year there were gardens attached to 81 schools, as against 46 in 1906. It has been arranged—the only satisfactory arrangement possible in this district—that the schools may take a combination course in agriculture and dairying, and it is to be hoped that the Department will make such a grant for this course as will promote its extension among the schools. Messrs. Clark and Bannister taught woodwork in ten schools, and Misses Mollison and Fergus taught cookery in the same number. As Miss Mollison now takes cookery classes in connection with the Wanganui Girls' College it has been found necessary to appoint Miss F. Grant to assist her. The woodwork classes have also increased, and it will be necessary for Mr. Fossey, the Director of the Feilding Technical School, to take the woodwork there.

EXTRACT FROM THE REPORT OF THE SUPERINTENDENT OF TECHNICAL INSTRUCTION.

In presenting the following reports I may state that an effort is being made so to organize the work of manual and technical instruction that the course will be continuous from the kindergarten to the laboratory, from the first vague co-ordinations of brain with hand and eye to highly specialised experiments in dairy-work and agriculture. It is thus alone that the country will reap the full benefit of the sacrifices it is making in endeavouring to place the teaching of technical subjects on a satisfactory footing. But there are other considerations no less vital. By the end of the present year we shall have no fewer than eight splendidly equipped schools. Will the teachers prove themselves worthy of the facilities provided? There is reason to think that they will, and that, putting private considerations in the background, they will lay on the altar of the State their time, their energy, and their talent. One thing more is wanted, and that is a patriotic response on the part of the young people. Self-improvement means social improvement, social improvement means the betterment of humanity, and it is, accordingly, not too much to expect every young man and every young woman within a reasonable distance of a technical school to give up at least two hours a week to the study of one of many subjects taught. The people of the various districts have given liberally of their means, and the Board, taking no inconsiderable risk, provides the best teaching-power available. It remains for the young people to fill the schools.

The various reports testify to the enormous strides that have been made in the work of technical instruction during the year, and to the zeal and energy of the instructors and supervisors. The Board, the Technical Committees, the contributing public bodies, and the people of the district, may surely reflect with legitimate pride that so much has been done in so brief a period.

G. D. BRAIK, Superintendent.

School Classes.

Mr. Varney reports that progress is still being made in the direction of the training of the hand and eye in our schools. This is evidenced by the fact that during the year there has been an increase of thirty-two schools.

Material is now procured in bulk and stored in the office. Teachers will now receive their supplies during the month of February. The method of distribution effects a great saving, and enables schools, especially the smaller ones, to secure a better and larger supply of material. Wherever possible, supplies are procured direct from the warehouses.

In view of the fact that so many of the schools now take advantage of the Manual and Technical Regulations, the time is opportune for the abolition of both Forms III and V. It should be sufficient on the certificate of the Inspector certifying that the regulations have been observed for the grant to be paid, of, say, 1s. per unit of average attendance.

Mr. Grant reports that during the year he has been engaged three days in the week in school-work, two days in teaching agriculture, biology, and botany, and on Saturdays in conducting classes in practical science for teachers. At the end of 1906 the number of schools where elementary agriculture was taught was forty-six, the number of pupils receiving instruction being 1,233. At the end of this year the number of schools has increased to eighty-one, and the number of pupils to 1,870.

During the year 155 visits were paid to schools. Whilst at the schools the pupils were tested in agriculture and nature-knowledge, or given lessons in these subjects, or demonstrations in school gardens. In addition to this work, nearly six hundred packets of seeds, and almost half a ton of fertilisers were sent out to the schools. Regarding the outdoor operations, much valuable time is lost in doing unnecessary work. When no digging, weeding, hoeing, &c., need to be done, the time set apart for garden-work should be devoted to the observation of the habits of the plants and animals of the garden, or to the careful measurement of the garden-plots, or the whole garden. On the whole the tools are well looked after, but in some cases a little more attention might be devoted to keeping them clean.

Classes for farmers were conducted at Manaia, Bull's, and Marton. The students enrolled numbered forty-two. They attended with very fair regularity. The subject studied in Manaia and Marton was elementary agricultural chemistry; in Bull's, farm practice. The students in the Manaia and Marton classes did a considerable amount of practical work. Several students are conducting field experiments which were suggested during the progress of the lessons. Judging from conversations with a large number of farmers, the subjects best suited for these classes is agricultural chemistry—a course wide enough to enable them to read the literature of farming easily and intelligently.

Classes for teachers were conducted on Saturdays, the first half of the year in Wanganui, the second half in Palmerston North. In Wanganui practical botany was the subject studied; in Palmerston North, practical agricultural chemistry. Each course consisted of twenty lessons. The total number of students enrolled was fifty-seven. An examination was held at the close of each course and twenty-six certificates were gained. The Manawatu and West Coast Agricultural and Pastoral Association, the Feilding Agricultural and Pastoral Association, and the Wanganui Horticultural Society have again done their part in encouraging the study of practical elementary agriculture by offering substantial prizes for various phases of garden-work. Practical biology and botany was taken on Friday afternoons and evenings in the Wanganui Technical School laboratory. The average roll was fifteen. The results of the special experiments carried out at Halcombe last year were published in pamphlet form. The potatoes grown in the course of the experiments were distributed among a number of schools, but, from reports received, they have not grown well. The work this year is being conducted by Mr. J. T. Robson.

Mr. Browne reports that during the year twenty school classes in dairy-work have been taken in nineteen schools. These classes have been held in the Hawera and Feilding districts. In the former the average attendance was 22; in the latter, 21.8. The schools that took the work are Okaiawa, Manaia, Auroa, Kapuni, Kaponga, Mangatoki, Eltham, Matapu, Hawera (2), Sandon, Rongotea, Kairanga, Stoney Creek, Colyton, Bunnythorpe, Lytton Street, Cheltenham, Taonui, and Awahuri. Sickness considerably interfered with the attendance, otherwise the average would have been higher. Besides these classes, one for adults has been conducted at Hawera (average 7.5); Manaia (9.6); Eltham (8.6); and Rongotea (14.4). Classes for teachers only were held at Hawera (5) and Feilding (13). At Hawera an hour per week was given to instructing pupil-teachers in agricultural botany. During next year a number of teachers intend taking up the subject of dairy-work in their schools after a course either in adult classes or in those for teachers. A certain amount of supervision will be required in these cases, so that it will not be possible to take as many continuous classes as in the present year. Now that such an excellent set of apparatus is supplied to each school, expenses in running the classes should be much reduced.

Miss Mollison reports that she held weekly cookery classes at Wanganui and Hawera from February till October. There were eight classes in Wanganui; roll-number, 158; average attendance, 145; three classes in Hawera; roll-number, 60; average, 52. The equipment in both centres is fairly complete, but Fahrenheit thermometers and extra sets of scales are required to make the teaching more efficient. Diagrams of the animals most commonly used for food, showing the different parts, would also be an advantage. A teachers' class was also held for two sessions, with an average attendance of eight. Three of the teachers sat for the City and Guilds Examination, and gained first-class certificates.

Miss Fergus reports that cookery classes were held weekly at the following centres: Palmerston North, Feilding, and Marton. The roll-number was 238, the average attendance 214. In Feilding and Marton the work has been carried on under great disadvantages, owing to the rooms not being at all suitable, but this difficulty will be obviated next year at Marton; possibly also at Feilding. The children have, on the whole, worked well and taken a keen interest in their work. It would be

a great advantage to the teachers of cookery if each centre could be supplied with diagrams showing the digestive organs, as digestion plays such an important part in human welfare. In addition to the school classes, a teachers' class has been held on Saturday mornings, at which the average attendance was eleven.

Mr. Clark reports that the chief events of the year, outside the work of his woodwork classes, have been the appointment of Mr. H. Bannister to the charge of the classes at the southern end of the district; the formation of new classes at Feilding, Marton, and Eltham; and the transfer of the Wanganui classes from the old and inconvenient room at the District High School to the newly-equipped room at the Technical School. Owing to the change of instructors about the middle of 1906, the work for the latter part of that year was somewhat disorganized; but matters righted themselves at the beginning of last year, and the classes have been doing good work since. The aim throughout is to make woodwork an integral part of the school-work, and although this end has not perhaps been perfectly attained, it has been approached. An endeavour has been made to carry out the suggestions embodied in Leaflet No. 12, Wanganui Education Board, the only change proposed now being in the amount of formal geometry under the head of drawing. Experience during the year has confirmed the opinion that any drawing that is not directly and intimately connected with the models made is absolutely futile. Throughout the principle of quality before quantity has been kept in view, and when at times it has been found difficult to keep up with the programme it has been varied in consonance with the above principle. During the last half of 1907 a teachers' class was conducted at Hawera, not under the best conditions in all respects, but some three or four of the students did well enough to warrant their sitting for the City and Guilds Examination this year. It will, however, be necessary to arrange for further classes to enable them to comply with the condition that they have attended at least twenty lessons in preparation for the examination. I should like to embody in this report a reference to the general good conduct of the school classes in woodwork. Occasionally an individual pupil has given trouble, but the willing co-operation of the head teachers in such cases has made the control of these classes an easy matter. I am also indebted to the head teachers for the courteous manner in which at all times they have considered my suggestions, and, at times, my convenience, when perhaps to do so may have involved some trouble to themselves.

Mr. Bannister reports that during the year classes in woodwork were conducted in the following centres: Palmerston North, Feilding, and Marton. In Palmerston North there were 7 classes, in Feilding 4, and Marton 2. Of the 13 classes, 4 have maintained the full attendance—viz., 26—whilst the others have averaged 19. The attendance was good on the whole, but sickness has interfered with it to a considerable extent. The work done in woodwork was good throughout the district, considering the disabilities under which we worked at Feilding and Marton. The drawing was very good, although it had to be done on the benches.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE WANGANUI TECHNICAL SCHOOL.

Work has proceeded on much the same lines as previously, many of the students taking advantage of the Junior Free Place Regulations. The majority of these worked admirably, but in a few cases there is still a lack of keen application, of an earnest desire to climb to the topmost place in a profession. Many appear to be quite satisfied to be "hewers of wood and drawers of water" all their days. Would that we as teachers could instil into the minds of all our students enthusiastic appreciation of study which must result in advancement in life. The regulation regarding English and arithmetic must in the near future be amended, so as to allow of these subjects being incorporated in a course of work. Two or three evenings per week is as much as we can expect the ordinary apprentice to attend classes. There are an enthusiastic few in all our departments who have attended four and even five evenings per week, so intent are they upon their work, yet we cannot look for this from all. Very great interest has been displayed by the various trade associations in the artisan classes, and, as a result, the apprentices have shown an increased desire to become more efficient. To still further popularise these classes, the following amounts have been granted towards the provision of scholarships: Master builders, £30; master painters, £17 10s.; master plumbers, £7. I am not yet able to report any assistance by way of scholarships to the best-equipped section of our school, the engineering branch. £30 is required for this object. The Education Department has treated us admirably in this section, as in fact in all others, and the least the people of Wanganui can do is to show their appreciation of this treatment by supporting the various classes for which provision has been made. I have no doubt that in years to come the Wanganui Engineering School will write its name large on the engineering records of the Dominion. During the present year accommodation will be available for from fifteen to twenty students in the Day Engineering School, and no effort will be spared to give each pupil a thorough training in subjects, both theoretical and practical, which are connected with the various trades.

Art Department.—Satisfactory work has been accomplished in this section. During the last term Mr. Hutton resigned his position as art master, and Mr. D. Seaward, A.R.C.A., has been appointed his successor. We are hoping much from the new appointment, especially in the introduction of the latest methods of instruction in both drawing and painting.

Engineering Department.—Under Mr. Steele's guidance, a start has been made with this important section of the school's work. Classes have been held each evening in various branches of the work with much success. Great difficulty has been experienced on account of the machinery not coming to hand until the third and fourth terms, but now we have a finely equipped workshop, which is a credit to the town and district. Rough castings are being imported from Home for dynamos and different types of engines, and the students in the advanced classes will be taken through a practical course from the drawing-bench to the finish.

Artisans' Classes.—The plumbing classes have done good work, but unfortunately the attendance of students has neither been as regular nor as punctual as could be desired. In December, Inspector Schauer conducted the local examination: 7 presented themselves for the theory, and 5 for the practical test; 5 being successful in the former, and 3 in the latter examination. The examiner remarked that the work, especially in theory, was first class. Under the able guidance of Mr. James Bruce, the building-construction and practical woodwork classes have done excellent work, and students have shown a lively interest in their exercises. The course of instruction—drawing, sign-writing, design, and graining—provided for painters and decorators has undoubtedly provided some of the best examples of work ever turned out from the school. The boys in this class deserve every credit for the excellent and painstaking results they have achieved.

Commercial Department.—This section, as usual, has been attended most largely, and yet in many ways is the most unsatisfactory. Students will not remain long enough in the classes to gain a thorough knowledge of the subjects they study. They appear to expect to become experts in a few months, where years are required. Of course this does not apply to a not inconsiderable section, who study most assiduously. During 1908 a special class will be formed for coaching for the A.I.A. New Zealand, and for the A.N.Z.A.A.

Domestic Department.—The dressmaking and millinery classes, under the able management of Miss Bohan, have done excellent work. The domestic science and cookery classes have not been so successful numerically as in the previous year, but admirable results have been achieved. The home nursing class did well for two years, and then circumstances arose that made it impossible to continue the class. With the advent of a new term, a strong class should again result in this important branch of home study.

Wood-carving Department.—Mr. W. Andrews, sen., proceeded to England in March last to equip himself more thoroughly for his work among us. During his absence Mr. Andrews, jun., has kept the classes together well, and much good work has been done by the students.

Science and other classes have proceeded, as in former years, very satisfactorily.

General.—Mr. E. C. Isaac, Organizing Inspector for Manual and Technical Instruction, visited the school in April. He was thoroughly satisfied with the work of the school.

The school reference library continues to grow in the number of volumes and in usefulness. The day classes for girls have proved most successful; forty being enrolled during 1907. Great interest is shown by the public and the Press of Wanganui in the school. The various trade associations have established a lead which might with advantage be followed in other centres. It is to be hoped that before long the two years spent in the day classes will be deducted from the number of years of apprenticeship.

Waverley.—The Waverley Committee, with Mr. Banks, worked hard, and had the satisfaction of forming successful classes in book-keeping and commercial arithmetic, dressmaking, and drawing and painting.

Turakina.—At present, dressmaking classes only have been attempted, but the classes were carried out to a successful issue.

Marton.—The Technical School is now an established fact. £60 was raised locally, and a commercial class-room has been added to the three rooms previously authorised. The Hon. G. Fowlds performed the opening ceremony in August. Mr. Wilkes, the energetic local director, is to be congratulated on the success of his first year's work.

Bull's.—Classes in English, commercial arithmetic, book-keeping, dressmaking, and millinery have been conducted in this township. The students and Mr. Gray, the headmaster, have worked hard, and excellent work has been the result. The near future should see the erection of woodwork, cookery, and ordinary class-rooms, nearly £200 having been raised locally.

Hunterville.—Dressmaking and wood-carving classes continue to receive good support.

Taihape.—Dressmaking and wood-carving were the only subjects taught here. A grant of £400 has just been sanctioned towards the cost of a suitable Technical School. This, with £200 locally subscribed, and the Government subsidy thereon, will be sufficient to cover the cost of science, woodwork, and cookery rooms. I anticipate much success from my work in this centre.

A. VARNEY, Director.

EXTRACT FROM THE REPORT OF THE SUPERINTENDENT OF THE SOUTHERN DISTRICT.

During the year classes have been conducted in the district at the following places: Feilding, Kimbolton, Colyton, Bunnythorpe, Halcombe, Apiti, Pohangina, Rongotea, and Ashhurst. In all, forty-seven classes, attended by 664 pupils, were held. A feature of the year's work has been the establishment of country classes. These have been a decided success, thanks to the energy and enthusiasm of the school-teachers. The work of the classes in Feilding has been much hampered by the unsuitability of the rooms in which the classes have been held, but, with the opening of the new Technical School next year, good work should be done. The unsuitable accommodation and equipment, and the difficulty in securing suitable instructors, have prevented pupils from sitting for the various technological examinations, but, with the appointment of special instructors for the district next year, this defect should be remedied.

H. AMOS.

EXTRACT FROM THE REPORT OF THE SUPERINTENDENT OF THE NORTHERN DISTRICT.

The year just ending marks, in this district, the beginning of a scheme of procedure in connection with technical instruction which should in the near future produce such beneficial results as will fully justify the initial expenditure necessary on the part of Government, Education Board, and local authorities. Previously, technical classes of an elementary nature have been successfully carried on, under the control of local headmasters of schools, at Eltham, Hawera, and Mangatoki,

but this year an attempt has been made to as far as possible unify the courses of instruction throughout the district—an attempt that, owing to the lack of facilities as regards accommodation and suitable apparatus, has been but partly successful. Under these circumstances, it was necessary that considerable attention should be given to securing adequate equipment for carrying on practical work, for, with the exception of poorly equipped science and art rooms at Hawera, this was sadly lacking. Very gratifying support has been received in this work, both from local bodies and private individuals, with the result that thoroughly up-to-date centres are now erected at Eltham and Patea, and it is hoped that Hawera and Manaia will be in the same fortunate position before the work for 1908 commences in March next. The following donations have been subscribed or promised: Eltham, £72; Hawera, £200; Patea, £102; Manaia, £80: total, £454. This, with the subsidy it carries, will give over £900 to assist with the Government grants in the erection and equipment of the different centres. Though technical classes have this year been held for the first time in some of the centres of the district, the work throughout has had its scope much confined through lack of accommodation. Nevertheless, under rather trying conditions, technical instruction in the application of scientific knowledge to the dairying industry, with special reference to testing and analysis of milk, has been carried on at Manaia, Eltham, and Hawera, and, with the fully equipped laboratories which will next year be provided at these places, this branch of technical training will receive the attention which, in a district of this kind, it so merits. The establishment of classes in practical and theoretical work for plumbers at Hawera and Eltham has resulted in several students presenting themselves for the examination recently conducted by the Department of Public Health. The results of this examination are not yet to hand. At Manaia a very successful class in agriculture was conducted by Mr. Grant. The other classes throughout the district—dress-making, millinery, drawing and painting, commercial work, photography, commercial law, electricity, English, Latin, and mathematics—have been on the whole well supported, and have done satisfactory work.

The great difficulty in small centres, and one which can only be overcome by the adoption of a complete staff of travelling instructors, such as the Board proposes to appoint, is the impossibility of obtaining locally persons who possess both the knowledge and the necessary teaching capabilities to handle many of the subjects for which there is a desire. My report would be incomplete without making a special reference to the enthusiastic interest taken in technical education by the residents of Eltham and surrounding district. All classes of the community are keenly alive to the advantages of modern technical instruction, and there is no doubt that all facilities offered by the Board will be taken advantage of to the full. Eltham, in fact, might also be a better administrative centre for the district than Hawera, for it certainly promises to be the better educational centre. Throughout the year the teaching staff have worked enthusiastically under what have often been trying conditions. The life of a travelling instructor in this district in winter-time is scarcely to be envied. Great assistance in the advancement of technical education has been readily given by teachers throughout the district, and particular mention should be made of the painstaking efforts of Messrs. Thomas and Law, of Eltham and Manaia respectively, both of whom have been of great service to the Board in assisting with the conduct of classes in their towns.

A. HINTZ.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Special Classes conducted at Apiti, Ashhurst, Bull's, Bunnythorpe, Colyton, Eltham, Feilding, Halcombe, Hawera, Hunterville, Kimbolton, Marton, Manaia, Mangatoki, Matapu, Normanby, Patea, Pohangina, Rongotea, Taihape, Turakina, Waverley, and Wanganui.

Receipts.			Expenditure.		
	£	s. d.		£	s. d.
Capitation on special classes ..	537	17 5	Balance at beginning of year ..	1,587	16 6
Capitation on account of free places ..	474	17 2	Salaries of instructors ..	3,456	15 11
Buildings ..	761	12 6	Office expenses (including salaries, stationery, &c.) ..	154	7 0
Rent ..	72	18 0	Advertising and printing ..	132	11 3
Furniture, fittings, and apparatus ..	772	6 6	Lighting and heating and cleaning ..	191	1 5
Material ..	58	6 11	Insurance and repairs ..	2	15 0
Subsidies on voluntary contributions ..	442	2 9	Rent ..	90	4 0
Fees ..	1,662	2 9	Examinations, &c. ..	7	12 0
Voluntary contributions ..	1,130	19 8	Material for class use ..	194	17 6
Material, &c., sold ..	46	6 9	Scholarships ..	84	0 0
Interest on deposit ..	0	12 6	Library and prizes ..	96	8 7
Unpresented cheque ..	1	10 0	Telephone ..	5	5 3
Transfer from Rees Bequest Fund Account for purchase of apparatus ..	15	18 7	Miscellaneous ..	18	9 11
Balance at end of year ..	4,480	16 9	Contracts, architect, &c. ..	2,895	12 1
			Furniture, fittings, and apparatus ..	1,540	11 10
	<u>£10,458</u>	<u>8 3</u>		<u>£10,458</u>	<u>8 3</u>

W. J. CARSON, Secretary.

EXTRACT FROM THE REPORT OF THE CONTROLLING AUTHORITY OF THE PALMERSTON NORTH TECHNICAL SCHOOL.

Until 1907 Mr. Vernon, M.A., B.Sc., had been acting as Honorary Director, but owing to the increase in the number of the classes, &c., it became necessary to appoint a Director. Mr. F. Foote, B.A., was then appointed to this position with Mr. Vernon as Hon. Principal. The art classes were under the direction of Mr. Elliott and ran for three terms. The only other classes running for three terms were the plumbing and wood-carving classes. The remaining classes ran

for two terms. In June twenty-seven students entered for the South Kensington examinations, and twenty-three were successful in passing. Thirteen obtained first-class and ten second-class certificates. In November twelve members of the plumbing class sat for the Wellington Technical School ordinary plumbing examination, and ten passed.

Towards the close of the year examinations were held in the various classes, and certificates awarded to students according to merit.

In all, seventeen classes were held, with a total average roll of 344 pupils.

W. RUTHERFORD, Chairman.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Special Classes conducted at Palmerston North.

<i>Receipts.</i>	£	s.	d.	<i>Expenditure.</i>	£	s.	d.
Balance at beginning of year ..	86	13	6	Salaries of instructors ..	492	9	3
Capitation on special classes ..	170	9	1	Office expenses (including salaries, stationery, &c.) ..	29	17	4
Furniture, fittings, and apparatus ..	111	2	6	Advertising and printing ..	61	17	0
Fees ..	376	15	7	Lighting and heating ..	30	12	1
Voluntary contributions ..	90	9	6	Insurance, repairs, freight, and cartage ..	6	6	0
Transfer from Palmerston North High School ..				Rent ..	48	10	0
Account on account of apparatus ..	8	9	0	Examinations, &c. ..	12	19	0
Balance at end of year ..	16	6	2	Material for class use ..	72	9	6
				Apparatus for electricity and magnetism ..	58	9	0
				Furniture, fittings, and apparatus ..	34	14	2
				Cleaning ..	12	2	0
	<u>£860</u>	<u>5</u>	<u>4</u>		<u>£860</u>	<u>5</u>	<u>4</u>

W. HUNTER, Secretary.

WELLINGTON.

EXTRACT FROM THE REPORT OF THE WELLINGTON EDUCATION BOARD.

During the year capitation under the regulations for manual and technical instruction was earned by 116 schools, as compared with 120 in 1906 and 110 in 1905. In all, 13,983 pupils received instruction in various branches of manual education. Instruction in cookery has been given at Thorndon and Newtown in Wellington; at Levin; and at various Wairarapa centres, including, for the first time, Martinborough. The instructor in woodwork began his duties in June in the woodwork-room at the Training College, and in rooms rented at Newtown until the completion of the South Wellington Woodwork and Cookery Buildings. The erection of this fine building, of the cookery and science rooms at Levin, and the fitting-up of science and cookery rooms at Greytown and Carterton should render the work of instruction at these centres both more pleasant and more efficient. The work of instruction in agriculture is dealt with at length in the report of the Inspectors. The number of school classes increased from forty-two to fifty.

The Board is pleased to record that substantial benefit has been conferred on over twenty schools by donations to their funds, made chiefly for the establishment and improvement of school gardens. Donations, with the Government subsidy, resulted in the erection of a room for science in one district; in the purchase of a 2-acre technical-school site in another, and elsewhere in the purchase of a good microscope or other useful piece of apparatus. Large donations have in like manner, through local interest and generosity, resulted in improved equipment in at least three of our district high schools.

EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

In our junior classes nature-study is finding increasing favour. A truer appreciation of its value, of its living interest to children, and of its higher aims is enabling many of our teachers to rely less on text-books and to work more along their own lines—this, much to their own and their pupils' profit. In many of our infant-rooms we now find the songs, the stories, the drawings, and models all made to centre round the bird or flower or insect the little observers have been studying. We need hardly say that co-ordination has its limitations, and these are exceeded when it is no longer purely a means to an end. Elementary agriculture in our country schools now forms the fit and proper complement to the nature-study of the lower standards, though we look forward to the time when the garden takes a more prominent place in the work of the P. classes. "The recent addition of elementary agriculture to the matriculation programme should do much to popularise agriculture instruction in country centres, and the eminently practical course prescribed by the University should have the effect of imparting to the curricula of our district high schools a character more in accord with their surroundings." Mr. Davies, the agricultural instructor, further reports that "At the end of 1906, the number of schools in the district earning capitation for recognised classes in this subject was forty-two. During 1907 the number has increased to fifty, while several schools which are too small to earn the grant have made a feature of nature-study as applied to the garden. At Makomako School, which formerly earned capitation for agriculture, dairy-work has been successfully taken up, the garden being still tended by the pupils during their spare time. Since 1906 the laboratories at Levin and Carterton have been equipped and a spare room in the Kereru School has been fitted up for chemical experimental work, the cost in each case being met by a grant from the Education Department, supplemented by local contributions. At Otaki, a bazaar realised £65, which, with the Government subsidy, will provide a useful building for laboratory purposes." The addition of school gardening to the

syllabus has entailed a large amount of extra work on country teachers—work willingly undertaken. In the preliminary work of breaking in the ground for school gardens, many Committees have rendered invaluable assistance, and we bespeak their further sympathy with the teacher in looking not merely for the husbandman's return of fat crops, but for a return measured only by the larger interests and wider sympathies of the children. We trust that as teachers become accustomed to the school garden and its bearing on school-work, the "craft and crop" aspect will not obscure the other and no less important side of this work—viz., its bearing on the mental and moral development of the scholar. To quote Mr. Davies again, "A matter not entirely foreign to the subject under notice is the care and beautifying of school grounds. Indeed, in America, a country which is generally credited with being beyond all else practical and utilitarian, this feature occupies a leading place in the rural education programme. Is it too much to hope that, as one of the results of nature-study, the school may become a source of pride and inspiration to the district?" We are in entire accord with Mr. Davies in this matter, and we can assure teachers that both sympathy and practical assistance will not be wanting in any attempt to further so entirely praiseworthy an object. We are, moreover, the more inclined to give prominence to this subject, as during the past year we have been compelled to report in strong terms on the unsatisfactory condition of certain school grounds and offices. During the year instruction in elementary agriculture was provided for such teachers as could arrange to attend at Greytown from April to June, Masterton from July to October, and at Levin during November and December. A similar class at Pahiatua was arranged for, but had to be abandoned owing to the indisposition of the instructor Mr. Davies. The obvious difficulties in the way of making a Saturday class successful in such a subject as agriculture and the excessive demands made on the time of the teachers attending, have induced the Board to adopt this year a system of arranging for a limited number of selected teachers to go into residence at Greytown for a fortnight at a time.

During the year 116 schools earned capitation under the Manual and Technical Regulations. Nearly all the subjects of manual instruction set down for classes below S5 were represented, and grants were also earned for such science subjects as agriculture, chemistry, physical measurements, botany, physiology, and "first aid," and also for dressmaking, cookery, woodwork, dairying, swimming and life-saving.

We are well satisfied with the work done in all these classes, and our opinion has been confirmed by the Department's Technical Inspector, who gave a very satisfactory report on the classes visited by him during the year. Manual work in our schools is improving year by year, but while many of our teachers now realise its proper place in the curriculum, there is certainly evidence that these subjects "have been pushed so hard as to defeat the purpose of scientific education by depriving the pupils of their necessary training in other subjects, and especially in the power of expression in their own language," and we desire to repeat the warning we have given in previous reports, that, while "sense-perception and practical work should have a place in any curriculum, that place should not be an exaggerated one." Mr. Howe, who was appointed instructor in woodwork, opened his classes at Thorndon in June, and another centre was opened in Constable Street. A very satisfactory programme was drawn up, and the boys showed great interest and made good progress in the work. As the programme provides for instruction in drawing, we look forward to a great improvement in those branches of this subject, which include geometrical and scale drawing. The addition of cookery and woodwork to the subjects of the teachers' examination should give some encouragement to work of this class. Saturday classes for teachers have been established in cookery at Wellington and Masterton, and in drawing and handwork (including woodwork) at Wellington.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD'S INSTRUCTOR IN AGRICULTURE.

Special Saturday classes in elementary agriculture for teachers were held at Greytown from April to June, and at Masterton from July to September, during the year 1907. The classes at each place were attended by sixteen teachers, the average attendance at Greytown being eleven, and at Masterton ten. The course at Greytown dealt chiefly with plant-physiology, and included lectures and a series of experiments on leaves, stems, roots, flowers, fruits, and seeds; while at Masterton, in addition to similar laboratory practice, the programme provided talks on rocks and their constituent minerals, and the formation and nature of soil, with appropriate practical work. Good results were achieved by those able to attend regularly, but several wet Saturdays interfered considerably with the progress of the work at both these centres. An evening technical class in elementary agriculture was also held weekly at Greytown from April to July, 1907. The average roll-number of the class was fifteen, and the average attendance twelve, several losses being sustained during the session through the departure of members of the class from the district. The programme of work consisted of a brief revision of the course in elementary chemistry carried out during the previous year, followed by lectures and laboratory exercises dealing with soils and manures.

W. C. DAVIES.

EXTRACT FROM THE REPORT OF THE CARTERTON TECHNICAL CLASSES.

Classes were held in English and arithmetic, shorthand and commercial subjects, including book-keeping, *précis*, correspondence, and commercial arithmetic. The shorthand class was carried on for two terms, and the others for three. The year was commenced with a much-improved attendance, but there was the usual falling-off towards the end. The average attendance was as follows: English and arithmetic, 8; shorthand, 5; commercial subjects, 6. As these numbers were not sufficient to earn capitation for the payment of the instructors, the Committee's surplus funds were almost completely used up, and it will be impossible to continue the classes for another year without a large increase in the number of pupils.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Technical and Continuation Classes in Country Districts.

Receipts.

Centre.	Grants from Government.		Other Receipts.		Balance at End of Year.	Totals.
	Capitation on Special Classes.	Capitation on Free Places.	Fees.	Refund on Account of Elementary Agriculture.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Eketahuna ..	20 6 6	..	..	..	3 2 3	23 8 9
Carterton ..	25 3 9	11 2 6	4 15 0	40 3 4	..	81 4 7
Greytown ..	12 9 0	..	..	..	..	12 9 0
Masterion ..	..	..	..	..	11 10 8	11 10 8
Totals ..	57 19 3	11 2 6	4 15 0	40 3 4	14 12 11	128 13 0

Expenditure.

Centre.	Balance at Beginning of Year.	Administration.			Furniture, Fittings, and Apparatus.	Balance at End of Year.	Totals.
		Salaries of Instructors.	Advertising and Printing, &c.	Material.			
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Eketahuna ..	..	23 8 9	..	..	..	..	23 8 9
Carterton ..	19 18 4	50 7 2	2 14 6	..	..	8 4 7	81 4 7
Greytown ..	1 8 4	..	..	4 0 6	3 16 2	3 4 0	12 9 0
Masterion ..	9 7 11	..	..	2 2 9	..	..	11 10 8
Totals ..	30 14 7	73 15 11	2 14 6	6 3 3	3 16 2	11 8 7	128 13 0

G. STEWART, Secretary.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE WELLINGTON TECHNICAL SCHOOL.

The year 1907 has been one of steady progress and development of the work of the school. All classes show some improvement in the quality of their work, and many show considerable improvement in numbers. The action of the Board in abolishing the system of payment of teachers by refunded fees has, I think, tended to unify the work, and to render more elastic many of the school courses. In particular there has been a steady growth in the number of free pupils in the evening classes, many of them old day-scholars who won free places in December, 1906. Courses for these free students would have been very difficult to arrange if the change in the system of payment of teachers had not been made.

The staff is now very strong, and will probably be yet stronger next year. Every member of the staff has worked well and successfully to forward the interests of the school during the past year. The large measure of success of students of the school, both at the International Exhibition at Christchurch and at the Palmerston Agricultural Association's Show, which is to some extent an indication of the quality of work done, is due as much to the earnest efforts of the teachers as to the industry and ability of the students.

During the year new classes have been formed in cooking and domestic economy, in dress-making, in life-modelling, in jewellery and enamelling, in writing, lettering, and illuminating, and in blackboard drawing for Sunday-school teachers with satisfactory results. The art classes generally have been reorganized, and placed, I think, on the best footing possible in our present quarters. The work of reorganizing the evening classes in mechanics and electrical engineering has been continued, but with some considerable difficulties on account of lack of proper class-room and laboratory facilities. The classes in general science, mathematics pure and applied, mechanics, chemistry, and electricity and magnetism are doing better work than heretofore, largely through the presence of students holding free places and preparing for Senior Civil Service and other examinations. The day classes for technical scholars have again been well attended, have done very satisfactory work, and have largely contributed to the financial soundness of the school. Classes connected with the building trades have been very well attended, the numbers in the building-construction class having been much larger than usual, notwithstanding the badness of the accommodation available for this class. The commercial classes generally have been very successful, being well attended by a class of students capable of benefiting by the instruction given. Classes in the domestic economy section have been very promising, and should command a large success in the future. Signs are not wanting to show that with suitable buildings and grounds and adequate equipment the school would soon become an assured success, and would be of real value to the community. In regard to numbers of students and class entries, the record for this year compares very favourably with those for former years.

Buildings.—The buildings we have now are in as good condition for our purpose as I think it is advisable to make them. About £1,100 has been spent during the year in necessary alterations, and everything possible has been done to make the buildings suitable for their purpose. I

regret extremely the necessity for this expenditure and for the large expenditure of last year. It is solely due, except for small sums, for repairs to the absolute unsuitability of the original design; and no reasonable expenditure can do more than very partially obviate inherent defects. The old carpenters' shop, for example, has been renovated inside, at a cost of about £120, to provide accommodation for students in domestic economy. The sum thus spent cannot be considered an asset of the Board. It should be written off during this and next year as rent or rent-equivalent.

Furniture and Fittings.—About £125 has been spent in providing extra furniture and fittings required, and in substitution for old, dilapidated, and worn-out furniture, much of which was badly made to begin with, and had been many years in the school.

Apparatus.—About £520 was spent on new apparatus during the year, thus largely increasing the efficiency of teaching in many classes. The mechanical workshop in particular is now well supplied with modern tools of good design, so far as the ordinary work possible in a small shop is concerned. Several useful and ingenious pieces of apparatus for class purposes have been constructed in the workshop. I have always found that apparatus thus constructed in the workshops is more keenly studied and more intelligently used, and the results of experiments more closely examined than in the case of apparatus bought ready-made. In no long time our difficulty will be to find room for the use and display of our equipment in the mechanical and electrical classes. In the art department considerable additions have been made to our equipment, particularly in the way of providing natural objects for study. The benefit accruing from this expenditure has been very marked, there being a notable increase of carefulness in study and accuracy in workmanship on the part of the students.

Material.—As showing the large amount of work done in the school, I may state that some £700 has been spent in providing material for the various classes, notwithstanding every effort to reduce the cost of this item as far as is consistent with efficient teaching.

The number of individual students attending the school during the year was—first quarter, 950; second quarter, 1,054; third quarter, 1,047; fourth quarter, 881. These numbers form a record for the school, being more than 10 per cent. greater than any previous year.

Special Reports on the Work of Individual Classes.

Art Section.—The attendance in the design class has been well maintained during the session, and a considerable amount of satisfactory work done. The aim of the work in this class has been to encourage students engaged in the artistic trades to study the branch of design specially suitable to them, so as to be able to design as well as to execute their work. Cabinetmakers, metal-workers, jewellers, ticket-writers, sign-writers, painters and decorators, workers in stained glass, &c., have been instructed in designing for their special work. Depending to a considerable extent upon the work done in the design classes are the following craft classes in which the students are encouraged to carry out their own designs, and are instructed in the technique of their work. (a.) Stencilled designs: A considerable advance has been made in this class of work during the year, and a very creditable amount of work done. The junior day-pupils particularly have done some good work. (b.) Wood-carving: In increasing numbers students have attended the drawing and design classes in order to prepare their own designs for execution in carving with the consequent increase of good work done in the wood-carving class. (c.) Metal-work, jewellery, and enamelling: Owing to these classes having opened towards the end of the session, the attendance has not been so large as was anticipated, but if the number of jewellers and metal-workers who have been making inquiries about the classes present themselves next year a large class may be looked for. (d.) Painting and decorating and sign-writing: The quality of work done in this class has risen during the year, and the attendance has been fairly regular. (e.) Lettering, writing and illuminating, and ticket-writing: The attendance in this class has been variable, but the regular attenders have made considerable progress. The establishment of craft classes such as the above (a, b, c, d, e), in which students are taught conjointly drawing and design and the technique of their trade, is of the utmost importance. It is in such classes that the greater part of the work of an art-school culminates. The other classes are preparatory to these, and lead up to them. Without these the duties of an art-school are only half-performed. So I would strongly recommend, when funds permit, the establishment of other classes of a similar nature, such as stained-glass work, pottery, cabinetmaking, bookbinding, lithography, trades in which success depends as much upon the exercise of the artistic sense as on technique. As it is we are turning out students fairly well qualified in drawing but with little special qualification in the technique of the trade which they intend to follow, excepting in the cases which are already provided for. Some of these classes can be started with very little outlay. Nature-study: The bulk of the work done in the elementary drawing and painting classes is done from natural specimens, so that it has been my endeavour during the year to obtain as large and as varied a collection of natural specimens as possible. Plant-studies: Good work has been done in these classes during the year. Although it is always possible to obtain cut flowers for these classes, it is advisable to have as many specimens of growing plants in the school as possible, and a small glasshouse would greatly facilitate the keeping of such plants. Bird and animal studies: Very good work has been done during the year from the living birds and animals. Stuffed and preserved specimens (birds, butterflies, &c.): The specimens obtained during the year have been exceedingly useful as examples for drawing and painting from, and good work has been done from them. Model and common object drawing: A considerable amount of the work done in the elementary classes is from models and common objects, and the standard of work has been well maintained. Memory drawing: A certain amount of memory drawing has been done during the year, and it is proposed to increase the classes in the subject during the coming year. Still-life painting: The standard of work done in this class has been well maintained. The prizes offered by the New Zealand Academy of Fine

Arts in this subject were won by students of this class. Outdoor sketching class: Whenever possible, this class has met outside, and the work has shown progress during the year. When the weather is unsuitable for working out-of-doors the class meets in the school and studies from a costume model. Modelling and plaster-work: The attendance at these classes has been regular, and the work progressive. The development of this class is greatly hampered by want of room. Classes in modelling the head and figure from life have been held during the year. Next year the modelling life classes will be principally from the figure, and as the heating of the room as at present by means of a kerosene-stove is unsatisfactory, I would recommend the fitting-in of a coal-stove for the modelling life class. The present accommodation for plaster-casting is very unsatisfactory. Life and antique drawing and painting: The attendance at these classes has shown considerable improvement, and the quality of the work done has been raised. Anatomy: The attendance of these classes has been very regular, and their usefulness is being felt in the figure-drawing and modelling classes. Geometrical drawing and perspective: The nature of the work done in these classes has been made more suitable for art students, the syllabus of work being drafted specially for draughtsmen and designers. Teachers and pupil-teachers' classes: In these classes, which are held on Saturday mornings, the following subjects are taught: Model and common object drawing, nature-study, brushwork, blackboard drawing, memory drawing, modelling in clay and plasticine, plaster-casting, wood-carving and design, the courses being arranged and adapted to suit the requirements of the different teachers. The attendance has been fairly regular, and the work shows considerable improvement. Blackboard drawing class: This class has been specially arranged for Sunday-school teachers, and the class of work made suitable for their requirements. They have been instructed in model and common object drawing, perspective, and more particularly in the illustration of biblical subjects, all the work being done on blackboards.

In general the work shows some improvement. It is still, however, carried out under difficulties in many cases. In particular we should have a casting and moulding room, and a life-modelling room, properly heated, as soon as possible. We also require extra facilities for keeping birds and plants in the best condition, in order to increase our present collection, and so improve its usefulness. In connection with the teachers' Saturday classes it is satisfactory to learn that several headmasters of the primary schools have expressed themselves as highly satisfied with the increased freedom and skill shown by their pupil-teachers in using the pencil and brush, and with the consequent improved standard of work in their drawing classes. The Saturday morning elementary drawing class has increased from twelve to fourteen last year to over thirty this year, and the work done reflects great credit on the teachers.

Mechanical Engineering Classes.—Workshops: Students in this class usually possess some training in either fitting or turning before joining, and are generally anxious to learn screw-cutting. We have but three screw-cutting lathes, and more are required to make the class a large success. Students who have no practical experience before joining are given simple exercises in tool-dressing, fitting, and turning, and do some work towards shop repairs and equipment. Lecturettes on workshop practice and calculations relating to the various processes are given by the instructor, Mr. E. Dolby; note-books are kept by the students, and some of them carefully written up. Progress is satisfactory in this class, and the students give evidence of greatly appreciating the excellent machines provided for their use. Prime movers; machine drawing and design: In both these classes the work and attendance have been interrupted and irregular through students having to work overtime. I may say that the same complaint is made about students in many other trades, including clerks employed in offices and warehouses. The popularity of these two classes would be much increased if satisfactory accommodation and equipment could be provided for them. The standard of work done is good, and in both classes students have done somewhat advanced work. For example, the advanced design class has completed in the last six months the plans and designs, from notes given by the instructor, supplemented by their own calculations, of a suction gas plant and gas-engine of 40- to 60-horse power. The work involved researches into the rules governing gas-engine design, a comparison of the proportions—each detail—of several well-known types for the use of the student. I have carefully examined the drawings and designs turned out by the students, and have no hesitation in saying that the designs are eminently of a workable character, besides providing an excellent mental training for the students. Every detail was carefully thought out from the beginning. The work was such as an honours class in a University would be proud of. Day-classes: The work done in the day-classes was hampered considerably by lack of the necessary apparatus and laboratories. Several useful pieces of apparatus have been constructed and are in use, but much more apparatus is required, and also a special laboratory for its reception and use. In the practical classes in mathematics and mechanics the main object of the teaching has been to give experimental proofs or demonstrations (helped by graphical constructions and arithmetic) of the laws and theorems of mechanics, thus supplementing and solidifying the work done in the theory classes.

Electrical Engineering Classes.—In these classes the numbers have been in excess of those for former years, and the character of the work has been well maintained. Elementary electricity: This class was intended for students preparing for Matriculation, Civil Service, or other similar examinations, which include an elementary treatment of electricity as one subject. The class was, however, attended by many who were preparing for electrical engineering, and both classes of students also attend the class in elementary electrical engineering which was found suitable for examination candidates as well as for young engineers. In consequence it is proposed that the classes shall be renamed "elementary electrical engineering," covering the elements of electricity and magnetism, instrument making, testing, and using; and "intermediate electrical engineering," covering some of the subjects of the advanced course, and suitable for second- and

third-year students. In the advanced course the subjects for this year's work were mainly installations and power-producers in central stations, and the theory and design of the direct-current motor. I have to thank the City Electrical Engineer for allowing me to use the results of trials of the tramway power-house engines for class purposes. Authoritative tests of engines and dynamos known to the students are of far greater value to them than the published results of trials in Europe or America. The advanced course will in future deal mainly with the revision of earlier work, with applications in the design of electrical machines and apparatus. A pleasing feature of the evening elementary classes is the good attendance thereof of many of the day-boys who are taking electrical work. There is distinctly a greater tendency on the part of students towards taking connected courses in mechanical and electrical engineering. The workshops have proved of great service in the electrical classes, both day and evening, and many useful pieces of apparatus have been constructed.

Building Trades.—The classes in building-construction, in carpentry, and in plumbing have been very successful during the year. The numbers in the building-construction class constitute a record for the school, and the work done testifies to the excellence of the teaching. The results are all the more praiseworthy considering how much hampered the class is by lack of suitable accommodation. The main hall, used as a drawing-office, might, with its present furniture, serve for one small class in some one branch. It is hopelessly inadequate for the needs of the six different, and many of them large, classes that occupy the room in rotation. The apparatus and work in progress is different for each class, but all must be housed in the same room. The furniture is not specially designed to save the time of teachers and students, nor even to safely store the apparatus and work in progress. The consequence of this ill arrangement is distinctly inimical to the interests of the several classes. Students are continually being discouraged by losing work or having it spoiled, and the apparatus cannot be maintained in the best condition. Notwithstanding these disadvantages, the class has done excellent work during the year. Several members of the class show a praiseworthy desire to acquaint themselves with the principles of design and the art of modelling, and are among the best students in the applied-art classes. I feel certain that this class could be made very much more successful and efficient if it were provided with reasonable facilities for work. In this connection I have again to deplore the lack of room and equipment for a strength-of-materials laboratory, which is absolutely essential in any institution that aspires even in a modest way to teaching the principles of civil and mechanical engineering, of building-construction, or of electrical engineering. Viewed from the standpoint of a properly equipped institution, the absurdity of our present position in this as in many other respects is painfully ludicrous. The carpentry classes have done good work during the year, but it has become increasingly evident that our supply of small tools must be largely increased, in order that as far as possible each student may have the keeping and care of the commoner tools which he uses. The day classes in particular should have their own sets of tools, as a very important part of their training consists in acquiring habits of order and neatness, and the art of keeping tools in proper working-condition. The plumbing classes have been large, and the work done on the whole very satisfactory, during this year. The old trouble of irregular attendance is still, however, far too apparent. Measures taken recently by the Board will, I hope, in coming years minimise this main cause of inefficiency. The instructor in plumbing, the late Mr. G. Reed, took advantage of a private trip to England to acquaint himself with the latest methods and devices in plumbing, and by authority of the Board purchased for the school some excellent diagrams and a useful series of lantern-slides, illustrating the principles and practice of sanitary science. He also arranged for the importation of apparatus for lead-burning, which, with the increase of manufacturing in this town, has become a subject of some importance to plumbers, and is likely to be more prominent still in the future. A hydraulic laboratory in conjunction with the strength-of-material laboratory would be of great service in the instruction of the senior classes in the theory of plumbing.

Applied Science Classes.—These classes are at least showing a gratifying vitality. To the educationalist this is one of the brightest signs in the progress of the school, for the whole superstructure of professional knowledge in engineering, in building, and all trades allied to these, and indeed in commerce also to a very large degree, is based on a right understanding of the facts and principles of applied science. The classes in mathematics, in mechanics, in experimental mechanics, and in chemistry and electricity and magnetism have all been well attended, and good work is being done. As time goes on and the numbers increase it will be possible to largely minimise present difficulties, due to the varying attainments of different sections in these classes. A significant and promising feature of these classes is the large proportion of students with senior free places. There is special need for a separate room in which apparatus for mechanical experiments can be permanently set up for the use of the students in experimental mechanics. Much apparatus has been made, and more is under construction or designed. Full and efficient use of apparatus can only be made when it is readily accessible for use in a special room. If stowed in cupboards in an ordinary class-room it depreciates in value with some rapidity if used, and might as well not exist at all if not used. The geometry and mechanical drawing class on Wednesday evenings has been attended fairly well in the circumstances, but in a suitable room in which efficient teaching could be done the numbers would largely increase.

Commercial Classes.—Book-keeping: Record numbers have kept the instructors particularly busy during the whole year. The advanced book-keeping class has done specially good work and has doubled in numbers in the year. Great credit is due to the chief instructor and his assistants for the good work done. Shorthand and typing: These classes have also done excellent work. The typing class needs more machines and more room. The difficulty of finding room for the special day-class in typing has been considerable and the class has suffered through not having sufficient

room to work in. The room occupied is also used as an instructors' room, so that the class and the instructors wishing to have access are an inconvenience to one another. I trust that better arrangements may soon be possible. Arithmetic, English, and Latin: These classes also show a considerable increase over the numbers for former years. The English class has been divided into two, both under Mr. Renner's supervision. Mr. Binning was appointed to assist Mr. Renner. The standard of work is steadily improving in all these classes.

Domestic Economy.—Classes in cooking and dressmaking have been held in the old carpenters' shop during the year. These classes promise to become a successful part of the school system. The alterations made in the building cost some £120, and a further £40 was expended for equipment. The accommodation is of a temporary nature, but has served well so far and should serve till the Board is in a position to build on a suitable site.

A class in *Pattern-cutting for Bootmakers* has been conducted during the year by Mr. B. Mapplebeck; the number of students is not large, but does not diminish, and the class should run for a year or two at any rate, even if it does not develop into a special bootmaker's course. Whether there would be a sufficient demand for instruction to warrant the inclusion of other branches of the bootmaking trade is, I think, very problematical. Some experience of classes of a similar character to this has led me to the conclusion that many of them cannot be carried on continuously from year to year. It is necessary to harvest (so to say) one crop of students and then to wait a year or two for another crop to come on.

Technical Day-scholars.—The standard of work done and the numbers attending this year have been higher than last year. Of many of the day-students who left the school in December, 1906, at the end of their two-years course, I have had information during the year and the reports of their progress and conduct have been uniformly good. The progress made during the year has been very gratifying.

Special Courses.—Commerce: These classes have been well attended during the year and a distinct advance has been made on the work of previous years. The model offices scheme has now been organized and is running smoothly. The results are good and amply justify the expenditure for books, &c., which the adoption of the scheme entailed. The work done in the first-year classes was better than that of last year, and the results of examination have been uniformly good. A large percentage of second-year students will qualify for senior free places. The reports of the outside examiners in commercial subjects are good, though there is a lamentable lack of accuracy in figuring observable in some cases. However, I am assured by the examiner, who also examined for Victoria College in commercial subjects, that our students are no worse than others in this respect, perhaps rather better. Engineering, carpentry and joinery, and electrical engineering: I have been very agreeably surprised, reading the answers given to papers set by me this month, to find how far the boys in these divisions have got into the spirit of their work. There is no parrot-like repetition of teacher's words. Each boy thinks for himself. The actual volume of book-knowledge gained by the boy is not, I think, so large as it might have been in an ordinary secondary school, but the work struck me as being particularly thoughtful and of a kind likely to prove extremely useful to the boys later on. In practical mathematics, for example, the boys showed a knowledge of the fundamental principles of graphical and analytical methods and applied them with a confidence that was very gratifying, though I have no doubt the same boys would have floundered miserably with the same amount of training in the elegant but elusive methods of pure geometry. I am not, of course, in any way depreciating the study of pure geometry as a splendid general mental training; but I do think that graphical and analytical methods are more easily understood and applied by the mechanic and the engineer. In mechanical drawing, mechanics, and applied science generally, good work has been done by the boys. In the electrical, mechanical, and woodworking shops good progress has been made, and general subjects, such as English and drawing, arithmetic and geometry, have not been neglected. We find that, even with the limited means as yet at our disposal, the boys make surer progress, more readily and clearly understand the principles of mechanics, and solve with facility more difficult problems than they could by purely mathematical methods. In a word, they learn to think. We had a striking illustration of this in comparing the arithmetic papers done by these boys and by the members of the advanced commercial classes. The commercial students were left hopelessly in the rear on a paper that consisted largely of commercial problems. Art section: The students in the day-classes for junior-free-place pupils have made very good progress and have in many competitions shown themselves capable of holding their own with students in the adult classes. Some specimens of elementary-design work applied to cushion-covers were quite noticeable for excellence, and their modelling, and drawing from flowers and other natural objects, and from live birds and animals, showed that they were keenly interested in their work. Domestic economy: A class of about twelve girls did good work throughout the year. The lessons given included instruction in food-values, in hygiene, and in cognate subjects.

The library, I am glad to report, is used more by students than formerly. Many works of a useful character have been added during the year, and the nucleus of an instructor's library has been formed and has proved of some advantage. Thanks to Miss Lawson's unremitting care, only one book has been lost during the year. Considering that all students in the evening and many in the day classes are allowed to borrow books, and that these students often belong to the floating population, this is an excellent record.

Condition of Buildings.—The work of cleaning and caretaking has been well performed during the year by the caretaker and his assistant. Considering what a variety of classes it is often necessary to hold in the same room at different times, the orderliness of the rooms is very good—far better than it has been in past years. The buildings have not been in any way specially

has really been very satisfactory. With the advent of the new school this class should make a considerable advance in numbers and interest, as a good many youths attend the Wellington school at considerable inconvenience, who would remain in Petone were the conditions more favourable. Mr. Frederick W. Clayton, the teacher of the art class, reports that the class for drawing was not so well attended as on the previous year. The class for painting showed an increase of pupils considerably above previous years. He considers the work done in both branches very satisfactory, but want of room and proper lighting very much hamper the art class.

Mr. S. G. Walsh reports in regard to the class for electricity and magnetism that the students have made fair progress and are attentive and diligent in their work. This class ought to attract a larger number of pupils, and will likely do so when properly housed in our new school building. The shed used for the plumbing class has also to serve for this class, and the teacher complains that under present conditions it is well-nigh impossible to give satisfactory demonstrations in the class. Miss Kate Stewart, dress-making and -cutting class, reports that fewer pupils attended her class last year, but that all those attending made good progress during the year. The Managers feel the necessity for the appointment of a Director to take the oversight and responsibility of all the classes. This must be done before we go into our new building.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance at beginning of year	176	15 3	Salaries of instructors	316	6 0
Capitation on associated classes	66	6 9	Office expenses (including salaries, &c.) ..	11	2 10
Capitation on free places	53	5 0	Advertising and printing	8	10 0
Apparatus	15	0 0	Lighting and heating	17	12 4
Material	8	14 8	Insurance and repairs	2	14 8
Rent	40	13 0	Rent	39	4 0
Fees	134	0 2	Material for class use	53	16 5
Voluntary contributions	71	3 9	Caretaker's salary	12	14 0
From Petone School Committee for gas used	7	10 0	Bank commission and cheque-books ..	0	16 0
			Cartage	1	12 0
			Fees refunded to free-place pupils ..	27	3 0
			Furniture	4	16 0
			Sundries	0	10 4
			Balance at end of year	76	11 0
	<u>£573</u>	<u>8 7</u>		<u>£573</u>	<u>8 7</u>

ALEXANDER THOMSON, Chairman }
J. G. CASTLE, Hon. Secretary } of Managers.

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE PAHIATUA TECHNICAL CLASSES ASSOCIATION.

Miss Johnston conducted a class in dressmaking for adults for the quarter ending December. Fifteen attended. Mr. Irving carried on a class for school-children in brush drawing and design.

J. THOMAS, Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Associated Classes conducted by the Pahiatus Technical Classes Association.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance at beginning of year	35	10 6	Salaries of instructors	47	7 6
Capitation on associated classes	27	0 9	Advertising and printing	2	2 0
Fees	7	10 0	Balance at end of year	49	8 6
Voluntary contributions	21	0 0			
Capitation, associated classes, paid in advance by the Wellington Education Board ..	7	16 9			
	<u>£98</u>	<u>18 0</u>		<u>£98</u>	<u>18 0</u>

J. D. WILSON, Chairman }
J. THOMAS, Secretary } of Managers.

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE MASTERTON TECHNICAL SCHOOL.

The work of the school was commenced on Monday, the 11th March, and during the year classes were established in the following subjects: Drawing from life, building-construction, general drawing, light and shade, painting, dressmaking, woodworking, wood-carving, plumbers' work, commercial subjects, English and arithmetic, Civil Service subjects, and Pitman's shorthand. In all there were thirteen classes, and the work was spread over a period of thirty-six weeks, comprising three terms of twelve weeks each. The average number of pupils on the rolls of the respective classes was 239, and the average attendance 156. This, although not quite so good as last year's record, when the figures were 238 and 167 respectively, may yet be regarded as satisfactory.

In their report last year the Managers stated that no less than forty-seven free pupils were admitted to the classes, and that consequently the accommodation was taxed to the uttermost. During the past year this number increased to forty-nine, and of this number no fewer than forty-four succeeded in complying with the regulations in respect to the attendance of holders of free places—a result gratifying to Managers and instructors alike. Of the five who failed to comply with the regulations as laid down by the Department, one failed owing to illness, two owing to

removal from the district, and the remaining two owing to negligence; and in each of these last two cases the Managers are calling upon the parent or guardian to pay the amount lost to the school through the irregular attendance of the pupils concerned, and will, if necessary, take steps to enforce the payment.

Candidates from the school were very successful in their examinations during the course of the past year, and succeeded in passing examinations as follows: In the plumbing examinations conducted by the Wellington Technical Education Board in June last seven candidates were presented and all passed; whilst in the City and Guilds of London Institute Examinations seven candidates presented themselves for examination, six of whom succeeded in scoring a pass in one or both sections of the examination. In November last the second half-yearly examination of plumbers was conducted under the auspices of the Wellington Technical Education Board, and the two candidates who entered from this school succeeded in passing in both the theoretical and practical sections of their examination. The Civil Service Junior Examination pass-list, recently published, also contains the names of two out of three candidates who sat for that examination from this institution. Owing to his removal to Greytown North, the Managers were at the end of last year regretfully compelled to accept the resignation of Mr. A. B. Charters, B.A., instructor to the class in English and arithmetic. The position, however, was ably filled by the appointment of Mr. C. N. Haslam, and good progress has since been maintained. In November last, owing to his removal to Napier, the Managers were reluctantly obliged to accept the resignation of Mr. S. E. Wright, instructor to the classes in commercial work and wood-carving. Mr. Wright has for quite a number of years been connected with the commercial classes in the school, and there is no doubt that his place will be very difficult to fill.

In August last the school was visited by Mr. E. C. Isaac, Inspector under the Regulations for Manual and Technical Instruction. Mr. Isaac inspected the working of the respective classes, and later on sent in to the Managers a confidential report of a generally favourable character on the work he had seen.

During the past two or three years reference has been made in each of the annual reports submitted by the Managers to the unsuitability of the present buildings and the insufficiency of the accommodation provided therein. These grave disadvantages will, however, soon belong to the past. In May last a movement for the erection of a memorial to the late Right Hon. R. J. Seddon was inaugurated in the town, an influential general committee established to help the movement along, and as a result the sum of £1,200 was raised for the express purpose of erecting a new technical school in Masterton as a memorial to our late Premier. The Trust Lands Trustees have generously provided a valuable and most centrally situated site on which to erect the building, and with the pound-for-pound subsidy on the voluntary contributions received, and the special building grant promised by the Minister for Education, there is every reason to believe that before the end of the current year the Managers will be superintending the working of a technical school suitable for the requirements of the town for many years to come.

The accompanying statement of receipts and expenditure for the year ended 31st December, 1907, shows the receipts to have been £454 1s. 9d., whilst the expenditure covering the same period was £545 14s. 2d., thus leaving a debit balance for the year of £91 12s. 5d. This statement does not, however, disclose the true financial position in regard to the year's work, as capitation amounting to £135, all of which was earned during the year ended 31st December, 1907, did not come to hand till after the middle of January.

In conclusion, the Managers desire to take this opportunity of heartily thanking the Masterton Borough Council, the Trust Lands Trustees, and the Education Department for the liberal assistance again rendered by those bodies to the cause of technical education in this town. Mainly owing to the aid received from these sources the work of the school has been maintained, and with the erection of new and commodious buildings, practically now in sight, there is every prospect that the work of the school will be advanced along lines calculated to prove of lasting benefit to the town and district.

JAMES M. CORADINE, Chairman } of Managers.
N. D. BUNTING, Secretary

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Associated Classes conducted by the Masterton Technical Classes Association.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance at beginning of year	11	4 7	Salaries of instructors	354	1 6
Capitation on associated classes	93	15 9	Office expenses (including salaries, stationery, &c.)	46	18 9
Rent	26	0 0	Advertising and printing	10	15 6
Furniture, fittings, apparatus	2	10 0	Lighting and heating	19	8 11
Material	28	19 11	Insurance and repairs	6	11 10
Subsidies on voluntary contributions	169	2 6	Rent	52	0 0
Fees	71	12 6	Examinations, &c.	8	6 6
Voluntary contributions	104	14 0	Material for class use	24	15 2
Rent for use of rooms	0	12 6	Caretaker	13	17 0
Sale of material	4	10 0	Postages, petties, &c.	1	5 11
Refund gas used at City and Guilds Institute	1	0 0	Bank charges and interest	2	13 1
Examinations	91	12 5	Furniture, fittings, and apparatus	5	0 0
Balance at end of year	£545	14 2		£545	14 2

JAMES M. CORADINE, Chairman } of Managers.
N. D. BUNTING, Secretary

HAWKE'S BAY.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Manual and Technical Instruction.—There has been still further extension of school classes during the year, and instruction in cookery, dressmaking, and woodwork was given at Gisborne, Napier, Hastings, Waipawa, and Dannevirke, the children of twenty-two schools receiving the benefit. The question of the appointment of itinerant instructors in agriculture and dairying is being carefully considered by the Board, and it is very probable that next year those important subjects will receive the attention they deserve. The technical schools at Napier, Hastings, and Waipawa are now completed, so the conditions under which classes work are materially improved.

Training of Teachers.—During the year Saturday classes for teachers have been held at Dannevirke, in physical instruction, drawing, cookery, and woodwork; at Napier, in cookery, woodwork, and dressmaking; and at Gisborne, in cookery, woodwork, and dressmaking. The attendances at the classes and the work done have, on the whole, been satisfactory, the work done at the cookery classes at Napier and Gisborne being good.

EXTRACT FROM THE REPORT OF THE INSPECTOR OF SCHOOLS.

The woodwork, cookery, and dressmaking classes under the Manual and Technical Regulations have been continued in the schools on the lines set forth in my last year's report. Mr. Gardiner, the instructor in woodwork, has conducted classes in Napier, Hastings, and Dannevirke as centres. The cookery classes for girls have been carried on in the same places by Misses Millington and Lousley, and Mrs. Thomas has conducted dressmaking classes. In Poverty Bay the instruction in woodwork was given by Mr. Levey. Altogether more than a thousand children received instruction in one or more of the subjects mentioned.

EXTRACT FROM REPORT ON SPECIAL CLASSES IN THE HAWKE'S BAY DISTRICT.

During the past year the manual and technical instruction classes have been extended, and, including the Gisborne centre, twenty-seven special classes were in operation. Efforts have been made to provide classes for the teachers in the northern, central, and southern portions of the district, but the attendance is not satisfactory. Some teachers dislike having to attend a Saturday class, and they appear to think that the subjects for which separate and special instruction is provided will always be done by specialists as at present. They do not appear to realise the fact that teachers' classes are primarily for the purpose of providing facilities to teachers who have not had opportunities previously to prepare themselves in subjects that are being called for in the schools under the new regulations. These subjects must be taught, and if the teachers now in charge do not avail themselves of the opportunities provided they alone will be to blame if vacancies are filled by others more capable of carrying out the needful duties. The training colleges for teachers are doing work in anticipation of meeting the growing demand, so that unless the Board's own teachers choose to avail themselves of the classes formed for their special benefit, in the natural order of things, they must give place to better-prepared teachers. The Board has no desire to suggest the compulsory attendance of teachers at the Saturday classes, but it is considered the bounden duty of teachers to avail themselves of every opportunity to prepare the subjects of instruction which they are supposed to teach. Certificates are being issued by the Board to all teachers who are reported as having attended the special Saturday classes and have made satisfactory progress.

Special evening classes were established in Napier for machine construction and drawing, building construction and drawing, carpentry and joinery, dressmaking, practical plumbing, shorthand, English, arithmetic, book-keeping.

At Hastings an evening class for shorthand was in operation, but the attendance diminished towards the close of the session, so that the average reached only four. Altogether twenty-seven special classes were established, and, without including the attendance of teachers in Gisborne, the average for the year was as follows: Dressmaking, 43; woodwork, 13; cookery, 103; drawing, 18; other classes as above, 62: total, 239.

For the current year it is expected that a large increase in the attendances at classes will take place. At Waipawa rooms have been provided for purposes of technical instruction, and there appears to be a growing desire to improve the existing state of things with respect to technical training. The Government have generously supplied grants for apparatus and appliances, and with the appointment of a Director of Technical Instruction it is hoped that new classes will be established, that the present classes will be reorganized with a view to becoming more valuable to the community, and that opportunities will be opened to country students to pursue their studies at the Napier Technical School, which is now completed and opened for teaching purposes with a staff of competent instructors.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Special Classes conducted at Dannevirke, Gisborne, Hastings, Napier, and Woodville.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance at beginning of year	398	8 0	Salaries of instructors	346	5 7
Capitation on special classes	145	18 1	Office expenses (including salaries, stationery, &c.)	67	7 0
Buildings	4,706	19 2	Advertising and printing	8	6 0
Rent	37	17 6	Lighting and heating	12	13 0
Furniture, fittings, apparatus	5	14 6	Repairs and cleaning	17	0 6
Material	38	13 2	Rent	30	3 4
Fees	155	7 6	Examinations, &c.	12	12 2
Government grant, instruction of teachers	175	0 0	Material for class use	47	4 6
Sale of material	10	11 2	Conveyance of teachers	9	2 0
Balance at end of year	20	13 4	Legal expenses	7	17 4
			Transfer to controlling authority, Dannevirke	32	14 3
			Transfer to controlling authority, Gisborne	47	17 0
			Refund of class fees to pupil-teachers	12	12 0
			Contracts (new buildings, additions, &c.)	5,019	11 8
			Furniture, fittings, apparatus	23	16 1
	£5,695	2 5		£5,695	2 5

G. CRAWSHAW, Secretary.

EXTRACT FROM THE REPORT ON CLASSES CONDUCTED BY THE DANNEVIRKE HIGH SCHOOL BOARD OF GOVERNORS.

The following technical classes have been carried on:—

Plumbing class (Mr. F. W. Smith, instructor): This class has done very good work. Ten pupils entered for the City and Guilds of London Examination; of these eight passed the examination, while one took honours. From the same class seven pupils sat for the Wellington Technical Plumbing Examination, and all did well.

Carpentry and joinery classes: This class, which was carried on for three months (Mr. R. Gardiner, instructor), was at first strong and promised well, but it was impossible to continue it for more than the period named.

Dressmaking class (instructress, Miss Jean Lough): This class was held on Saturday afternoon. It was found that this time was very inconvenient, and it has been decided to change it to Wednesday afternoon.

Drawing and painting classes have been conducted very successfully by Miss Baker, both in Dannevirke and at Norsewood.

Woodwork class: This class, consisting of high-school boys, was held for two hours on Tuesday afternoons (instructor, R. Gardiner).

In June the Foresters' Hall was secured and fitted up for cookery classes. When the new technical buildings are completed it should be possible to start a larger number of technical classes, and to have the whole arrangement for conducting these placed on a better footing.

J. J. PATTERSON, Chairman.

A. GRANT, Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Special Classes conducted at Dannevirke by the Dannevirke High School Board of Governors.

Receipts.			Expenditure.		
	£	s. d.		£	s. d.
Balance at beginning of year	3	9 0	Salaries of instructors	147	5 9
Capitation on special classes	30	17 9	Lighting and heating	3	19 3
Buildings	882	1 0	Insurance	1	14 8
Furniture, fittings, apparatus	87	17 10	Rent	8	7 6
Fees	101	8 0	Materials for class use	19	0 8
From Hawke's Bay Education Board:			Furnishing hall for cookery classes ..	7	1 11
balance of local Technical Fund ..	21	6 3	Lamps for woodwork and plumbing ..	3	6 0
Sales of material	9	16 4	Contracts (new buildings, additions, &c.)..	936	18 2
Balance at end of year	123	0 3	Architect	40	0 0
			Furniture, fittings, and apparatus ..	92	2 6
	<u>£1,259</u>	<u>16 5</u>		<u>£1,259</u>	<u>16 5</u>

A. GRANT, Secretary.

EXTRACT FROM THE REPORT ON CLASSES CONDUCTED BY THE GISBORNE HIGH SCHOOL BOARD OF GOVERNORS.

In conjunction with the Education Board of Hawke's Bay, school classes in woodwork (under Mr. Levey), cookery (Miss Lousley), and dressmaking (Mrs. Thomas) were carried on during the year, at which pupils from the following schools attended free of cost: Gisborne, Kaiti, Mangapapa, Makauri, Waerangahika, Ormond, Kaiteratahi, Te Karaka, Patutahi, Te Arai, Marataha, and Matawhero. The pupils as a whole appeared to enjoy the change from books to manual instruction. The work done was very satisfactory, and was favourably commented on by Mr. Isaac, Technical Inspector, who visited the school during the year. The instruction in dress-making appears to appeal most strongly to the girls and their parents, owing probably to the fact that at the end of the session each girl is able to take home a finished article, which she has cut out and finished herself. The work done by the girls from each school is forwarded to the headmaster, who invites the parents to visit the school and inspect all the garments, and the reports furnished the Secretary by the masters show that the mothers are well pleased with the instruction given. In woodwork the senior boys made some very useful articles, which they were allowed to take home with them. Special classes in English, book-keeping, typewriting, shorthand, vocal music, woodwork, and wood-carving were also carried on, the attendance at some of which was rather disappointing. It seems a pity that parents and young people do not realise more fully the advantages to be gained by attending these classes. Our thanks are due to the various teachers for their attention, often under discouraging circumstances. The Borough Council again gave us assistance in the shape of a donation.

W. MORGAN, Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Special Classes conducted at Gisborne by the Gisborne High School Board of Governors.

Receipts.			Expenditure.		
	£	s. d.		£	s. d.
Balance at beginning of year	9	13 0	Salaries of instructors	271	9 0
Capitation on special classes	37	19 6	Office expenses (including salaries, stationery, &c.)	38	0 0
Subsidies on voluntary contributions ..	22	10 0	Advertising and printing	11	12 6
Fees	66	19 3	Lighting and heating	18	19 1
Voluntary contributions	20	0 0	Material for class use	43	14 3
Transfer from Secondary Account High School	103	10 0	Caretaker and cleaning	29	6 6
Sale of material	3	0 10	Steamer-fare and Board of instructors ..	5	8 6
Received from Hawke's Bay Education Board	217	18 0	Sundry expenses	1	0 9
			Coach fares to and from classes	61	4 0
	<u>£481</u>	<u>10 7</u>	Balance at end of year	0	16 0
				<u>£481</u>	<u>10 7</u>

W. MORGAN, Secretary.

MARLBOROUGH.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Instruction in manual and technical subjects is now being given in most of the schools. The subjects most widely taught were brushwork and modelling in plasticine. Other classes carried on were woodwork, cookery, elementary agriculture, needlework, &c. The Board regrets to note the reduction of capitation on cookery classes, from 15s. to 12s. 6d., when an increase of 2s. 6d. was rather to be expected. In administering these classes even the largest Boards, such as Auckland and North Canterbury, find it necessary to make this part of our education system no longer free. Therefore it can be easily understood that the smaller Boards are likely to be seriously hampered by this reduction. This Board is of opinion that the time has arrived when the whole control of manual and technical school classes in each district should be placed in the hands of the respective Education Boards, the Government merely providing a grant based on the yearly average attendance.

Training of Teachers.—Saturday classes for teachers were held throughout the year, the subjects being cookery, agricultural chemistry, and, during the latter part of the year, singing.

EXTRACT FROM THE REPORT OF THE INSPECTOR OF SCHOOLS.

Handwork.—In forty-four schools handwork of some description was undertaken. Plasticine modelling, crayon-work, brush drawing, bricklaying, tablet-designing, beadwork, carton-work, paper-folding, paper-cutting, blackboard drawing, gardening, physiology and first aid, cookery, woodwork, swimming. Gardening and brush drawing appear to be most interesting. Including eight gardens at private institutions, there are thirty-five school gardens in the district; some of these are as yet in their infancy. I feel sure they would improve and prosper if we could have more of the services of Mr. Bruce, our expert in agriculture. The result of our present poor resources is that Mr. Bruce is forced into a wasteful system of travelling over four education districts wherein his energies are dissipated in the mere act of locomotion. The fact that he is able to do so much as he has accomplished is greatly to his credit. Large centres and small centres are all given the same capitation in cookery and woodwork. Even so, the Cities of Auckland and Christchurch appear to be forced to make the children contribute 3s. per annum for cookery and 2s. for woodwork. If that is the experience of the larger towns it may be imagined that the treasurer of a small district has no sinecure. The Board has hitherto maintained these classes free, but it may yet require to make a charge similar to that of the larger centres.

Elementary handwork: In plasticine modelling several schools showed more freedom and delicacy and also more variety, as if the teachers directed less and supervised more, thus giving individuality freedom to develop. Designing in colours is improving. Brush drawing—As with the plasticine, more variety of treatment has developed, flat tinting, geometric design, and nature-study showing advancement. Bricklaying deserves more attention than it receives, comparatively few teachers appearing yet to appreciate the capacity for correlation with oral composition, plans and elevations in drawing, fractional and cubic measure and mensuration in arithmetic, elementary geometry, &c., that lie hidden in these harmless-looking blocks. Tablet-designing, beadwork, carton-work, paper-folding, paper-cutting, and blackboard drawing are not taught in many schools; but in several of these subjects very good work is produced by a few classes. Swimming has been taught at two schools, but capitation has not been claimed thereon, the registration not having been systematic. One head teacher says all his boys can swim. It would give them encouragement if he issued to them certificates as to the distance they can cover. This has proved a successful measure elsewhere. The Auckland Board gives the teacher of swimming three-fourths of the capitation. I recommend a trial of this species of encouragement. Physiology and first aid is not widely taught. The higher standards of the larger schools attend classes in woodwork and cookery. In some schools again the subject is discontinued for a year and then resumed. Gardening—This is greatly encouraged by prizes offered by various local bodies. During the past year several gardens have increased in area and improved in the measures adopted for comparing results. Woodwork and cookery—The schools in and around Blenheim, from as far away as Picton, sent pupils to these classes. The aggregate roll at school classes was 256, and the average number present 183. Registration—The registration in respect of some of these classes is very cumbersome, and is probably not a whit more effective than the ordinary school registration. In regard to school classes, except possibly those held in buildings away from their schools, there appears no reason why the ordinary school register should not be sufficient. Of late there is a tendency to make matters more complicated still, which means an enormous increase of work in the office as well as in the school. Needlework was taught as handwork in two schools in charge of sole male teachers. In these cases special teachers were employed.

Teachers' classes: Cookery—The average attendance was disappointing. It will probably improve during 1908 owing to the success of the candidates who sat for certificates from the City and Guilds of London Institute. Four candidates entered. One gained a first-class diploma and three gained second-class awards. Practical Agriculture and Agricultural Chemistry—After the receipt of a grant for apparatus and material, this class made good headway, and should prove very successful during 1908. A class in singing was also held. Under the amending Education Act of last session this class may now operate as a continuation class.

Owing to the departure of our instructress and difficulties in the way of arranging for a successor, our class in dressmaking did not proceed.

Technical and continuation classes: Classes were held in Blenheim in English, arithmetic, shorthand, book-keeping, woodwork, and cookery. The upper pupils of private schools round Blenheim were formed into technical classes for cookery and woodwork. At Canvastown classes were held in English, arithmetic, commercial arithmetic, commercial geography, and book-keeping.

Owing to changes in the staff the classes at Havelock did not proceed. Classes were instituted at Picton in English, arithmetic, and brush drawing. A number of pupils in these classes held during 1906 passed the examinations for Civil Service Junior and Civil Service Senior, in whole or part. Marlborough High School provided classes in woodwork and cookery. The total enrolment at cookery and woodwork classes of all descriptions was 209 and 152 respectively: total, 361. The average attendance was 139 and 112. In estimating these attendances it must be remembered that they include pupils some of whom have to walk two miles from their school to the technical school. Others come by train eighteen miles, and still others are country teachers who have more or fewer miles to traverse before reaching the train. We propose to hold a wood-carving and, if possible, a model-drawing class during 1908.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Special Classes conducted at Blenheim, Canvastown, Havelock, and Picton.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance at beginning of year ..	94	11 1	Salaries of instructors ..	113	19 1
Capitation on special classes ..	51	5 8	Advertising and printing ..	4	9 5
Capitation on account of free places ..	10	5 9	Lighting and heating ..	3	11 3
Furniture, fittings, and apparatus ..	4	0 0	Material for class use ..	11	14 1
Fees ..	26	19 0	Cleaning ..	5	1 11
			Contracts (new buildings, additions, &c.) ..	12	13 4
			Architect, &c. ..	0	17 6
			Balance at end of year ..	34	14 11
	<u>£187</u>	<u>1 6</u>		<u>£187</u>	<u>1 6</u>

E. HYLTON, Secretary.

NELSON.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Great advances have been made in the district in regard to this important branch of education. The Nelson Technical School has been well supported during the year. Technical and school classes in agricultural chemistry and elementary agriculture, woodwork, cookery, and dressmaking have been held in some of the country centres; while in a large number of the public schools manual instruction has been carried on with every success. An exhibition of Technical School and public-school pupils' work, held in Nelson in December last, gave a splendid idea of the value of this important branch of education. During the year the Inspectors were appointed Superintendents of Manual and Technical Instruction, and the Board now takes this opportunity of expressing its appreciation of the very efficient manner in which they have carried out their duties. This remark also applies to the local Superintendents at Reefton and Westport. Owing to the great increase of work in this Department the Board has now appointed a Director of Technical Schools. The new building at Wakefield for technical classes was completed at the beginning of the year, and has proved suitable in every respect for its purpose. The Board regrets that up to the present the Department has not seen its way to authorise the erection of a similar building at Motueka, where equal demands seem to exist. A new building for technical classes at Westport has now been authorised, and plans are being prepared by the Board's Architect.

EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

Handwork.—Handwork has been taken in forty-six schools, for the most part in a very satisfactory manner. A variety of branches has been undertaken, the chief being plasticine modelling, taught in twenty-seven schools; elementary agriculture, in twenty-six; elementary physiology, in fifteen; brush drawing, in twelve; and paper-folding, free-arm drawing, bricklaying, modelling in carton, and elementary physical measurements, in lesser numbers. These subjects of instruction have all been solely undertaken by the permanent teachers, with the exception of elementary agriculture, more fully referred to in another part of the report, which has been under the direction of a special instructor. Classes for cookery, dressmaking, and woodwork were also held at the larger centres. The number of pupils under instruction was—For cookery, 338; for dressmaking, 290; and for woodwork, 286.

A considerable extension of this branch of work has been made during the year, chiefly in the way of placing the facilities offered by our present technical schools within reach of schools in the adjoining neighbourhood. In making such arrangements we have carefully considered the interruption and loss of time in the ordinary school-work. To this end we have so organized the classes that pupils from all schools in the vicinity attend the Wakefield Technical School once a week for instruction in cookery, woodwork, and dressmaking; while the boys from Stoke, and Richmond likewise attend the Technical School in Nelson for woodwork, and the girls are taught cookery and dressmaking at Richmond. The classes of boys and girls from any one school are away from it only one half-day each week, so that by this arrangement but little more school-time is occupied than if the pupils were instructed in their own schools. Dressmaking classes were inaugurated at Motueka, but want of a suitable building prevented any other technical classes being formed. When rooms have been provided at Westport we hope to see such an extension of the school classes in technical subjects as we have recorded above.

Classes for the instruction of teachers were again held in Nelson and Westport, the subjects taken up including drawing in its different branches, elementary geology, carton-work, cookery, woodwork, elementary botany, physics, chemistry, mathematics, and elementary physiology.

In addition to the usual classes that have been carried on in the Nelson Technical School for the past two years, classes in agriculture were held for the first time at Wakefield, Richmond, Motueka, and Nelson with a considerable amount of success. This class of instruction is, of course, as yet in quite the experimental stage. With the advantage of a chemical laboratory, for which the necessary grant has now been made by the Department, we look for a further development of this most important study. Science, apart from physiology and physical measurements, which are taken as branches of handwork, is taught in the form of physics or agricultural chemistry in but few schools; but we hope that the establishment of a chemical laboratory in connection with the Nelson Technical School will so educate and stimulate teachers that it will prove a veritable science workshop for the whole district.

EXTRACT FROM THE REPORT OF THE INSTRUCTOR IN AGRICULTURE.

Since my appointment in the end of October, 1906, under the combined Education Boards of Nelson, Marlborough, Westland, and Grey, I have been engaged in visiting schools, arranging for gardens, and conducting evening classes in elementary agriculture for farmers and a botany class for teachers on Saturdays. My yearly itinerary under the four Boards was arranged as follows: Six months in Nelson—viz., January, April, May, June, August, and November—three months in Marlborough, and three months in Westland and Grey. At the end of 1906 the number of school classes in elementary agriculture in Nelson District was five, two of which were recognised. During the past year the number has increased to twenty-five. At all these schools, with the exception of one, small gardens have been established. The work done during the year has been chiefly in fencing and breaking up the land, subdividing it into plots, planting and growing the vegetables usually found in a cottage garden. Each child has a plot of land, or more frequently a plot is shared by two children. The children are made responsible for the complete cultivation of these miniature gardens. Notebooks are required to be kept by the children containing records of the principal operations done in the garden, and observations on the growth of plants, and rough drawings of plant-members. As the gardens are only in course of formation failures must be expected, but in spite of the many difficulties to be contended against and inseparable from the earlier stages of the work the progress made during the short time is very satisfactory. The excellent collections of garden-produce staged by several schools for competition at the horticultural and agricultural shows in the district, and which succeeded in winning first and second prizes, is a good indication of the work accomplished. Experiments have been tried at several schools to show the effect of different kinds of manures on the growth of plants. This course is very promising, as there is a tendency in school gardening to subordinate the educational side of the work to the useful, the only aim being—as the common saying is—to have a fine show of vegetables and flowers. To grow plants under uniform and favourable conditions may become mechanical and of little educative value. I may here point out that the purpose of the garden is first as a means of education, and this should be kept steadily in view. Grow plants and grow them well, but vary the conditions under which they grow, so as to learn as much as possible from the growing of them. The methods employed to obtain the results are often of more importance than the results themselves. To make the garden effective as a means of education a continuous course of simple experiments on plant-life should be carried on by the children and accurately recorded. The habit of observation would be stimulated, and the exercise of the reflective powers on the results would have a beneficial and lasting influence on character. In April, May, and June evening classes for farmers and teachers were held once a week at Nelson, Richmond, Wakefield, and Motueka. The subjects dealt with were the chemistry of air and water, the most important constituents removed by various crops from the soil, and the properties of manures and their application to farm and garden crops. Experiments were performed to show the properties of the substances dealt with. The attendance at Wakefield (thirty) and Motueka (twenty-one) was good, but at Nelson (sixteen) and Richmond (fifteen) not so satisfactory. The interest taken in the subject by the students was of a very encouraging nature, and fully justified starting these classes. On Saturdays a course of eighteen lessons in elementary agricultural botany was given to teachers. A large amount of individual practical work was done in the examination of the common plants of the farm and garden. The class was large, forty being on the roll. The attendance was good at first, but owing to the class being held intermittently there was a falling-off near the end. The want of suitable accommodation, apparatus, &c., interfered greatly with the efficient working of these classes. Now that the erection of a laboratory in Nelson is assured, the students in science classes (teachers and others) will be afforded an opportunity of doing practical work, so essential to the proper understanding of all scientific subjects. A series of field experiments on the manuring of barley, hops, fruit-trees, and pasture was arranged with several farmers in the Waimea, the manures being supplied free by the Potash Syndicate of Australasia. Owing to the unfavourable weather-conditions the trials are only partially successful. The results are not available yet; however, the indications point to a fair increase in some of the barley and hop trials, and should thus be a valuable object-lesson to farmers in the neighbourhood. There are now in the four education districts over sixty school gardens in course of formation. The number of children receiving instruction in nature-study leading up to agriculture is approximately over a thousand. As the united education districts are so extensive, and I have to visit the different districts at fixed times, the work in any one is consequently intermittent and disconnected. To get the best results the school garden requires constant supervision. In conclusion, I tender my best thanks to the Inspectors for much valuable aid and advice, and to friends who have assisted the movement in a practical manner by giving prizes and other help, and to the teachers and children for their energy and enthusiasm, without which very little would have been achieved.

J. BRUCE,

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Special Classes conducted at Nelson, Richmond, Brightwater, Wakefield, Motueka, Westport, and Reefton.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Capitation on special classes ..	307	17 10	Balance at beginning of year ..	259	11 4
Capitation on account of free places ..	57	8 3	Salaries of instructors ..	726	10 0
Subsidies on voluntary contributions ..	40	0 0	Office expenses (including salaries, stationery, &c.) ..	20	0 0
Fees ..	214	1 3	Advertising and printing ..	15	9 8
Voluntary contributions ..	84	17 8	Lighting and heating ..	26	10 2
Special grant for teachers' classes ..	150	0 0	Insurance and repairs ..	7	17 9
Sale of material ..	3	17 0	Examinations, &c. ..	5	10 2
Balance at end of year ..	392	14 8	Material for class use ..	59	0 7
			Typewriter and supplies ..	10	16 10
			Refund fees ..	1	10 0
			Incidentals ..	6	3 6
			Furniture, fittings, and apparatus ..	111	16 8
	£1,250	16 8		£1,250	16 8

N. WILLIAMS, Acting-Secretary.

GREY.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

During the year considerable attention was devoted to classes for the training of teachers, classes being conducted in cookery, by Miss Irene Dillon; in agriculture, by Mr. James Bruce; in drawing, by Mrs. F. R. Creasey; and in wood-carving, by Mrs. F. C. Widdop. All were largely and regularly attended, and good work was accomplished. A special cookery class for adults was held, also two school special classes for children attending convent schools. Of school classes, several forty-hour courses in cookery were most successfully conducted, and attended with profit and advantage by over 80 per cent. of qualified school-girls in the Board's district. In school agriculture Mr. James Bruce did good work. In addition to instructing teachers in class, he visited the various schools, and as a result ten school agricultural classes have been established. Under tuition by Mr. Austin, two woodwork classes were carried on at the Technical School with gratifying results. Hand and eye work received considerable attention in the principal schools.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Special Classes conducted at Greymouth by the Grey Education Board.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance at beginning of year ..	130	5 3	Salaries of instructors ..	130	3 4
Fees ..	4	14 3	Advertising and printing ..	2	14 0
Balance at end of year ..	163	0 7	Lighting and heating ..	5	10 1
			Material for class use ..	59	14 7
			Caretakers and cleaning ..	28	7 6
			Coach-fares of country teachers attending classes ..	13	18 0
			Contracts (new buildings, additions, &c.) ..	18	6 3
			Architect, &c. ..	15	0 0
			Furniture, fittings, and apparatus ..	26	6 4
	£298	0 1		£298	0 1

P. F. DANIEL, Secretary.

WESTLAND.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

The Board endeavoured during the year to form special evening classes in practical chemistry, woodwork, commercial subjects, and instrumental drawing. The number of students offering was, however, insufficient in each case, and the only evening class in operation was one in cookery. It is, of course, not to be expected that in a comparatively small community an adequate number of students will be forthcoming. The previous success of the evening classes satisfied the immediate demand, and it is necessary to wait until a sufficient number of students accumulates.

The following is a statement relating to the various manual and technical classes held during the year: (1.) Elementary agriculture and school gardens: The instructor in elementary agriculture (Mr. J. Bruce) has, during the earlier part of the year, given instruction to twenty-five teachers. One week of the midwinter holidays was devoted to this purpose, in addition to two Saturday mornings. Under Mr. Bruce's direction five country schools have instituted school gardens, and the necessary work of preparation has been accomplished. (2.) Cookery: Two school classes and two special classes have been held for two quarters each, and, in addition, a class for teachers has been carried on for fourteen weeks. The total number of students was 107. The instruction was given by Miss Dillon, who was under engagement by the Grey and Westland Boards. The interest of the students was fully maintained, and the opportunity for practice in the art of cookery was much appreciated. (3.) The following school classes have also been in operation during the year: Woodwork (Hokitika), practical chemistry and physics (Hokitika), elementary agriculture (Arahura Road, Humphreys, Lower Kokatahi, Koiterangi, and Stafford), handwork (nine schools), needlework with extra teacher (three schools).

Buildings.—Though the buildings were by no means completed by the time when arrangements had been made to start the Day School, sufficient rooms were made ready to allow this to be done, and shortly after the evening classes were transferred to the new buildings. The College was formally opened by the Minister of Education on the 6th September, in the presence of a large gathering of representatives from the public bodies of the district. A third workshop for instruction in fitting and turning will shortly be erected. Towards the end of the year 1906 the representatives from the public bodies of Christchurch resolved with practical unanimity that the North Canterbury memorial to Mr. Seddon should take the form of additions to the Technical College. Subscriptions have so far been received amounting to about £630, and it is hoped that this may still be increased. With the Government subsidy the amount available is approximately £1,250, and, whilst this does not cover the cost, the Board is proceeding with the erection of an Assembly Hall, 70 ft. by 34 ft., which will be of very great value for our school assemblies, public meetings, physical-culture classes, and as a reading-room for evening students. This will be known as the Seddon Memorial Hall.

New Classes.—New evening classes were started last year in carriage-painting and sign-writing; and the entries for these—namely, fifteen and twenty-one respectively—form a sufficient justification for their formation.

Trades Department.—With the exception of two classes there has been a marked improvement in the trades department, especially in wool-classing and cabinetmaking. As regards the former, the Board has again been under great obligations to Mr. Walter Hill for generously supplying all the wool required throughout the session; but the class has been carried on under serious disadvantages for lack of proper accommodation. It is hoped that a room, properly equipped, will soon be provided for this most important work. When the State of Victoria, whose total wool-production is considerably less than that of New Zealand, has set apart a spacious building for technical instruction in the handling of wool, it is surely desirable that in this province, where wool is by far the most important product, and where farmers are becoming alive to the value of technical instruction, proper facilities should be available. The classes in cabinetmaking, which started in the middle of 1906 with two students, had forty-one entries last term, and we are anticipating such an increase this year that instruction on two additional evenings has been arranged for. The shop is now equipped with the woodworking machinery which came to hand in September, and was erected by the students under the direction of the instructor. An attempt was made during the year to revive the class in tailor's cutting, but the support given was insufficient to justify its continuance. Unless the attendance at the coachbuilding class improves during the present session this class also must be dropped, though it would be to the very great regret of the Board, which recognises how important the trade is to Christchurch, and how much its young workers need thorough technical instruction. Messrs. Boon and Moor, who kindly acted as honorary examiners to this class, said in their report, "We think something should be done by Parliament to amend the Apprentices Act, making it compulsory that apprentices should attend classes where there is a technical institution within the district where they are employed. In the coachbuilding trade there is a scarcity of competent workmen, employers finding it harder every year to get enough competent men to carry out their orders. We believe that if something is not immediately done in the matter workmen will have to be imported." This is giving expression to what seems a general feeling not only among the masters, but among the more thoughtful of the workers who have the future interests of the country at heart. The idea that the education of the child should stop at thirteen or fourteen is fast becoming in its turn as antiquated as the previous notion that for children who were to be manual workers education of any kind was not only unnecessary but harmful; and the next extension of our system must be in the direction of making education compulsory up to the age of sixteen or seventeen. It is desirable not only in the interests of the country, but of the individual; for the employment of four to six hours a week in self-improvement must tend to moral as well as to material welfare.

An important innovation this year in the trades department was an examination of the students' work at the end of the session by gentlemen unconnected with the College, who are especially well qualified to judge. Mr. Walter Hill very kindly examined the wool-classing, Messrs. Pearce and Stubberfield the carpentry and joinery, Messrs. Black and Southworth cabinetmaking, Messrs. Taylor and Colville plumbing, Messrs. Boon and Moor coachbuilding, Messrs. Gapes and Price signwriting, Messrs. Brabner and Hathaway carriage-painting. It is a matter of great value to the students and of great satisfaction to the Board to have had this work appraised independently by gentlemen of such high standing, and we are very grateful to them for devoting to it so much time and care.

Commercial Department.—Turning to the commercial department, the improvement has been no less marked, and that not only in the number of the students, but in the regularity of attendance and the standard of the work done. The credit of this is mainly due to the staff of highly qualified and earnest teachers which the Board has been fortunate enough to secure, but also in part to the greater length of the courses which the students are taking up. The liberal concessions which the Board has made to those who join for the whole session has induced the majority of them to enter upon a systematic course. I hope that before long there will be no students joining for one term only.

Day School.—The department of our work to which we look as the foundation of future success is our Technical Day School. This opened in the middle of last year with fifty-six pupils, and the numbers soon increased to over a hundred. Industrial, agricultural, domestic, and commercial courses have been arranged, and, with the exception of the agricultural course, the numbers are satisfactorily distributed. The scholars attracted by the school are in earnestness and good conduct decidedly above the average; and we anticipate with confidence that a sound foundation will here be laid for the more purely technical instruction to be given later.

J. H. HOWELL, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Associated Classes conducted at the Christchurch Technical College by the Christchurch Technical Classes Association.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance at beginning of year ..	247	0 1	Salaries of instructors ..	1,626	16 8
Balance from School of Domestic Instruction ..	20	17 4	Office expenses (including salaries, stationery, &c.) ..	288	15 9
Capitation on associated classes ..	651	2 0	Advertising and printing ..	88	0 10
Capitation on account of free places ..	340	1 8	Lighting, heating, and cleaning ..	170	4 4
Buildings ..	6,128	7 10	Insurance and repairs ..	22	6 3
Rent ..	139	10 0	Rent ..	123	9 4
Furniture, fittings, and apparatus ..	1,270	16 7	Material for class use ..	93	18 0
Material ..	95	6 2	Purchase of books, &c., for students ..	137	4 2
Subsidies on voluntary contributions ..	525	8 0	Contracts (new buildings, additions, &c.) ..	6,085	1 4
Fees ..	366	19 3	Architect, &c. ..	105	6 9
Voluntary contributions ..	275	19 0	Furniture, fittings, and apparatus ..	1,682	9 0
Deposits ..	11	10 0	Balance at end of year ..	493	3 5
Seddon Memorial Fund ..	613	4 10			
Prize Fund ..	9	19 6			
Sales of books, &c., to students ..	126	3 4			
Lighting and cleaning ..	1	0 0			
Working-expenses ..	2	18 3			
Sundry sales ..	27	18 0			
Received from School of Domestic Instruction ..	62	14 0			
	<u>£10,916</u>	<u>15 10</u>		<u>£10,916</u>	<u>15 10</u>

JAMES HIGHT, Chairman
JOHN H. HOWELL, Secretary } of Managers.

Statement of Receipts and Expenditure for Nine Months ending 12th October, 1907, in respect of Associated Classes conducted at the School of Domestic Instruction.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance at beginning of year ..	68	4 8	Salaries of instructors ..	337	16 8
Capitation on associated classes ..	77	3 6	Office expenses (including salaries, stationery, &c.) ..	61	11 4
Rent ..	125	0 0	Advertising and printing ..	8	6 6
Furniture, fittings, and apparatus ..	18	9 4	Lighting and heating ..	42	4 0
Material ..	85	2 9	Rent ..	100	0 0
Fees ..	146	7 3	Material for class use ..	150	12 1
From North Canterbury Education Board—			Petty cash ..	10	0 0
Capitation on teachers' classes ..	3	10 0	Bank charges and cheque-books ..	1	1 0
Capitation on school classes ..	183	10 7	Furniture, fittings, and apparatus ..	22	4 1
Sales of material ..	46	7 5	Balance at end of year ..	20	17 4
Hire of room for examination ..	0	17 6			
	<u>£754</u>	<u>13 0</u>		<u>£754</u>	<u>13 0</u>

[NOTE.—The classes of the School of Domestic Instruction were taken over by the Managers of the Christchurch Technical College in October, 1907.]

O'BRYAN HOARE,
Chairman and Secretary of Managers.

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE ASHBURTON ASSOCIATED CLASSES.

The following are the averages of class entries for the year ending 31st December, 1907:—Technical classes: Dressmaking, 48; cookery, 21; carpentry and joinery, 9; building-construction, 7; wool-sorting, 22. Continuation classes: Shorthand, 14; book-keeping, 7. School classes: Cookery, 102; woodwork, 113.

During the year the average attendance on the whole was good, and the interest generally was well maintained throughout the year. The roll-number in many of the classes would have been much larger if the school had been more centrally situated. One of the rooms is used for woodwork, another for cookery, and the third—the smallest of the three—for all other subjects. The lighting and ventilation of this room leave much to be desired, and the shingle roof of the cookery and general rooms is so old that during the last two summers myriads of insects have been falling from it, causing great inconvenience. Classes have been held in the smallest room every evening of the week but one, and next year on that evening classes will be held in English and arithmetic. No other classes can be held in 1908, as no other room is available. Owing to the kindness of Messrs. Friedlander Bros. (Limited) in lending the loft of one of their grain-stores, a class was held in wool-sorting. Though an evening class in this subject would be well attended, it cannot be held, as no room lit with gas or electricity is available. This year, in the second term, an afternoon class in dressmaking was started at Hinds, and during the third term an evening class was also started. In both these classes the pupils worked with great enthusiasm.

I am glad to bear testimony to the generous attitude towards technical training taken by the various public bodies in the district, notably by the County Council and the Borough Council. The latter body has for years past been contributing to the funds of the association, and some years ago it offered for a technical school an excellent site near the Council Chambers—an offer that is still open. There is no doubt that every one in the district interested in technical education recognises that a mistake was made in accepting for a technical school the old buildings discarded by the High School Board. A new school on the site offered by the Borough Council is inevitable if technical education is to advance as it is doing in other towns of the Dominion.

J. McLEOD, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Associated Classes conducted by the Ashburton Technical Classes Association.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance at beginning of year ..	148	3 0	Salaries of instructors ..	275	4 1
Capitation on associated classes ..	65	2 6	Office expenses (including salaries, stationery, &c.) ..	56	1 10
Rent ..	2	5 0	Advertising and printing ..	10	18 6
Material ..	9	9 6	Lighting and heating ..	13	10 2
Subsidies on voluntary contributions ..	80	17 0	Insurance and repairs ..	12	6 9
Fees ..	93	10 9	Examinations, &c. ..	1	18 4
Voluntary contributions ..	18	2 0	Material for class use ..	29	18 6
Examination fees ..	1	5 0	Setting and sharpening saws ..	1	7 6
Proceeds cookery sales and demonstrations ..	22	6 0	Cleaning ..	16	3 0
Sales timber ..	2	6 9	Rail-fares for dressmaking instructor ..	8	1 0
Admission to breaking-up ceremony ..	2	5 6	Contracts (new buildings, additions, &c.) ..	24	3 1
From North Canterbury Education Board—			Furniture, fittings, and apparatus ..	49	11 5
Capitation, school classes ..	131	6 0	Balance at end of year ..	77	14 10
	<u>£576</u>	<u>19 0</u>		<u>£576</u>	<u>19 0</u>

HENRY DAVIS, Chairman } of Managers.
J. McLEOD, Secretary

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE LYTTELTON ASSOCIATED CLASSES.

During the year 1907 school classes for instruction in cookery and woodwork, and an adult class for dress cutting and making were conducted at Lyttelton. The school classes were well attended throughout the year, and although the attendance at the dress-cutting class kept up well at first, the average fell rather seriously towards the close of the year. Owing to removal from the district the Committee suffered the loss of the services of Mr. F. W. Sandford, the instructor in woodwork, but were exceptionally fortunate in securing in his stead the services of Mr. W. Bridge, another capable instructor. The two school classes, cookery for the girls and woodwork for the boys, are filling a most pronounced want, and very pleasing results are being attained.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Associated Classes conducted by the Lyttelton Technical Classes Association.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance at beginning of year ..	30	5 8	Salaries of instructors ..	52	18 0
Rent ..	40	0 0	Office expenses (including salaries, stationery, &c.) ..	1	4 9
Subsidies on voluntary contributions ..	10	0 0	Advertising and printing ..	8	10 0
Fees ..	5	15 0	Lighting and heating ..	2	9 2
Voluntary contributions ..	10	0 0	Rent ..	40	0 0
From North Canterbury Education Board—			Material for class use ..	5	11 8
Capitation, school classes ..	42	7 6	Cleaning ..	8	16 0
	<u>£138</u>	<u>8 2</u>	Balance at end of year ..	18	18 7
				<u>£138</u>	<u>8 2</u>

S. R. WEBB, Chairman } of Managers.
G. LEWIN Secretary

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE RANGIORA TECHNICAL CLASSES ASSOCIATION.

The Managers have much pleasure in reporting that, considering the unfavourable conditions under which the classes have to work as regards the building in which the classes are held, very satisfactory work has been done in various subjects. The dressmaking classes have been very well attended, and thorough practical work has been carried out under the instruction of Miss Gillies. In cookery the school class is a very large one; the evening class has not been so well attended as in the previous year. The typewriting and shorthand classes have been fairly well attended. The Managers regret that owing to want of accommodation no class for boys in woodwork has yet been commenced.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Associated Classes conducted by the Rangiora Technical Classes Association.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Capitation on associated classes ..	79	16 3	Balance at beginning of year ..	0	6 5
Fees ..	46	3 0	Salaries of instructors ..	108	0 0
From North Canterbury Education Board—			Office expenses (including salaries, stationery, &c.) ..	0	9 6
Capitation, school classes ..	21	4 11	Advertising and printing ..	4	6 6
Balance at end of year ..	0	3 11	Lighting and heating ..	2	0 3
			Rent ..	4	0 0
			Material for class use ..	4	12 2
			Board and lodging of instructors ..	14	1 3
			Caretaker ..	9	0 0
			Bank charges ..	0	12 0
	<u>£147</u>	<u>8 1</u>		<u>£147</u>	<u>8 1</u>

JAS. CARMICHAEL, Chairman } of Managers.
JAMES MARSHALL, Secretary

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE BANKS PENINSULA ASSOCIATED CLASSES.

During the year the following technical classes were held: Cookery, 13 pupils; dressmaking, 20 pupils; wool-sorting, 28 pupils; woodwork, 16 pupils. Thirty-one school-children also received instruction in cookery.

Dressmaking and wool-sorting classes have been added this year, and shorthand and book-keeping discontinued. To teach wool-sorting the instructor has come weekly from Christchurch. The class has been a most successful one, as the students took a very keen interest in the work. Much permanent good must accrue to the peninsula from the knowledge of wool gained at this class.

The dressmaking class has been very ably conducted, and when a more suitable room has been obtained no doubt the number in the class will increase.

In the cookery classes the instructor deserves the greatest credit for persevering with the work under most disadvantageous circumstances. The class is still being conducted in the building which Mr. Isaac, the Inspector of Technical Schools, reported last year as being totally unsuited for the work. In the woodwork class seven school boys were allowed to attend as free pupils.

We again recommend the Association to ask the Managers to persist in urging the Education Department to make a grant for a new building, as it is absolutely impossible for the classes to continue a success under present conditions. Mr. E. E. Le Lievre has informed the Managers that unless a definite reply has been obtained from the Education Department *re* the new building before the 1st April, 1908, he will withdraw his offer of a site.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Associated Classes conducted by the Banks Peninsula Technical Classes Association.

Receipts.			Expenditure.		
	£	s. d.		£	s. d.
Balance at beginning of year	91	7 8	Salaries of instructors	63	0 0
Capitation on associated classes	38	14 4	Office expenses (including salaries, stationery, &c.)	0	19 1
Rent	26	7 0	Advertising and printing	4	10 3
Fees	43	5 0	Lighting and heating	3	17 0
Sales of material	6	15 8	Insurance and repairs	0	17 6
Charts sold	12	2 6	Rent	20	3 0
Received from Education Board	10	10 0	Material for class use	20	6 10
			Charts for dressmaking class	11	15 2
			Plumbing, cookery-room	7	12 6
			Cleaning	2	18 0
			Bank charge	0	10 0
			Balance at end of year	92	12 10
	<u>£229</u>	<u>2 2</u>		<u>£229</u>	<u>2 2</u>

J. D. BRUCE, Chairman }
ALEX. GRAY, Secretary } of Managers.

EXTRACT FROM THE REPORT ON SPECIAL CLASSES AT KAIAPOI.

The Committee reports that during the year ending 31st December, 1907, classes were held for instruction in wood-carving, dressmaking, cookery, wool-classing, woodwork, and shorthand. The attendances have been good, and the interest taken by pupils is very gratifying to the Committee. Also, the school classes in woodwork and cookery are excellent, and the progress made by the pupils is very satisfactory.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Special Classes conducted at Kaiapoi.

Receipts.			Expenditure.		
	£	s. d.		£	s. d.
Balance at beginning of year	81	18 4	Salaries of instructors	112	17 0
Capitation on special classes	45	0 0	Office expenses (including salaries, stationery, &c.)	12	19 0
Rent	36	10 0	Advertising and printing	2	6 6
Furniture, fittings, and apparatus	4	9 0	Rent	36	10 0
Fees	35	5 0	Material for class use	12	13 4
			Apparatus	7	7 9
			Bank charges	0	10 0
			Prizes	5	0 0
			Balance at end of year	12	18 9
	<u>£203</u>	<u>2 4</u>		<u>£203</u>	<u>2 4</u>

CHARLES ALLARD, For Secretary.

EXTRACT FROM THE REPORT ON SPECIAL CLASSES AT LINCOLN.

In the earlier portion of the year some difficulty was experienced, owing to the incomplete equipment of the workshop, but the boys were employed as regularly as possible up to the 28th May, by which time everything was in order. Since then, with a little extra pressure towards the end of the term, the sixty hours' work required to qualify for capitation has been accomplished. The attendance has not kept up to its early promise, the average for the three periods into which the year has been divided being—first, 14; second, 13; third, 11. The boys from the secondary department, for whom the subject is compulsory, attend on the whole very well, but the same cannot be said of a number of those in the primary department. One trouble has been the lateness of the hour in the winter months; but next year I propose to get the bulk of the work counting for capitation done while the evenings are fairly long.

On the whole good progress has been made by the pupils, and in the case of a few of the apter boys the results are very gratifying. It was, of course, inevitable that some of the boys, who eagerly joined the class for the sake of its novelty, should find the work it entailed become irksome; but, while that cannot be recognised as a valid excuse for giving it up, there is no doubt that it is for that reason that several have discontinued attending. The work done has been, of course, on the lines of the proposed programme, and has been carried out with the view of making the course as educational as possible. In addition to what may be called the most evident aspect of the subject—that is to say, the handling of tools and the elementary processes of woodworking—lessons have been given in drawing, on the construction of the tools, and on the growth and seasoning of timbers, so as to develop as far as possible powers of observation and reasoning. To impart a certain amount of practical knowledge that may be useful is an important part of the scheme, but to limit the efforts of the class to that alone is to leave out features which, if not so showy, are equally important. I am pleased to say that the boys have treated tools, &c., with great care, and that the whole of the equipment is in good order. Our thanks are due to Mr. W. Bartram for a number of specimens of New Zealand timbers. These, as soon as time allows, will be mounted, so as to be readily available for study.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Special Classes conducted at Lincoln.

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Capitation on special classes ..	..	34	17	9	Salaries of instructors ..	..	23	0	0
Buildings ..	..	68	10	0	Advertising and printing ..	..	0	10	0
Furniture, fittings, and apparatus ..	..	65	13	5	Rent ..	..	2	10	0
Subsidies on voluntary contributions ..	..	10	0	0	Contracts (new buildings, additions, &c.) ..	..	68	10	0
Fees ..	..	13	0	0	Furniture, fittings, and apparatus ..	..	66	9	6
Voluntary contributions ..	..	10	0	0	Balance at end of year ..	..	41	1	8
		<u>£202</u>	<u>1</u>	<u>2</u>			<u>£202</u>	<u>1</u>	<u>2</u>

CHARLES ALLARD, For Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Special Classes conducted at Southbridge.

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Balance at beginning of year ..	..	41	3	3	Salaries of instructors ..	..	30	10	0
Capitation on special classes ..	..	28	4	6	Advertising and printing ..	..	1	3	3
Fees ..	..	3	2	6	Rent ..	..	3	0	0
		<u>£72</u>	<u>10</u>	<u>3</u>	Bank charges ..	..	0	5	0
					Balance at end of year ..	..	37	12	0
							<u>£72</u>	<u>10</u>	<u>3</u>

CHARLES ALLARD, For Secretary.

EXTRACT FROM THE REPORT ON THE SPECIAL CLASSES AT LEESTON AND DOYLESTON.

There were three terms of the woodwork classes, with an average attendance of eleven pupils, making a total attendance of 519. The ironwork class was carried on for one term, but as the attendance was low it was discontinued. The dressmaking and cutting classes were held for two terms. The attendance was good, and the work consisted of cutting out from patterns and making up of pupils' material, and instruction in the use of the sewing-machine.

The income during the year was £127 13s. 5d., and the expenditure £89 1s. 2d., leaving a balance of £38 12s. 3d.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Special Classes conducted at Leeston and Doyleston.

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Balance at beginning of year ..	..	42	17	2	Salaries of instructors ..	..	64	12	0
Capitation on special classes ..	..	34	12	3	Office expenses (including salaries, stationery, &c.) ..	..	3	0	0
Rent ..	..	2	0	0	Rent ..	..	4	0	0
Furniture, fittings, and apparatus ..	..	3	12	0	Material for class use ..	..	6	19	2
Subsidies on voluntary contributions ..	..	20	0	0	Voluntary contribution paid to Education Board (to be refunded) ..	..	10	0	0
Fees ..	..	0	14	6	Bank charge ..	..	0	10	0
Voluntary contributions ..	..	23	17	6	Balance at end of year ..	..	38	12	3
		<u>£127</u>	<u>13</u>	<u>5</u>			<u>£127</u>	<u>13</u>	<u>5</u>

H. C. LANE, Secretary.

EXTRACT FROM THE REPORT OF THE CHAIRMAN OF THE BOARD OF GOVERNORS OF CANTERBURY COLLEGE.

School of Engineering, Electricity, and Technical Science.

The number of individual students attending lectures was 191, an increase of 19 per cent. as compared with the 160 names on the books in 1906. Throughout the session twenty-eight lectures were given per week, and instruction in drawing, laboratory, and field-work occupied 138½ hours, the total instruction hours in each week being 166½.

The following new courses of instruction were initiated: (1) Principles of civil engineering; (2) technical chemistry; (3) electrical engineering, alternating current, lectures and laboratory practice; (4) elementary applied mechanics, laboratory practice; (5) elementary strength of materials, laboratory practice.

At the University examinations in 1906, 3 students passed the final examination for the degree of Bachelor of Engineering; 6 passed part of the second examination, 2 completed the first examination, and 3 part of the first examination. At the Associateship examinations of 1907, 1 student passed the final examination for the Associateship in Mechanical, and 1 student that for the Associateship in Civil Engineering. The passes in the subjects of the Associateship course taught in the School of Engineering were: Electricity and magnetism, 6; freehand mechanical drawing, 5; descriptive geometry (advanced), 3; steam-engine (elementary), 4; steam-engine (intermediate), 3; steam-engine (advanced), 1; applied mechanics, 5; mechanics of machinery, 7; hydraulics, 6; mechanical drawing (second year), 3; strength of materials (elementary), 6; strength of materials (intermediate), 2; strength of materials (advanced), 2; theory of workshop practice, 1; surveying (elementary), 3; building-construction, 2; principles of civil engineering, 2; electrical engineering (intermediate), 1. In electricity and magnetism 14 students qualified on the pass, and 1 student on the advanced electricity papers. Associateship students taking subjects outside their regular courses attended lectures, passed examinations, and obtained certificates in—surveying (elementary), 1; surveying (advanced), 1; electrical engineering (advanced), 1; electrical drawing (stage 3), 1.

One hundred and thirty certificates were awarded to students who attended evening lectures and passed examinations in the subjects named: Freehand mechanical drawing, 6 first-class and 17 second-class certificates; descriptive geometry and setting-out work, 16 first-class and 9 second-class certificates; mechanical drawing, section 1, 5 first-class and 10 second-class certificates; mechanical drawing, section 2, 4 first-class and 5 second-class certificates; mechanical drawing, section 3, 1 first-class and 3 second-class certificates; electrical drawing, 1 second-class certificate; steam-engine (elementary), 9 first-class and 6 second-class certificates; steam-engine (advanced), 1 second-class certificate; applied mechanics (elementary), 8 first-class and 5 second-class certificates; strength of materials (elementary), 5 first-class and 3 second-class certificates; theory of workshop practice, 1 first-class and 1 second-class certificate; electricity (elementary), 3 first-class and 5 second-class certificates; electrical engineering (elementary), D.C., 2 first-class and 1 second-class certificates; electrical engineering (elementary), A.C., 2 first-class certificates; surveying (elementary), 1 second-class certificate.

The most important event of the year, as far as the school was concerned, was the recognition of its University courses by the Institution of Civil Engineers. Completion of a course in mechanical, electrical, or civil engineering at the School of Engineering, and obtaining the University degree in the subject, now exempts the holder from sitting for the institution's examinations for associateship membership. At the date of this recognition McGill was the only other university outside of Great Britain on which this honour had been conferred.

An exhibit illustrating the work of the school was placed in the New Zealand International Exhibition. This exhibit was awarded five gold medals—one for apparatus designed (at the school) for teaching applied mechanics, one for apparatus for teaching electrical engineering, one for students' original drawings and designs, one for samples of tested materials, one for a collection of New Zealand building-stones prepared by the lecturer in geology and the professor in charge.

During the year tests were carried out for the Government and private firms and companies on steel plates, building-stones, bridge-plates and bolts, cement, bricks, drainpipes, coals, and timbers.

Some valuable donations were made to the school. The Government presented the engines, boiler, and machinery of a second-class torpedo-boat; Mr. Julius, B.Sc. Eng., an old student, as the representative of the Government of Western Australia at the Exhibition, several samples of hardwood, and reports of tests made by him of the timbers of Australia; Mr. Durie, representative of the Government of New South Wales, several framed photographs; and Mr. Palmer, of the Palmer Engineering Company, Wellington, another old student, a full-size model of a Nathan injector.

During the year the hydraulics laboratory was completed, and a water-supply brought in by connection with the artesian well at the Boys' High School.

The main measuring-tank was constructed, and a high-lift turbine pump with 40-horse-power motor erected.

These works form the first instalment of the full-sized equipment for the practical investigation of hydraulic problems, which will be completed by the addition of overhead tanks and weirs, high and low pressure pipe ranges, a 10-horse-power Pelton wheel, a 15-horse-power Thompson's turbine, a 15-horse-power low-fall turbine, an accumulator, a venturimeter, an experimental tank, and numerous measuring appliances. Two overhead travellers were designed. These have been constructed and put in place in the laboratory by a local firm. On the side reserved for internal-combustion motors a 12-horse-power National and a 10-horse-power Trusty engine have been erected. The former has been connected to a Dowson suction producer plant, and air and gas meters and other appliances have been installed, and so arranged that everything going into and coming out of either of these engines can be accurately measured. The whole of the plant of the school has been carefully upkept, and is in excellent order. The following new apparatus has been procured: A set of models, purchased from the exhibit of Mr. G. Cussons in the New Zealand International Exhibition, including wrought-iron tank, corner-riveted; gusset stay, riveted; detail of N girder, riveted; stay for crown of locomotive firebox; Corliss valve and valve-seating; sectional

model of steam-engine, with valves and valve-diagram apparatus; slide-valve, with spindle; sectional model of Meyer gear; section of cylinder; Willans engine (working model); eccentric in section; box coupling; hydraulic-pipe joint; mansard roof; oxygen cylinder and fittings; Nathan injector; two platform scales; gas-engine indicator gear; air-reservoir; two overhead travellers (built to College designs); laboratory table and cupboards; flasks and glassware, thermometers. A model of a screw propeller, arranged to show the phenomenon of cavitation, and a model to illustrate the gyroscopic control of rolling motion, were designed and obtained locally. An experimental gas-meter and experimental air-meter; a 2-horse-power electric motor and resistances; 1 wattmeter, 5 ammeters, 4 voltmeters; a commutator model; wooden armature model; x-ray apparatus; switch-frame; lenses; fuse-blocks; resistances; Carden voltmeter and galvanometer for alternating-current work; thirty diagrams; 180 lantern slides; and a complete set of apparatus for the teaching of technical chemistry.

Mr. S. Steele, an old student of the school, who occupied the position of demonstrator, having resigned to take up the appointment of lecturer in engineering at the Wanganui Technical School, Mr. R. J. McKay, another past student, was appointed in his place. Mr. P. H. Powell, M.Sc., M.Eng., having completed the term of his engagement as lecturer and demonstrator in electrical engineering, was reappointed as lecturer in that subject. Mr. G. P. Williams, M.Inst.C.E., and Mr. A. D. Dobson, each for the first time, gave a course of lectures in branches of civil engineering.

ROBERT J. SCOTT, M.I.C.E., M.I.M.E.,
Professor in Charge.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Contribution from Museum, Library, and School of Technical Science Endowment	800	0 0	Balance, 1st January, 1907	260	17 9
Contribution from superior-education reserves (College)	890	0 0	Salaries	2,175	5 8
Government grants—			Instruction in surveying and civil engineering	235	11 8
For specialisation in engineering	2,000	0 0	Rent of building (College)	193	18 4
For technical classes	302	3 6	Exhibitions	40	0 0
For furniture, fittings, and apparatus	232	15 0	Contribution towards expenses of Registrar's office	120	0 0
For material	54	0 0	Gas and electric lighting	108	9 1
Towards cost of hydraulic laboratory	928	5 0	Insurance	25	8 5
Students' fees	851	5 0	Printing, stationery, and stamps	88	13 10
Students' fines	0	17 0	Advertising	19	0 9
Testing fees	48	10 0	Fuel (coal and gas)	10	6 5
Associate-ship certificates, &c.	2	7 0	Laboratory stores	25	13 10
Sale of slide-rules to students	12	12 0	Cleaning machinery	140	17 2
Refund from General Electrical Company (England)	2	16 8	Experimental work and apparatus (mechanical)	97	1 0
Interest	49	18 0	Experimental work and apparatus (electrical)	145	1 2
			Stores and chemical (electrical)	19	5 8
			Upkeep of plant, repairs to machinery	65	19 11
			General expenses	23	8 8
			Apparatus, hydraulics, &c.	419	15 3
			Making watertight roof of hydraulic laboratory	59	0 4
			Technical chemistry lectures (College)	75	0 0
			Technical chemistry lectures (apparatus)	55	6 10
			Share of rent of section in Hereford Street	20	0 0
			Ventilation of electrical laboratories	20	17 8
			Expenses of exhibit, New Zealand International Exhibition	43	11 0
			Professor Scott, share of testing fees	26	17 6
			Balance	1,660	1 3
	£6,175	9 2		£6,175	9 2

SCHOOL OF ART.

I have the honour to report that the year 1907 has been notable as the first in which junior free day students have been admitted to the school. At the beginning of the year some thirty-five students joined the classes under the Government regulations for free places. Each of these students took up a specified course of art instruction, and attended the school for twenty-seven hours each week throughout the session. This experiment proved highly satisfactory, both from an educational and financial standpoint. The attendance of these students was very satisfactory, and their work exceedingly creditable. I look upon this scheme as being a means of supplying the advanced classes of the school with a number of students whose elementary training has thoroughly fitted them to benefit to the full by such instruction as is now available in the life, landscape, architectural, and artistic crafts departments. These students are entitled to two years' instruction as junior and three years' as senior free scholars, providing they pass the annual examinations of the school. It is therefore possible for the first time to have thoroughly carried out a graduated course of instruction extending over a period of five years; hitherto the drawback to such courses of instruction has been the difficulty in getting students to remain long enough at the school to properly benefit by the instruction. During the year several advanced students have obtained positions as designers and draftsmen; one student was appointed assistant art master at the Elam School of Art, Auckland, and several other students have received appointments in smaller schools. The number of letters I have received from managers of technical schools and classes in various parts of the Dominion, asking me to recommend art and craft teachers, proves

that the school is being recognised as a centre for the training of art-teachers—a fact that goes to prove that the influence of the school is extending.

Attendance.—The students in attendance during 1907 numbered 1,085. The hour-attendances amounted to 93,520 during 1907, as against 48,000 in 1906 and 34,160 in 1905. This shows an increase for 1907 of 45,520 attendances over the year 1906, and an increase of 59,360 attendances over 1905, thus proving that the attendance has considerably more than doubled itself since 1906. I have made no comparisons in the number of students in attendance this year with previous years, because hitherto it has been the rule to give as totals the class entries, which tends to give an erroneous impression of the number of students. The number of actual students during 1907, taken on the basis of hour-attendances, would be more than double that of 1905.

In connection with the Advanced Art examinations held by the Board of Education, South Kensington, London, the school obtained twenty-five pass certificates, and in the examinations for art class teachers' certificates three students had works accepted. The usual local examinations were held at the end of the year, and all the students submitted work for examination.

In connection with the art competitions of the late International Exhibition, the school scored higher than any other art school in the colony, obtaining in all fifteen medals (seven gold, four silver, and four bronze). A certificate of the highest order of merit was awarded for the school's collection of work as a whole, and the complete furniture and decoration for a "hall" was awarded a certificate of special excellence.

A bronze medal and nine free scholarships were awarded on the year's work to students of the day and evening classes, also some twenty-four scholarships to pupils of the State schools.

Drawing and Painting.—Instruction was given in drawing and painting from life, still life, antique, and landscape. The greatly increased attendance in the day classes considerably taxed the accommodation available for the teaching of these subjects; on most days every room in the school was packed. The present rooms are small, and often necessitate a teacher having classes in three separate rooms, which does not allow any collective teaching, by which means the best class results are obtained. A large studio for figure and still-life work is urgently needed.

Design.—The students have increased to such an extent in this department as to demand two additional classes per week, making a total of four classes per week in place of two as hitherto.

Artistic Crafts.—A great advance has been made in this department since the appointment of the new instructor. A course of silversmiths' work and Limoges, Champlevé, and cloisonné enamelling was commenced at the beginning of the year, and several beautiful pieces of jewellery were executed. Larger and more important work will be possible when a larger muffle furnace is available. Classes were held for repoussé, gesso, wood-carving, and embossed-leather work during the morning, afternoon, and evening throughout the year.

Painters' and Decorators' Classes.—Classes in practical work were held twice a week, and instruction was given in signwriting, glass-embossing, graining and marbling, stencilling and decorating, students also attending the special design and colour classes. The advantage to apprentices engaged in this trade by such classes being held at a school of art is obvious, as the practical work can be co-operated with the higher branches of colour and design, and so tend to raise the general standard of the trade.

Architecture.—The course in this department included geometry, perspective, elementary, and advanced building-construction, quantity-surveying, mensuration, specification writing, history of architecture, interior design, historic ornament, and architectural design. The attendance in this section was fairly satisfactory. The duplication of several of the more elementary subjects by the authorities of the Christchurch Technical College has tended to slightly reduce the number of students in this department. The course of instruction in this department ranges over five evenings per week, and the work necessitates the services of five specialists as lecturers and instructors.

Cabinetmaking.—The work in this department has been chiefly directed to drawing and design, subjects which are strongly allied to a school of art.

Teachers and Pupil-teachers.—A complete course of instruction in elementary drawing, colouring, and design, together with modelling, was given on Saturday mornings, to meet the requirements of the teachers' examinations held by the Education Department. The attendance at these classes has been very large, and the accommodation of the school was severely taxed in consequence.

Normal College Students.—Classes were held on Tuesday afternoons in freehand, model, and blackboard drawing for students in training from the Normal School. The time devoted to these subjects—namely, two hours per week—is too small to go very thoroughly into these subjects.

Arts and Crafts Guild.—The work of the Guild was continued on similar lines to that of last year. The attendance at the monthly meetings was excellent, and several valuable lectures and demonstrations were given by well-known artists and craftsmen. The members of the Guild number over two hundred, many of which are ex-students of the school.

Staff.—At the beginning of the year Mr. John Cook was appointed instructor in building-construction and quantity-surveying, Mr. C. F. Kelly was appointed instructor in elementary art, and Mr. J. H. Wilson lecturer in English literature and instructor in mensuration. The appointment of Mr. F. G. Gurnsey as instructor in applied art at the beginning of the year has proved very satisfactory. No resignations have been received during the year. The staff now numbers fourteen, all of whom worked loyally in the interests of the school. Thanks are due to Messrs. J. W. Gibb, A. H. Fielder, and W. Sey for prizes kindly given for painting, architecture, and decorating, and also to those gentlemen who assisted in making the monthly meetings of the Guild so instructive by lectures and demonstrations. In conclusion, I wish to thank the Board for the very careful consideration that has been given to the recommendations I have made.

R. HERDMAN-SMITH, F.S.A.M., Director.

12: total, 446 class entries, meaning about 300 students. The average attendance for the whole year was about 75 per cent. When it is considered that many of the classes were carried on under great disadvantages, on account of the lack of accommodation, the above numbers must be considered highly satisfactory. The session began on the 11th March, and finished at the end of October, and this period was divided up into three terms of ten weeks each. This is the first time in the history of the school that such a lengthy term has been attempted; heretofore the session has only lasted for twenty-four weeks. Last year the course of instruction was modelled with the idea not only of providing facilities of self-improvement for those engaged in earning their livelihood during the day, but also with the idea of making them better able to adapt themselves to changed conditions. To carry out the above purpose the syllabus was made up to include (1) a commercial course, (2) a domestic course, (3) a trades course, (4) an arts course, (5) a literary course, and in carrying out the programme the co-operation of all the various unions and associations was solicited. The Technical Inspector, Mr. E. C. Isaac, visited the school about the beginning of last October. Unfortunately he was only able to spend one night in Timaru at that time; however, he reported favourably on the three classes he saw at work—namely, book-keeping, dress-making, and woodwork. The Managers also paid periodical visits of inspection to the different classes, and reported thereon. At the end of the session examinations were held in English, arithmetic, shorthand, book-keeping, typewriting, building-construction, electricity, engineering, and plumbing.

At the close of the session in October an exhibition of work done by students during the year was held. The exhibition was kept open for two afternoons and evenings, being attended by large numbers of townspeople. Everybody seemed well satisfied, and many complimentary remarks were passed on the quality of the exhibits.

In last year's report it was mentioned that the work of some of the classes was carried out under great disadvantages on account of the limited accommodation, and, although a strong appeal was made to the Department during the year, nothing has yet been done in the way of granting additional rooms. Thus in a great many cases good students and good teachers were heavily handicapped for want of proper accommodation to carry on the work. This was especially noticeable with regard to the engineering and electrical classes.

The finances of the Association are still in a sound condition, and it required the strictest economy during the year to keep them so. The credit balance at the end of the financial year stood at £54 10s. 4d., but some £75 is still due from the Department for capitation. It should be pointed out that but for the voluntary contributions of the public and the various contributing bodies the school could not exist, as it requires the whole of the fees and the capitation to pay the salaries of instructors.

In summarising, the year's work must be considered highly satisfactory. This year established records both for the amount of fees collected and for the number of pupils attending the school, both of which facts go to prove that the school is doing its duty as a technical school in the community.

The thanks of the Association are due to local bodies and citizens who contributed to the funds of the Association, to the examiners who conducted the examinations gratuitously, to the teachers who devote a great amount of time and energy to the work for very small remuneration, and to the Press, who always loyally support the school and do their best to further the cause of technical education in our midst. The Managers also desire to place on record the prompt attention of the central Department to all claims and applications made during the year.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Associated Classes conducted at Timaru by the Timaru Technical Classes Association.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance at beginning of year	73	5 11	Salaries	637	11 4
Capitation on associated classes	162	15 10	Office expenses (including salaries, stationery, &c.)	5	13 1
Furniture, fittings, and apparatus	112	3 6	Advertising and printing	15	17 6
Material	36	12 0	Lighting and heating	17	14 10
Subsidies on voluntary contributions	173	10 0	Insurance and repairs	9	17 3
Fees	194	10 2	Material for class use	26	13 10
Voluntary contributions	90	15 6	Carting, instructor's board, labour, &c.	13	10 10
Interest, Post-Office Savings-Bank	0	2 5	Furniture, fittings, and apparatus	68	15 0
Miscellaneous items	6	11 1	Balance at end of year	54	12 9
	<u>£850</u>	<u>6 5</u>		<u>£850</u>	<u>6 5</u>

J. JACKSON, Chairman } of Managers.
R. GRANT, Secretary }

EXTRACT FROM THE REPORT OF THE TEMUKA TECHNICAL CLASSES ASSOCIATION.

The Managers have to report that steady progress has been made during the past session by the classes under the auspices of the above Association. The chief feature of the year's work has been the uniform excellent attendance at each class; the roll-number and attendance number in each case gradually improving as the session advanced. Nine different classes were conducted in various subjects by eight different teachers, the roll-numbers being as follows: Cookery, 20; dressmaking, 35; blacksmithing, 19; wool-sorting, 14; painting (art), 17; chemistry, 20; carpentry, 13; relief carving, 15: total, 153. The only new class was that for wool-sorting, a class most necessary in the district. An excellent instructor was obtained; the Timaru Woollen-mills provided wool free of cost, and the result was a most successful class in every way. As the work of the instructress in cookery, employed by the Board of Education, had greatly increased, they appointed Miss Rennie to take over part of the work, and she conducted an excellent class.

here. We can confidently state that the attendance and instruction in connection with the classes have never reached so high a standard. Throughout the session managers were appointed monthly to visit the classes, and their reports have always been satisfactory.

Last June Messrs. Miles, Cooper, McLeod, and the Director waited on the Hon. G. Fowlds, Minister of Education, to lay before him the claims of the Association and endeavour to obtain an extension of the present woodwork shop, such extension to be used for wool-sorting and art. The Minister expressed himself as highly pleased with the manifest interest taken in technical work, but did not bind himself by any promise. An application for a grant was made in due course. We have just received word that the application has been granted, and we hope to have the building ready for work at the beginning of the coming session.

The financial position of the Association is very sound. The statement of receipts and expenditure for 1906 showed a credit balance of £20 17s. 5d. We are pleased to state that as a result of the year's work this amount has been increased to £79 1s. 11d., which will be decreased, however, to £70 10s. 3d. when outstanding accounts are paid.

In conclusion, the Managers wish to tender their sincere thanks to the Board of Education, Borough Council, Road Board, Caledonian Society, and the many private persons who have so liberally supported the Association. Without their financial aid it would be a most difficult matter to work the classes on paying lines.

D. McCASKILL, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Associated Classes conducted by the Temuka Technical Classes Association.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance at beginning of year	20	17 5	Salaries of instructors	212	4 0
Capitation on associated classes	137	11 9	Office expenses (including salaries, stationery, &c.)	51	4 0
Rent	3	12 0	Advertising and printing	4	15 0
Furniture, fittings, and apparatus	4	3 2	Lighting and heating	25	10 8
Material	39	17 6	Insurance and repairs	3	12 2
Subsidies on voluntary contributions	121	14 0	Rent	3	12 0
Fees	37	9 0	Material for class use	48	19 6
Voluntary contributions	59	2 6	Instructor's board	6	14 0
Grant from Education Board towards janitor's salary	19	19 6	Interest	1	0 6
Refund from Education Board for material used at school classes	3	16 7	Audit expenses	2	2 0
Sundries	9	0 0	Sundries	3	17 8
			Architect, &c.	6	5 6
			Furniture, fittings, and apparatus	8	4 6
			Balance at end of year	79	1 11
	<u>£457</u>	<u>3 5</u>		<u>£457</u>	<u>3 5</u>

H. M. MILES, Chairman }
D. McCASKILL, Secretary } of Managers.

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE WAIMATE TECHNICAL CLASSES ASSOCIATION.

During the year classes were held in woodwork, relief carving, dressmaking, cookery, electricity, shorthand, book-keeping, typewriting, English, Latin, painting, drawing, vocal music, and arithmetic, and on the whole the attendance was a great improvement on that of the previous year. Again the Managers have to report the lack of interest taken in the purely educational subjects. For this reason it was found necessary to discontinue arithmetic and English after the first quarter. A new departure was made by starting a class in electricity, but, although this flourished the first quarter, the attendance during the second fell away somewhat. The reason for this was that the students desired a much more practical course than that mapped out, and the Managers recommend that that course be adopted this coming year. The classes for cookery, dressmaking, wood-carving, vocal music, shorthand, and typewriting were excellent, and the attendance was all that could be desired. The attendance at other classes was satisfactory.

The finances of the Association were assisted by a concert given by the Glee Club, and the thanks of the Association are due to Mr. Burry for his energy in this matter. The Managers are pleased to report that the classes still continue to be financially sound, as will be seen from the accompanying balance-sheet.

H. C. BARCLAY, Acting-Chairman.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Associated Classes conducted by the Waimate Technical Classes Association.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance at beginning of year	110	0 3	Salaries of instructors	209	10 9
Capitation on associated classes	67	2 3	Office expenses (including salaries, stationery, &c.)	15	12 1
Subsidies on voluntary contributions	43	18 6	Advertising and printing	8	18 0
Fees	20	3 6	Lighting and heating	8	0 5
Voluntary contributions	56	0 6	Insurance and repairs	4	15 6
Balance at end of year	54	8 8	Material for class use	19	9 7
			Furniture, fittings, and apparatus	85	7 4
	<u>£351</u>	<u>13 8</u>		<u>£351</u>	<u>13 8</u>

G. BARCLAY, Chairman }
W. H. BECKETT, Secretary } of Managers.

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE PLEASANT POINT TECHNICAL CLASSES ASSOCIATION.

The Association has completed the second year of its existence. It is to be regretted that sufficient pupils were not forthcoming for blacksmithing, wool-classing, English, and commercial instruction. The Association had all arrangements completed for the carrying-on of these classes, but pupils were enrolled for cookery and dressmaking only. The dressmaking pupils were fortunate in having an excellent instructress (Miss Smith), and showed their appreciation of her work by attending well. The class met in one of the public-school class-rooms.

The services of the Education Board's instructress, Miss Rennie, were secured for the cookery class. The regular attendance of pupils showed that the class was doing good work in spite of the unsuitable room—namely, one of the school class-rooms. A public demonstration of cookery was given, and was well attended. Thanks to the liberal support of the public and of various local bodies, the financial position of the Association is still sound.

M. G. IRWIN, Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Associated Classes conducted by the Pleasant Point Technical Classes Association.

<i>Receipts.</i>			£	s.	d.	<i>Expenditure.</i>			£	s.	d.
Balance at beginning of year	..	..	2	5	8	Salaries of instructors	..	..	27	12	0
Capitation on associated classes	..	..	51	11	7	Office expenses (including salaries, stationery, &c.)	..	..	34	17	1
Rent	..	..	5	0	0	Advertising and printing	..	..	2	2	0
Material	..	..	6	12	4	Rent	..	..	5	0	0
Subsidies on voluntary contributions	..	..	16	10	6	Material for class use	..	..	2	19	9
Fees	..	..	15	17	6	Instructor's railway fares	..	..	0	18	8
Voluntary contributions	..	..	16	13	0	Balance at end of year	..	..	43	19	11
Sales of material, &c.	..	..	2	18	10						
			£117	9	5				£117	9	5

J. MAZE, Chairman
M. G. IRWIN, Secretary } of Managers.

OTAGO.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

The number of schools in which instruction in one or other of the manual and technical subjects was given was 122, and in 104 of these schools the time devoted to the instruction was sufficient to entitle them to claim capitation under the Department's regulations. This is an increase of eleven schools for the year. During the December quarter of 1907 the number of pupils receiving instruction in handwork subjects was 13,823, or 72 per cent., being an increase over the previous year of 2,374 pupils, or 12 per cent. Instruction in elementary agriculture was given in 61 schools, botany in 2, bricklaying in 9, brushwork in 44, carton-work in 15, cardboard-work in 17, cookery in 22, cane-weaving in 1, elementary design and colour-work in 2, free-arm drawing in 4, advanced needlework in 2, painting from the flat in 1, paper-work in 69, perspective in 1, physics in 1, physiology and first aid in 3, physical measurements in 18, plasticine in 16, stick-laying in 13, swimming in 4, wood-carving in 1, woodwork in 21. During the past three or four years pupils, teachers, and students in training have undergone a course in swimming and life-saving under the Board's instructor. The beneficial results of these are now appearing in our schools. During the year classes for instruction in swimming have been established at several rural schools, and in one the mistress has taken up the subject with the girls of the senior classes. It is reasonable to expect that during the current year this subject will be taken up more generally than it now is. Saturday classes in drawing, elementary design, brushwork, and cardboard and clay modelling were held at the Dunedin School of Art, and were attended by 121 country teachers and pupil-teachers.

Special teachers of needlework were employed in twenty-four schools having an average attendance below forty-one and taught by male teachers.

EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

We are glad to be able to report favourably on the work done in most of the school gardens, of which we have sixty-one in full operation, and on much of the work done in elementary science, nature-study, woodwork, cookery, cardboard-work, paper-folding, brushwork, &c. If newspaper correspondents and public speakers would visit the schools and make personal inspection of what is done in these departments of work, and of the manner in which it is done, they would be surprised to see how widely the real school world differs from what, if we may judge from their words, they imagine it to be. The revelation would, we venture to say, extort from them the confession that the facts do not support their conclusions, and that after all we cannot be so much behind their models, America, France, and Germany, as they had fondly imagined. It is not our way to proclaim our doings from the house-top; all the same, they are not unworthy, and that they are not is largely due to the teachers, who have, at great inconvenience and with much labour, utilised to the full every facility provided by the Board to enable them to master the technique of the many kinds of manual work now taught in the schools. They have done wonders, and deserve ungrudging praise.

EXTRACT FROM THE REPORT ON SPECIAL CLASSES CONDUCTED BY THE EDUCATION BOARD.

Saturday classes in drawing, elementary design, brushwork, and cardboard and clay modelling were held at the Dunedin School of Art, and were attended by 121 country teachers and pupil-teachers. A class for instruction of teachers in elementary agriculture, conducted by Mr. Tannock, Curator of the Dunedin Botanical Gardens, was held during the winter and spring months, and was attended by some thirty-five country teachers who have gardens in connection with their schools. A course of lessons in brushwork for the benefit of the teachers in the North Otago District was given by Miss Sherriff at Oamaru. The attendance at this class was thirty-three.

EXTRACT FROM THE REPORT OF THE PRINCIPAL OF THE SCHOOL OF ART.

During the period over which this report extends—viz., from the 11th February to the 21st December—the total number of individual students who received instruction was 545, an increase of 73 on the previous year. This number includes 195 teachers and pupil-teachers, 82 students in training, 99 students who attended the day classes, and 169 students who attended the evening classes. The school was open daily from 9.30 a.m. to 4 p.m. and from 5.45 to 9 p.m., and on Saturday from 9.30 a.m. to 12 noon. That the value of the school is becoming increasingly recognised has been evinced by the large number of students in attendance, and by the interest employers have shown in urging their employees to attend, and in many cases paying their fees and otherwise encouraging them to join our classes. I regret to say that during the second and third quarters the students were considerably inconvenienced owing to the overcrowded state of some of our class-rooms. The most elementary instruction was that imparted to the juvenile class, and consisted of freehand and model drawing, brushwork, and the arranging of floral forms to fill given geometrical figures. The pupils manifested great interest in their work. They were regular in their attendance, and their progress was quite satisfactory. In the drawing classes the work, on the whole, has been very good. Very many young students joined our classes during the session, and did very creditable work. In the modelling classes the students received instruction in modelling from casts of ornaments and the figure, from plant-form, from nature, and from their own designs, casting from waste and piece moulds. Numerous examples of the students' work, including studies of plants from nature, ornamental panels, designs from frames, portrait busts from nature, &c., were exhibited at our annual exhibition. In the painting class the students, as part of their training, made (during the summer months) excursions to various localities for the purpose of studying landscape-painting from nature. This had a very beneficial effect on their ordinary studies, as could be seen in the works exhibited. Students of the Training College received instruction in the subjects required for the elementary drawing certificate. This includes freehand and model drawing, geometrical drawing, drawing from models with chalk on the blackboard, modelling, brushwork, and light and shade. Owing to a number of the junior students having wholly or partially passed in the subjects necessary for the D certificate, arrangements were made to enable them to pursue their studies outside the ordinary course. Although this entailed a little extra work on the part of the instructors, it suited the students, and we had pleasure in assisting them. The senior students were instructed in brushwork, elementary design, and modelling. The general quality of the work done in the different classes showed a decided improvement towards the end of the year. This was more especially the case in drawing with chalk on the blackboard. The courses of instruction for pupil-teachers were very similar to those of last year, and comprised the subjects required for the elementary school drawing certificate. The work of the different classes showed an all-round improvement. I have, year after year, tried to induce Training College students to enter for the South Kensington Board of Education's examinations, and obtain certificates, but so far I have not been very successful. This is to be regretted, because, after studying and working through the prescribed work for each of the subjects, they leave their examination each year in abeyance, until they finally sit for their teachers' certificate of Class D, which includes all the subjects. It would be far better for them if they entered each year for examination in the subject they have been studying. By adopting this method they would save themselves needless worry and anxiety, and have time and energy to devote to other subjects besides drawing. In the Saturday classes for teachers and pupil-teachers the majority of the teachers in attendance studied two subjects—brushwork and light and shade or modelling, or model-drawing and freehand drawing; while the pupil-teachers devoted their attention to the subjects required for the elementary-school teacher's drawing certificate. The work produced showed a decided improvement on that of previous years, and the students fully appreciated the privilege of attending these classes. They appeared anxious to make the most of the time allotted to them, and, I must say, worked admirably. Owing to the large number in attendance and the accommodation being limited, the crowded state of some of the classes reacted somewhat unfavourably upon the number of attendances. In the science classes the courses of instruction were very similar to those of last year, and comprised geometrical drawing; practical, plane, and solid geometry; machine-construction, stages 1, 2, 3, and honours; and building-construction, stages 1, 2, 3, and honours. The work in these classes was carried on with earnestness and regularity, and a good deal of excellent work was accomplished during the session.

The number of students who passed the South Kensington Science and Art Examinations was as follows: Freehand drawing—first class 2, second class 12; model-drawing—first class 3, second class 4; geometrical drawing—second class 3; perspective—second class 4; blackboard drawing—second class 4; light and shade—first class 2, second class 2; painting from still life—first class 1, second class 4; anatomy—second class 1; design, stage I—first class 1, second class 2; memory drawing of plant-form—first class 1, second class 2; practical plane and solid geometry—second class 1; machine-construction, stage I—first class 1, second class 2; stage II—first class 1; building-construction, stage I—second class 1; stage II—first class 1, second class 2; stage III—second

class 1; applied mechanics—first class 2, second class 1. An exhibition of examples of the students' work was held in the school on the 30th and 31st January and 1st February, and was fairly well attended. In conclusion, I have to thank the staff for the zealous attention which they have devoted to their respective duties during the year.

D. C. HUTTON, Principal.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Special Classes conducted at Dunedin.

Receipts.			Expenditure.		
	£	s. d.		£	s. d.
Capitation on special classes	287	3 3	Balance at beginning of year	512	6 11
Technical instruction of teachers.. ..	300	0 0	Salaries of instructors	857	2 0
Fees	161	8 6	Office expenses (including salaries, stationery, &c.)	25	0 0
Balance at end of year.	746	5 7	Advertising and printing	45	7 0
			Lighting and heating	30	13 0
			Material for class use	24	8 5
	<u>£1,494</u>	<u>17 4</u>		<u>£1,494</u>	<u>17 4</u>

P. G. PRYDE, Secretary.

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE DUNEDIN TECHNICAL CLASSES ASSOCIATION.

The Managers beg to hereby submit the annual report (the nineteenth) on the work of the Dunedin Technical School during the session of 1907. The Board of Management for the past year consisted of Hon. T. Fergus; Rev. P. B. Fraser, M.A.; and Messrs. G. C. Israel and William Scott, representing the Otago Education Board; Messrs. J. F. Arnold, M.P.; A. Sligo, and G. M. Thomson, F.L.S., members of the Technical Association; and Councillors T. Scott and J. H. Walker, from the Dunedin City Council. At the first meeting Mr. Thomson was elected Chairman, and Mr. Sligo Treasurer. During the year classes totalling seventy were in operation at the Dunedin School, while an additional six classes were conducted at three outside centres—namely, at Tapanui, Waikouaiti, and Palmerston. The Director's report gives the detailed account of the classes and their work. The number of enrolments during the year was 1,063, the attendance constituting a record. There was also a marked increase in the number of applications for free places, no less than 357 students being granted free tuition under the regulations. In the new portion of the building, erected during the recess, rooms were fitted up for carpentry, plumbing, wood-carving, chemistry, practical electricity, and cookery, and the increased accommodation provided for these and other classes got rid of the congestion which previously made the work of the Director and teaching staff so difficult. The new rooms were thrown open to the public in one of the working evenings during the session, and hundreds of visitors took advantage of the Board's invitation to inspect the school. In order to complete the building a grant of £1,100 has been received from the Government, and the work of widening and elevating the north wing, and of making new and commodious rooms for the engineering department, will be put in hand at once, the plans having been approved by the Education Department. A grant has also been provided to enable the Board to procure the necessary machinery for engineering work.

During the past year, as formerly, the school has been largely utilised by the Otago Education Board for its primary-school classes in woodwork and cookery, for its teachers' classes, and also for examinations. The Education Board has granted concessions to all Technical School students who wished to attend the School of Art classes.

The demand for day classes has been steadily increasing, and the necessity for meeting this want has engaged the earnest attention of the Board. The work of the school has gradually extended into afternoon classes, of which sixteen were held during the session, and were attended by 112 students who took a course of more than one class. Of these sixty-seven came from beyond Mosgiel on the south, or Port Chalmers on the north. In order to provide a full-day course the staff would require to be very considerably enlarged, and a Director appointed whose whole time would be given to the work of the school. While desirous of meeting the needs of the community the Board, in order to avoid overlapping the work now being done at the School of Art, has approached the Otago Education Board with a view of having the whole subject of the relations of the two schools discussed. As in former years, free tuition has been given at the University to the leading student of the past session in physics, chemistry, and English by Professors Shand, Black, and Gilray, to whom the thanks of the Board are accorded. The statement of receipts and expenditure shows the credit balance at the end of the year as £387 4s. 4d., to which has to be added several grants earned, but not received, before the end of the financial year. The thanks of the Managers are again accorded the honorary examiners for valuable services most willingly rendered, to the Press for its sympathetic assistance, and to the staff for the successful issue of the year's work.

GEO. M. THOMSON, Chairman.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE DUNEDIN TECHNICAL SCHOOL.

At the beginning of the session the following changes were made in the teaching staff: Mr. T. B. Hamilton, M.A., succeeded Mr. Bruce as teacher of chemistry, and Mr. Douglas Thomson was appointed his assistant; Mr. Alfred O. Burton became teacher of elocution; Miss Dora M. Little was placed in charge of the elementary cookery classes; and Mr. David Stewart was added to the staff as additional teacher of senior arithmetic. During the session Mr. William Rodger, teacher of Latin, asked to be relieved, and his place was filled by the appointment of Mr. George F. Booth, B.A., while Mr. George P. Graham accepted the position of third teacher of English.

Seventy classes were held at Dunedin, and of these twenty were for continuation subjects, seventeen for commercial subjects, and thirty-three for technical subjects. The total number of individual pupils enrolled during the year was 966, being an increase of 138 on last year's enrolment figures, and eleven higher than any previous enrolment. Many pupils enter for two or more subjects, and the class attendances are therefore usually taken as the index of the extent of the work.

The number of applications for free places under the departmental regulations was 357, compared with 229 last year, but twelve of this year's applicants did not enter on their free course, while another twelve failed to make the minimum number of attendances required to entitle them to the continuation of the privilege. Under the Association's own regulations students ineligible for these free places are, when circumstances seem to warrant it, granted partial or total remission of fees. The concession was this year made to thirty-one such young people.

Compared with the previous year, more than double the number of students availed themselves of the afternoon classes. The country contributed largely to the increase, a total of sixty-seven day-scholars coming from the following mentioned places: Clinton, Kakapuaka, Romahapa, Balclutha, Kaitangata, Stirling, Lovell's Flat, Lawrence, Waitahuna, Milton, Clarendon, Milburn, Evans Flat, Henley, Moeraki, Dunback, Puketeraki, Flag Swamp. It will be necessary next year to make special arrangements to meet the requirements of the country pupils.

Referring now briefly to the subjects of instruction, I have to report that good work continues to be done in the group designated "continuation classes"—English and arithmetic in the above list—and pupils are at last beginning to realise that a thorough grounding in these forms an excellent foundation for and facilitates the study of the subjects in the commercial and the strictly technical courses. But the recognition of this fact is not by any means general, and this year there were in the classes for plumbing students who stated that the simple arithmetical operations required were beyond them. Owing to weakness in English several members of the shorthand classes were unable to make any progress in their study of the subject. And of the eighty-nine present in the junior book-keeping classes on the opening night, eighteen had to be refused admission owing to their inability to do correctly the very simple calculations necessary.

The classes constituting the commercial group were again well attended. They evidently maintain their popularity. During the year numerous inquiries were made at the school for youths desirous of taking up a commercial life, but the response was not by any means equal to the demand. With the object of still further enhancing the value of the Association's certificates in these subjects the standard of examination has been again slightly raised.

The quality of the instruction given in the so-called technical classes varied, but on the whole good work was done. The course in practical mathematics is now proving of great benefit to the members of the engineering classes. The examiners make special reference to the improvement, and suggest that the drawing pertaining to the subject be similarly dealt with. The machinery for practical work has been recommended by the Committee, and this, when procured, will add greatly to the efficiency of the instruction given in mechanical engineering. Practical electricity was well attended during the first quarter, and fairly during the second. But many of the students were without the elementary knowledge required as a basis for the profitable study of this subject. It is, in my opinion, necessary to have provision for more practical work, and I purpose making suggestions whereby students will be required to spend half the time at actual construction and practice. Dressmaking was again in great demand, the nine classes held being well supported to the end of the session. The cookery classes were larger than usual, several of the pupils attending more than one class. In order to give students the full benefit of the teacher's attention in demonstration and practice the class for horticulture was limited to nineteen, several being refused admission each quarter. In physics the work was characterized by an earnest thoroughness on the part of both teacher and taught, while in the class for painters' work the effect of the teachers' enthusiasm was apparent. The work of the other classes does not call for any special mention.

I have again to place on record the Managers' appreciation of the generosity of Professors Black, Gilray, and Shand in each continuing to grant a free place in their University classes. This year James Turner gains the free place in physics, Harry S. Tilly in chemistry, and Miss Dorothy Bradley in English. The honorary examiners give a good deal of time and attention to the supervision and examination of the work. All are entitled to credit, but special mention must be made of the examiners for cookery. The members of the staff have been regular and zealous in the discharge of their duties, and to them is due the credit of bringing the year's work to such a successful issue.

A. MARSHALL, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Associated Classes conducted at the Dunedin Technical School by the Dunedin Technical Classes Association.

Receipts.			Expenditure.		
	£	s. d.		£	s. d.
Balance at beginning of year ..	101	4 1	Salaries of instructors ..	1,339	0 0
Capitation on associated classes ..	1,009	3 8	Office expenses (including salaries, stationery, &c.) ..	138	2 2
Capitation on account of free places ..	371	13 7	Advertising and printing ..	64	14 0
Furniture, fittings, and apparatus ..	224	0 0	Lighting and heating ..	66	18 8
Material ..	52	8 8	Insurance and repairs ..	72	11 0
Subsidies on voluntary contributions ..	249	0 0	Rent ..	1	10 0
From Education Board on account of janitor ..	28	6 8	Material for class use ..	72	4 6
Fees ..	404	8 6	Janitor ..	86	0 0
Voluntary contributions ..	192	10 6	Water rates ..	6	2 0
			Furniture, fittings, and apparatus ..	392	10 6
			Balance at end of year ..	392	17 10
	<u>£2,632</u>	<u>10 8</u>		<u>£2,632</u>	<u>10 8</u>

GEORGE M. THOMSON, Chairman }
ANGUS MARSHALL, Secretary } of Managers.

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE OAMARU TECHNICAL CLASSES ASSOCIATION.

The Managers, on submitting their annual report, have to chronicle a fairly successful year, and are pleased to be able to say that the Association is now in possession of a school well equipped and conveniently adapted to the requirements of students. The number of students enrolled during the year was 556, and the number of classes was 44, but the Managers feel that greater advantage should be taken of the facilities offered for improvement, and hope that the coming year will see a further increase. Thanks are due to the Press for their assistance, to Mr. Forrester for various services, to the Middle School Committee for use of rooms, and to the examiners and supervisors. The Superintendent, Mr. John Scoon, has, as usual, done a vast amount of work during the year, and ungrudgingly gives his services, which the Managers duly appreciate. From the balance-sheet, embracing the period 13th February to 31st December, it will be seen that the receipts from all sources amount to £911 9s. 2d., and the expenditure £906 2s. 5d., leaving a balance to credit of £5 6s. 9d. with which to commence the coming year. The Managers heartily thank the public bodies who assisted financially in the upkeep of the classes, also the individual subscribers, without whose generous aid it would be impossible to carry on the work of the Association.

THOMAS WILLIAMSON, Chairman.

Statement of Receipts and Expenditure for the Year ending 31st December, 1907, in respect of Associated Classes conducted by the Oamaru Technical Classes Association.

Receipts.			Expenditure.		
	£	s. d.		£	s. d.
Balance at beginning of year ..	12	9 1	Salaries of instructors ..	414	3 6
Capitation on associated classes ..	216	15 7	Office expenses (including salaries, stationery, &c.) ..	40	0 0
Capitation on account of free places ..	68	14 3	Advertising and printing ..	39	10 8
Buildings ..	129	17 2	Lighting and heating ..	28	16 11
Rent ..	138	0 6	Insurance and repairs ..	2	17 6
Furniture, fittings, and apparatus ..	227	19 3	Rent ..	101	11 6
Material ..	48	11 3	Material for class use ..	10	6 3
Subsidies on voluntary contributions ..	55	9 6	Sundries ..	9	2 5
Fees ..	128	0 6	Cartage ..	3	10 2
Voluntary contributions ..	60	5 0	Refunds ..	2	2 5
Sundry petty receipts and refunds ..	11	8 6	Contracts (new buildings, additions, &c.) ..	129	17 2
			Furniture, fittings, and apparatus ..	310	4 11
			Balance at end of year ..	5	6 9
	<u>£1,097</u>	<u>10 2</u>		<u>£1,097</u>	<u>10 2</u>

T. WILLIAMSON, Chairman }
A. MCKINNON, Secretary } of Managers.

SOUTHLAND.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Training of Teachers.—The annual grant made by the Department for the training of teachers in the subjects of manual and technical instruction has again been judiciously expended. Saturday classes in the subjects of elementary agriculture, elementary geology, elementary physiology, and model, freehand, and brush drawing were organized at Invercargill and Gore, and were attended by a large proportion of the teachers whose location enabled them to visit these centres and return to their homes on the same day. Considerable interest was manifested in the subjects dealt with by the respective instructors, and there is warrant for believing that the results achieved will amply justify the expenditure incurred.

EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

We fully recognise the great advantages teachers have derived from the establishment of Saturday classes in nature-study, botany, and geology. We must nevertheless point out that these classes, however beneficial and inspiring to teachers, are poor substitutes at best for practical systematic training at university classes. The attainments of the students attending them are so diverse that no course, unless on the most elementary lines, can be suitable to all; the period of attendance is too short for the attainment of satisfactory knowledge and skill in the subjects taught; and the large size of the classes precludes the possibility of sufficient practical individual work. Still, situated as we are at present, it would be folly not to avail ourselves of the confessedly limited advantages conferred by these classes. We can only wait patiently but hopefully for the time when an improved system of training of teachers will be introduced which will render them no longer necessary.

And here it is fitting that we recognise the great benefit derived by the teachers of Southland from the course of lectures delivered during the winter months by Dr. Marshall, of Dunedin. The lectures, which dealt with the geology and physiography of Southland, were informative and stimulating; as a consequence, the interest in them was lively and sustained. The results of Dr. Marshall's visit are already manifesting themselves in the work of not a few of our schools.

During the year considerable progress has been made in that branch of school activity known as manual work. Most teachers now recognise that manual work is not so much an additional subject as one by which other subjects are illustrated and exemplified. We, therefore, now rarely find it treated as completely isolated and detached; in most cases, its correlation with other subjects

is satisfactory. In almost all the infant departments some form of handwork—usually paper-folding or paper-cutting—is taken up, and work of a cognate kind is taken by pupils in the lower standard classes. But it is only in the Gore, East Gore, Invercargill, and suburban schools that the course has been so organized and developed as to lead from paper cutting and folding in the junior classes through plasticine and cardboard modelling to woodwork in the upper classes. The value of the training in woodwork that the pupils receive under Mr. Brownlie is undoubted, and evidence is furnished as to its educational work by the interest it stimulates, the inventiveness it engenders, as well as by the dexterity it cultivates.

In the case of the girls in the upper classes in the schools mentioned above, cookery takes the place of woodwork for boys. Under the capable direction of Mrs. Turner, these girls study, in the school kitchen as an experimental laboratory the laws of health so far as these relate to the preparation of food, and acquire an expertness in the art of cookery and in at least some of the details of home management that cannot fail to make for the stability and happiness of family life. As in respect of woodwork, we greatly desire to see an extension of the opportunities now within reach of pupils for acquiring a knowledge of this indispensable branch of domestic science.

Twenty-two classes in elementary agriculture were in operation during the year, and in most of these fairly satisfactory work was accomplished. Both teachers and pupils evince an interest in the school gardens, and in some localities they receive the hearty sympathy and support of the parents. The instruction given in these classes will not make a pupil a farmer—it is not intended to do so; but if it succeeds—as undoubtedly it does succeed—in developing in him a love for the beautiful, and an intelligent interest in his environment; if it gives a practical direction to nature-study, and furnishes an elementary knowledge of agricultural processes by means of practical illustrations; if it cultivates a taste for rural occupations, and a bias towards country life, then the inclusion of elementary agriculture in our school curriculum is amply justified.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF TECHNICAL INSTRUCTION.

There are 172 schools in the Education District of Southland, and in 160 of them handwork in one form or other has now a place in the curriculum of the school. This is good. An expert writes, "It is universally recognised that to arouse interest one must promote activity: that 'to do is to know.' If in teaching a child one can make him actually do something himself, can guide him to create something really his own, then one has found a means surer than any other of arousing dormant and holding vagrant faculties, has opened a clear path to whatever capabilities a child may have, has established at least one point of contact between the trained individuality of the teacher and the, as yet, nebulous individuality of the growing child. In the old-fashioned curriculums, what opportunity for this important business of creativeness was offered? As a rule, but one avenue was presented—the avenue of literary creation, admittedly the most difficult of all arts. With manual training, however, the child is not compelled to lie to you and to himself by pretending to a literary power he cannot possess. One simply employs the natural instinct of the child to use his hands, one merely seizes upon that passion of most children to make something, one but leads into regulated channels the brimming enthusiasm of healthy youth for the bending and shaping of inanimate things." So says the Auckland Director of Technical Education, and with these sentiments I am in hearty accord. Just what channels are the best into which to direct this "brimming enthusiasm" has been the problem difficult of solution. Manual training when co-ordinated with literary or ordinary standard subjects is undoubtedly of the greatest value in the development of the reasoning and reflective powers, and if the school life could be lengthened every one of the many handwork subjects could be profitably employed by the teacher. The school life, if the child is to keep pace with the throng, being limited however in the meantime, demands that in the selection of the subjects for the training of the hand and eye only those that bear directly and at once on the ordinary standard pass work shall find a place on the syllabus. Consequently, with the passing of time and the growth of experience, a gradual elimination of the less useful branches has taken place, until at the present time paper-folding and plasticine modelling in the lower classes, and brush drawing and cardboard modelling in the middle and upper classes, are the subjects most generally taught. The reason of this is that paper-folding and cardboard modelling when rightly applied is an easy and perfect introduction to geometrical forms, to arithmetic, and to elementary physical measurements; while plasticine modelling and brush drawing is in the same way a splendid aid to freehand drawing in outline, to the drawing of objects in the mass, to the development of the imagination, and to the proper perception of form and colour. Nature-study, manual training, and literary research go hand in hand. The life of the pupil, directed into paths where the hidden beauties of nature are revealed, and where the why and the wherefore of things is made plain, under the wise and skilful guidance of the teacher, expands, grows, and becomes fruitful in the production of the perfect man. Such a consummation is worth striving for; such a consummation is being striven for now, and in the ordinary evolution of things we are entering into the more perfect light.

In the town and suburban schools, and in the Gore District High and East Gore Schools, woodwork and cookery for the boys and girls respectively were taught as formerly. Of the work done in these classes I can only speak in terms of satisfaction. Both instructors are earnest and enthusiastic in the performance of their duties, and the benefit derived by the pupils under their instruction is undoubtedly in direct proportion to the zeal of the teachers. An exhibit of work performed by the first-year pupils in the woodwork class was forwarded to the Christchurch International Exhibition, and in competition with the other centres of the Dominion was awarded a first-class order of merit. This after only a few months' instruction was creditable alike to the instructor and to the pupils.

Advanced needlework was taught to the girls in the upper standards in nineteen schools; physiology and first-aid classes were conducted in three schools; and instruction in swimming and life-saving was given in two schools. At Winton elementary botany was taken up, and in Riverton elementary physics found a place on the syllabus. Standard needlework classes in schools staffed by males only were conducted in only twenty-nine schools, as against forty during the year 1906. The reason of this is that a larger proportion of our smaller schools are now staffed by females, and where a female teacher is in charge of a school the teaching of sewing becomes a part of her ordinary duties. In some cases it has been found impossible to get any one to undertake the teaching of needlework, owing to the distance competent instructors reside from the school, and the small capitation payable on account of the work done. Still, nearly every girl in the district has received instruction in this most essential branch of domestic science.

In several of our larger schools elementary physical measurements and elementary agriculture have been introduced into the work of the upper standards. Experience has proved that in the elementary physical measurements classes the work attempted in many cases was of too advanced a character for primary-school work. This excess of zeal, for so in reality it was, on the part of the teachers is being modified somewhat, doubtless to the benefit of the pupils under instruction. The remarks of the Inspectors of Manual Instruction in their last annual report are worthy of careful consideration. *Inter alia*, they remark, "This branch of handwork can, if properly treated, be made to serve a very useful purpose as a factor in the all-round education of the child. The subject is one that can be efficiently taught in the ordinary class-room, and that does not call for anything in the way of elaborate equipment in the way of apparatus. It thus affords an excellent opportunity for enabling pupils attending primary schools (in most of which, unfortunately, but unavoidably, there is no provision in the way of laboratories) to gain some knowledge of elementary science at first hand. The subject is admittedly not an easy one to teach, entailing as it does a considerable amount of preparation on the part of the teacher; but we are confident that the results will be found to justify fully time and labour so spent. It seems necessary, however, to remind teachers that the educational value of the work of the pupils is very often in inverse proportion to the ground covered by them during the year. A few exercises and experiments thoroughly and carefully done will have far better results than a more ambitious course treated, perforce, in a hurried and incomplete manner. The too common mistake of attempting to cover too much ground in the time available for the work is probably due to some extent to the fact that certain of the text-books dealing with physical measurements err in precisely the same direction."

Elementary agriculture classes were conducted in thirteen schools. This is a most important subject, and should receive every attention at the hands of controlling authorities. New Zealand is too far removed from the centre of the world's population ever to become a great industrial nation. She must ever remain primarily a food-producing country, and it is essential that her inhabitants, in order to keep abreast of the other nations, should be trained to extract from the soil the largest possible quantity of food-material of the highest quality, at the least cost of labour, and with the least expenditure of soil-vitality. This is especially necessary because of the comparative isolation of these Islands, and the consequent heavy freights in transporting our products to the world's markets. In the school a beginning is made by implanting this knowledge in the minds of our senior scholars. In the school garden they see for themselves the effects of different soil-foods on different soils, they are trained to discriminate and to apply the necessary elements suited to the different soils to insure the best results, and they are thus educated to commune with the earth as it were as with a living thing, with certain knowledge that the earth will respond gladly to their earnest solicitations, and will yield them an abundant return. During the present year the number of schools in which this branch of instruction is given promises to be considerably increased, and every effort will be made to have the work systematized and made of the greatest practical value to the scholars and eventually to the State.

Teachers' Training Classes.—In order that our teachers, on whom depend the implanting of the principles of the new education into the minds of our young people, may be better fitted to discharge their duties, Saturday training classes were again held during the year in agriculture, elementary geology, and nature-study, brush drawing, blackboard drawing, physiology and first aid, and physical drill, under the instruction of trained experts. These classes were well attended, and considerable interest in the work of each class was manifested by all the teachers. Especially was this the case in the geology class, which was conducted by P. Marshall, M.A., D.Sc., of the Otago University. No less than 226 teachers of all grades attended, and the opinion was unanimously expressed that the lectures were of the greatest value to all who had the privilege of being members of the class. At Gore classes were also held in agriculture, brush drawing, blackboard drawing, and physical drill.

Technical Instruction.—(a.) Invercargill: The evening classes held in Invercargill were attended in larger numbers than in any previous year. The number of students in the first and second terms respectively was 603 and 598, as against 539 and 489 in the same terms last year, an increase of sixty-four in the first term and 109 in the second term. This is very gratifying, and shows that the classes have lost none of their interest to the students, that the work sought to be accomplished is considered to be valuable and effective, and that the establishment of the classes has supplied a pressing want in the community. It is also gratifying to note that several of the students of this year have been students of former years, thus showing by their presence that the class instruction is deemed to be of a high standard. It must be borne in mind that the number of students attending the classes, although given as 603 and 598 respectively, does not represent the number of individual students, but the number on the class rolls. The actual number of individual students is really 348—viz., 256 ordinary and ninety-two free. As all the free students are bound to attend at least three classes, and some of them attend four, the larger figures representing the

roll-numbers are thus accounted for. The classes conducted were much the same as those of last year. Twenty-six classes were carried on successfully, although the number in attendance at the machine-construction and French classes hardly justified their existence. The machine-construction class was at one time one of our most successful classes, but with the partial collapse of the gold-dredging industry, and the pushing methods of the American schools of correspondence, the class has well-nigh gone out of existence. It is a class, however, that may revive at any time. The French class has always been a difficult one to organize. It has been placed on the syllabus year after year, but students have always been found wanting. This year, with the advent of Mr. J. P. Dakin, B.A., second assistant at the Boys' High School, who is a French scholar of exceptional ability, it was thought that new life would be infused into the class. The daily papers were utilised to "boom" the class as far as possible, and, as a result, eight students came forward and enrolled, but the attendance so fell away that it was found almost impossible to keep the class going for the second term. Two classes for building-construction were successfully carried on this season—one in architectural drawing and detail work, the other in practical bench-work. The Builders' Association took a great interest in these classes, and gave a donation of £12 10s. towards the purchase of the necessary tools for the students, and also gave a donation of £1 1s. as a prize to the most efficient student at the close of the season. This practical acknowledgment of the value of the classes on the part of the Builders' Association was a very encouraging feature.

A considerable sum of money has been spent in the equipment of the plumbing-room for the study and practice of sanitary plumbing, but this class has never been as successful as the importance of the subject demands. On the whole, the work of the classes may be described as satisfactory. There is considerable difficulty in dealing with the free students. These, according to the regulations, have to attend not less than three classes, of which English and arithmetic or mathematics must form two. Quite a number of the students—younger ones particularly—attend these two classes rather unwillingly, in order that they may obtain free tuition at the third class, the one they are at liberty to select for themselves, and, therefore, as a rule, the class in which they are the most interested. I have, however, to say that the teachers have ever assisted most willingly in seeing that the regulations concerning these students have been complied with. Nor has there been one single hitch in connection with the staff during the whole season. They have carried out their duties in a manner which has given me every satisfaction, and thanks are due to them on that account. The literary and commercial classes have been specially overlooked by Inspectors Hendry and Wyllie, who have ever manifested increasing interest in the work of the school.

(b.) Gore, Bluff, and Mataura: Early in the year, at the invitation of local residents, I addressed public meetings at Gore, Bluff, and Mataura, and assisted as far as possible in the establishment of the evening classes. At all three places the work was most enthusiastically taken up by the local Committees, and the results have exceeded all expectations. At Bluff, eleven classes were organized with 259 names on the rolls, 46 of these being free students. The classes carried on were applied mechanics, machine-construction, carpentry, wood-carving, dressmaking, free-hand and model drawing, painting, English, arithmetic, shorthand, and book-keeping. Several local residents contributed liberally to the support of the classes. At Gore, ten classes were conducted—viz., freehand and model drawing, mechanical drawing, architectural drawing, carpentry, cookery, dressmaking, English, arithmetic, shorthand, and book-keeping. These classes had 247 names on the rolls, 39 of the students being on the free list. The Borough Council generously donated £25 towards the support of the classes. Both at Gore and Bluff the classes were conducted during two terms of ten weeks each. At Mataura, although somewhat later in the season, nine classes were established, with 109 names on the rolls, including 8 free-place students. The classes conducted at this centre were mechanical drawing, photography, dressmaking, physiology and first aid (males), physiology and first aid (females), English, arithmetic, singing, and book-keeping. The classes were all carried on during one term of ten weeks; two were carried on for an additional half-term, and one for an additional whole term. Of course, it is hardly to be expected that in future years the numbers quoted above will be maintained, as it is often the case that more than normal interest is created among students in any subject for the first year, but at all these centres technical classes have now been established, I believe, for good. The local Committees worked wholeheartedly in the interests of technical education, and deserve the heartiest commendations for their disinterested labours.

(c.) Other centres: I also visited Riverton and Winton in the interests of technical education, and addressed meetings at these towns, but sufficient students were not found to enable classes to be held at either place. At Queenstown and Oreti Plains, however, classes in vocal music were established, and were conducted with considerable success, the roll-numbers being twenty-five and twenty-seven respectively.

Examinations in art subjects under the South Kensington Board of Education, and in technological subjects under the City and Guilds of London Institute, were held locally in the months of June and July last. The number of passes was as follows:—South Kensington: Freehand drawing—First class 2, second class 8; model-drawing—first class 1, second class 1; practical plane and solid geometry, stage 1—second class 1; building construction and drawing—stage 1, first class 1, stage 2, first class 1; machine construction and drawing—stage 1, second class 1. City and Guilds of London Institute: Manual training in woodwork, teachers' final—first class 1.

The year 1907, in regard to technical education in the Southland District, is a record one. It is an easy matter to quote statistics and enumerate the usual details of the work attempted, but of the value of the work accomplished it is impossible definitely to speak. Though much has been attempted, I am aware that much remains yet to be done. There is room for improvement in many directions, and it shall be my duty as far as possible in the future to aim at more thoroughness of work and to instil into the minds of all concerned a higher ideal to which to aspire, so that greater

progress and efficiency may be secured. I have to acknowledge the fairness with which the central Department at Wellington met all claims for grants and capitation which were made during the year. I have also to acknowledge with gratitude the kindly consideration shown by the teachers and by all others concerned while engaged in carrying out the duties of my office.

Balance-sheet for the Year ending 31st December, 1907.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance from year 1906	494	12 2	Central Account—		
Central Account—			Salaries of instructors	375	7 9
Students' fees.. ..	143	8 0	Material and apparatus	105	7 9
Capitation—			Furniture and fittings	68	16 9
Special and continuation classes ..	178	17 6	Advertising and printing	28	8 6
Junior free places	114	6 0	Rent of section	5	0 0
Teachers' training	209	14 6	Janitor and lighting	40	2 10
Grant for material	9	13 8	Administration	23	11 2
Donations	13	11 0	Country Continuation Account—		
Refunds	13	8 11	Capitation paid to teachers	12	16 1
Country Continuation Account—Capitation	12	16 1	School Technical Account—		
School Technical Account—			Salaries of instructors	321	12 10
Capitation	617	16 10	Material	111	11 5
Grant for rent	32	10 0	Apparatus	285	17 6
Grant for apparatus	89	10 0	Furniture and fittings	10	9 0
Refund for material	96	0 0	Rent	32	10 0
Voluntary contributions and prizes ..	2	3 0	Conveyance of children (bus)	19	10 8
School Standard Account—			Prizes	1	15 0
Capitation	315	5 10	Janitor	11	12 0
Needlework capitation	210	9 9	Administration	23	11 2
Teachers' Training Account—			School Standard Account—		
Refund for material	7	0 6	Material	295	4 9
Gore Account—			Needlework salaries	214	12 3
Students' fees	65	0 0	Administration	47	2 4
Capitation—			Teachers' Training Account—		
Special and continuation classes ..	53	10 3	Salaries of instructors	149	16 10
Junior free places	33	16 6	Material and apparatus	14	15 8
Bluff Account—			Janitor	1	0 0
Capitation—			Gore Account—		
Special and continuation classes ..	71	1 3	Salaries of instructors	138	0 0
Junior free places	66	9 6	Bluff Account—		
Mataura Account—			Salaries of instructors	144	5 0
Students' fees.. ..	31	14 6	Furniture (machine)	5	0 0
Capitation—			Mataura Account—		
Special and continuation classes ..	37	15 3	Salaries of instructors	68	19 6
Junior free places	6	19 6	Printing and advertising	1	1 0
			Balance	369	12 9
	<u>£2,927</u>	<u>10 6</u>		<u>£2,927</u>	<u>10 6</u>

W. A. McCaw, Director.

Approximate Cost of Paper.—Preparation, not given; printing (3,750 copies, including maps, &c.), £78 6s. 6d.

By Authority: JOHN MACKAY, Government Printer, Wellington.—1908.

Prices 1s. 9d.]