1905.

NEW ZEALAND.

EDUCATION:

MANUAL AND TECHNICAL INSTRUCTION.

[In continuation of E.-5, 1904.]

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

No. 1.

EXTRACT FROM THE TWENTY-EIGHTH ANNUAL REPORT OF THE MINISTER OF EDUCATION.

A REVIEW of the year's work shows that considerable progress has been made by controlling authorities throughout the colony in the direction of improving existing arrangements and providing additional facilities for instruction in subjects of technology and of manual training. There is now no education district in which some provision, more or less adequate, has not been made for such instruction, and there are indications that in those districts in which the movement is most recent the local authorities interested in the matter will have no reason to regard their efforts as other than encouraging. Where it has been found that there was a well-grounded demand for instruction, the Government has provided the necessary funds for the equipment and maintenance of classes, as well as for buildings where the circumstances rendered special accommodation necessary. In many cases, local bodies and others have shown their interest in the work in a practical manner by contributing to the funds of the classes. Coincident with this evidence of local effort is an increase in the number of associated classes, that is to say, classes for technical instruction conducted in conjunction with the controlling authority by managers representing the various contributing bodies. There is little reason to fear that classes established on these lines are likely to prove other than successful.

The number of technical, continuation, and school classes recognised during 1904 was 2,599, as against 2,287 for the previous year. Of the classes for 1904, 2,001 were classes for handwork in connection with over 700 primary and secondary schools, while 598 were special, associated, or college classes for instruction in the several branches of pure and applied art and science, and in plumbing, carpentry and joinery, cookery, dressmaking, and commercial subjects. While the actual number of technical classes was not greatly in advance of that for 1903, the returns show a great increase in the average attendance at them. For 1903 the average attendance was about 6,300, and for 1904 about 13,700. Technical classes are held at about fifty different places.

In many of the public schools all the standards received instruction in some one or other of the branches of handwork. In several districts arrangements have been made whereby the older pupils in the city and suburban schools receive instruction in woodwork and cookery. During the year, 156 cookery classes and 129 woodwork classes were in operation, while, at the technological examinations of the City and Guilds of London Institute, 102 public-school teachers passed the examina-

tions in cookery and eighty-seven in woodwork. In only one education district were school classes for instruction in dairying established. Increased attention is being given to practical instruction in elementary agriculture in primary schools. During the year forty-seven classes in six education districts were working under the Act as against thirty-six for 1903. It is to be regretted that there is not more evidence of a definite movement on the part of controlling authorities to arrange for the regular instruction in country districts of school-children, as well as of those who have left school, in subjects having a direct bearing on rural pursuits. With the co-operation and help of local bodies interested in agricultural and pastoral matters controlling authorities should be able to see their way to arrange for suitable courses at convenient centres. If the classes were brought under the Act, subsidy would be payable on the contributions of local bodies and others, and the classes would be eligible for capitation and for grants in aid of the necessary apparatus and material. The funds available from these and other sources, such as the fees of students, should suffice for the efficient carrying-on of the classes. As far as the training of the teachers of country schools is concerned, there would seem to be no reason why Education Boards should not devote a proportion of the grants they receive each year for the training of teachers in subjects of manual and technical instruction to the maintenance of training-classes in rural science. In the case of the smaller education districts co-operation on the part of the Boards should enable such classes to be placed on a satisfactory footing.

There has been a considerable increase in the number of persons receiving free instruction under the regulations for technical scholarships. During the year 852 scholars received free instruction at ten technical schools. In not a few cases definite courses of work have been entered upon, and there are indications that there will be a substantial increase next year, not only in the number of free scholars, but also in the number of technical schools giving free instruction along definite lines.

The total expenditure on manual and technical instruction for 1904 was £27,425 1s. The details are as follows: Capitation on all classes, £11,801 12s. 6d.; grants for buildings and equipment, £9,255 17s. 2d.; grants for material for class use, £798 6s. 9d.; subsidies on voluntary contributions, £1,175 10s. 10d.; technical training of teachers, £1,853; railway fares of instructors and students, £364 2s. 9d.; expenses in connection with the examination of the Board of Education, South Kensington, and of the City and Guilds of London Institute, £518 12s. 4d.; inspection, £978 15s. 3d.; scholarships, £634 14s. 2d.; sundries, £44 9s. 3d. The sum of £107 2s. 6d. was recovered by way of examination fees and from sale of material used at examinations, leaving a net expenditure of £27,317 18s. 6d.

TABLE A.—MANUAL AND TECHNICAL INSTRUCTION, 1904.—SPECIAL, ASSOCIATED, AND COLLEGE CLASSES.

School or Classes.	Number of Classes.	Subjects of Instruction, and Average Attendance.																			Payments up to 31st December, 1904.									
		Freehand (from the Flat and Round), Light and Shade.	Plane and Solid Geometry, Perspective, Practical Geometry.	Design and Ornament.	Drawing, Modelling, and Painting from Antique and Nature.	Architecture and Building-construction.	Mechanical Drawing and Machine-construction.	Practical Mechanics and Mathematics, Surveying.	Mechanical and Electrical Engineering.	Experimental and Natural Science (Chemistry, Physics, Botany, Photography).	Woodwork and Ironwork.	Wood-carving, Modelling, and *Repoussé* Work.	Carpentry and Joinery, Cabinetmaking, Painters' and Decorators' Work, Coachbuilding.	Plumbing and Tinsmiths' Work, Iron and Brass-moulding.	Cookery and Laundry-work, Dressmaking, Tailoring.	Wool-sorting.	Commercial Subjects.	English, Latin, French, German, Maori, Arithmetic.	Singing and Elocution.	Training-classes for Teachers in Elementary Handwork.	Training-classes for Teachers in Drawing.	Totals.	Capitation.			Junior Technical Scholarships.			Grants for Buildings, Furniture, and Apparatus.			Grants for Material.			Pound-for-Pound Subsidy on Voluntary Contributions.		
																						£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Auckland Education Board—																																		
Technical School, Auckland	66	..	67	..	..	16	34	72	17	67	76	..	49	93	88	..	57	33	..	..	142	811	486	8	7	..			868	5	3	20	0	3	23	9	0
Technical Classes, Thames	10	..	..	..	..	..	..	15	..	..	..	..	..	..	..	..	312	..	..	..	..	327	69	18	3	56	11	8	84	2	6	..			..		
Continuation Classes, Orere	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..	4	..			..			..			..			..		
"Elam" School of Art	17	354	32	..	54	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	440	495	16	6	..			32	9	9	..			150	0	0
Taranaki Education Board—																																		
Technical classes, New Plymouth ..	9	..	..	..	..	..	..	..	..	193	30	..	..	22	22	..	..	..	70	104	..	441	80	16	6	..			8	17	6	8	6	1	..		
" Stratford	8	..	..	..	..	..	..	..	..	..	..	23	9	27	31	..	39	..	..	..	..	129	13	12	0	..			1,096	1	5	7	13	2	..		
Wanganui Education Board—																																		
Technical School, Wanganui	39	72	28	..	16	11	11	..	..	175	18	52	9	21	..	..	87	61	..	231	4	796	237	10	1	..			33	2	10	52	15	4	14	4	0
" Palmerston North ..	18	50	10	12	10	2	4	..	..	25	20	17	..	..	..	..	5	..	..	..	..	155	111	18	3	..			..			2	8	5	..		
" Hawera	10	22	3	..	4	..	..	..	..	7	..	18	..	..	23	..	16	..	..	..	..	93	42	7	3	..			..			1	10	10	..		
Technical classes, Eltham	3	..	..	..	..	..	..	..	..	..	..	12	..	..	..	..	..	..	..	..	..	12	4	5	6	..			..			..			..		
" Hunterville	3	..	..	..	..	..	..	..	..	..	..	16	..	..	..	..	..	..	..	..	..	16	7	9	8	..			..			..			..		
" Marton	4	..	..	..	..	..	..	..	..	..	..	14	..	..	..	..	..	..	..	..	..	14	4	13	9	..			..			..			..		
Wellington Education Board—																																		
Technical School, Wellington	48	54	52	43	106	29	49	40	31	..	..	55	74	104	28	..	140	90	..	..	187	1,082	705	18	2	12	1	0	552	7	1	150	15	1	125	0	0
Technical classes, Wellington	1	..	..	..	..	..	..	..	..	55	..	..	..	..	..	..	..	..	..	..	..	55	..			..			19	5	0	..			..		
" Masterton	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	34	37	71	16	5	0	..			1	10	0	..			..		
" Carterton	1	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	10	10	9	..			..			..			8	17	6
" Pahiatua	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13	26	39	4	10	1	..			1	15	10	..			..		
" Greytown	1	..	..	..	..	..	..	..	..	..	..	5	..	..	..	..	..	..	..	..	..	5	..			..			..			..			..		
Petone Technical Classes Association ..	7	..	..	..	..	..	8	..	..	..	..	..	21	..	21	..	13	30	..	..	..	93	..			..			66	9	9	..			166	17	9
Masterton Technical Classes Association ..	15	25	..	..	15	8	..	..	..	..	18	12	13	12	..	..	27	22	..	..	..	152	103	6	9	..			15	4	0	11	2	4	76	13	1
Hawke's Bay Education Board—																																		
Technical School, Napier	11	17	..	16	10	3	..	..	..	..	28	..	..	20	15	..	71	..	..	..	45	225	176	15	10	23	16	6	108	10	6	34	1	6	20	0	0
Technical classes, Hastings	3	..	..	..	..	..	..	..	..	..	..	..	11	..	8	..	12	..	..	..	..	31	12	15	2	..			274	15	9	..			..		
" Dannevirke	6	8	..	..	24	..	..	..	..	..	..	..	..	12	..	..	34	..	..	..	14	92	40	4	7	..			30	15	0	14	2	1	45	0	0
Board of Governors, Gisborne High School—																																		
Technical classes	8	..	..	..	..	..	8	..	..	..	16	..	..	20	20	..	29	44	..	..	..	137	33	1	0	..			990	9	6	..			..		
Marlborough Education Board—																																		
Technical classes, Blenheim	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	36	40	76	..			..			..			..			..		
" Havelock	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	6	..			..			..			..			..		
Continuation classes, Saratoga ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..			..			..			..			..		
Nelson Education Board—																																		
Technical classes, Nelson	8	..	..	..	..	..	..	..	..	..	16	..	..	..	38	..	51	..	..	..	60	165	63	11	0	..			11	10	0	..			..		
" Westport	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	33	53	5	15	0	..			5	0	0	..			..		
" Reefton	1	..	..	..	..	..	..	..	..	..	..	..	..	..	21	..	..	..	..	..	..	21	..			..			11	4	0	..			..		
Grey Education Board—																																		
Technical classes, Greymouth	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	55	83	138	17	13	9	..			16	2	6	..			..		

TABLE A.—MANUAL AND TECHNICAL INSTRUCTION, 1904—*continued*.

School or Classes.	Number of Classes.	Subjects of Instruction and Average Attendance.																				Payments up to 31st December, 1904.				
		Freehand (from the Flat and Round), Light and Shade.	Plane and Solid Geometry, Perspective, Practical Geometry.	Design and Ornament.	Drawing, Modelling, and Painting from Antique and Nature.	Architecture and Building-construction.	Mechanical Drawing and Machine-construction.	Practical Mechanics and Mathematics, Surveying.	Mechanical and Electrical Engineering.	Experimental and Natural Science (Chemistry, Physics, Botany, Photography).	Woodwork and Ironwork.	Wood-carving, Modelling, and *Repousse* Work.	Carpentry and Joinery, Cabinetmaking, Painters' and Decorators' Work, Coachbuilding.	Plumbing and Tinsmiths' Work, Iron and Brass Moulding.	Cookery and Laundry-work, Dressmaking, Tailoring.	Wool-sorting.	Commercial Subjects.	English, Latin, French, German, Maori, Arithmetic.	Singing and Elocution.	Training-classes for Teachers in Elementary Handwork.	Training-classes for Teachers in Drawing.	Totals.	Capitation.	Junior Technical Scholarships.	Grants for Buildings, Furniture, and Apparatus.	Grants or Material.	Pound-for-Pound Subsidies on Voulntary Contributions.
Westland Education Board—																						£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Technical classes, Hokitika	1	..	..	..	..	..	..	..	..	30	..	..	..	..	..	..	..	..	..	..	..	30	18 4 0	..	..	..	..
" Kumara	1	..	..	..	..	..	..	..	..	..	44	..	..	..	..	..	..	..	..	..	..	44	83 9 2	..	10 1 0	..	..
Board of Governors, Canterbury College—																										
School of Art, Christchurch	58	172	96	55	129	60	..	..	..	..	..	33	34	..	..	..	..	..	..	3	117	699	373 4 0	..	..	4 10 11	..
School of Engineering, Christchurch	39	85	87	..	..	..	161	76	273	44	..	..	..	..	..	..	..	..	..	..	..	726	221 3 0	..	302 0 0	198 0 0	..
School of Domestic Instruction, Christchurch	11	..	..	..	..	..	..	..	..	..	..	..	..	..	163	..	..	..	..	..	..	163	104 5 6	..	43 0 0	104 10 10	..
North Canterbury Education Board—																										
Christchurch Technical Classes Association	41	..	27	..	..	..	..	..	..	..	..	..	60	22	107	13	436	240	..	..	..	905	435 5 3	142 19 6	390 7 4	42 14 9	265 15 0
Technical classes, Normal School, Christchurch	4	..	..	..	..	..	..	..	..	..	14	..	..	..	..	..	..	..	..	224	41	279	63 17 0	..	..	..	..
Technical classes, Ashburton	4	..	..	..	..	..	..	..	..	..	9	..	..	..	43	..	..	..	..	..	..	52	5 7 6	..	..	..	..
Kaiapoi	10	..	..	..	..	..	..	..	..	..	16	20	..	..	123	14	17	28	..	..	..	218	55 17 6	..	161 8 11	..	..
Leeston and Doyleston	3	..	..	..	..	..	..	..	..	..	21	..	..	..	21	..	..	..	..	..	..	42	65 17 9	..	5 0 0	..	..
" Southbridge	1	..	..	..	..	..	..	..	..	..	..	..	..	..	19	..	..	..	..	..	..	19	36 4 6	..	5 0 0	..	..
" Lincoln	1	..	..	..	..	..	..	..	..	..	..	..	..	..	13	..	..	..	..	..	..	13	..	..	..	..	..
Continuation classes, West Christchurch School	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	153	..	..	..	..	153	..	..	..	..	..
Lyttelton associated classes	3	..	..	..	..	..	..	..	..	..	..	..	..	..	48	..	..	..	..	..	..	48	23 0 0	..	45 0 0	..	..
Rangiora "	2	..	..	..	..	..	..	..	..	..	..	..	..	..	36	..	..	..	..	..	..	36	32 13 3	..	14 5 1	..	..
South Canterbury Education Board—																										
Timaru Technical Classes Association	23	..	16	..	15	28	..	..	..	62	53	15	..	..	84	..	127	53	..	27	..	480	59 6 6	..	1,225 17 8	..	33 12 0
Waimate " "	14	..	..	..	..	..	..	..	..	67	24	..	..	..	80	..	203	48	..	..	..	422	28 0 5	..	692 10 5	..	17 6 0
Temuka " "	8	12	..	..	..	..	..	..	..	19	..	..	..	..	47	14	67	33	..	..	..	192	144 1 6	66 19 3	..	..	29 6 0
Technical classes, Timaru	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	40	40	24 15 6	..	..	..	..
" Waimate	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	27	37	23 17 5	..	..	..	..
Otago Education Board—																										
School of Art, Dunedin	53	277	150	46	110	15	12	..	..	..	..	..	..	..	..	..	..	..	..	..	10	620	364 16 6	..	177 8 11	..	..
Technical School, Dunedin	52	..	..	..	..	..	..	36	31	151	20	22	36	34	270	..	506	418	28	..	145	1,697	433 4 5	304 12 9	128 6 10	93 16 0	155 5 0
Technical classes, Dunedin	3	..	..	..	..	..	..	..	..	88	..	..	..	..	..	..	..	..	..	84	..	172	167 16 9	..	..	..	..
" Port Chalmers	2	..	..	..	..	..	..	..	..	..	..	..	..	..	33	..	..	..	..	..	..	33	8 16 0	..	..	..	..
" Oamaru	1	..	..	..	..	..	..	..	..	..	..	..	..	..	22	..	..	..	..	..	..	22	9 2 6	..	..	..	..
" Kaitangata	6	..	..	..	..	..	2	..	..	20	..	..	..	..	20	..	10	..	..	..	..	52	37 18 2	..	381 7 6	4 17 11	12 6 6
" Mosgiel	2	..	..	..	..	..	..	..	..	..	..	..	..	..	51	..	..	..	..	..	..	51	22 6 3	..	..	..	..
Southland Education Board—																										
Technical School, Invercargill	26	19	..	..	5	11	5	..	..	99	32	7	8	8	129	..	76	64	..	57	79	599	72 10 9	27 13 6	57 18 11	38 1 1	22 3 0
Technical classes, Gore	2	..	..	..	..	..	..	..	..	..	19	..	..	..	14	..	..	..	..	..	..	33	2 14 0	..	40 8 1	9 0 2	..
" Mataura	4	..	..	..	..	..	5	..	..	..	..	..	..	..	8	..	8	9	..	..	..	30	3 6 0	..	0 10 0	..	10 2 0
Country continuation classes	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	110	..	..	..	110	22 16 9	..	..	..	..
Totals	598	1,174	568	172	498	183	299	239	352	1,102	474	321	324	395	1,646	41	2496	1288	98	904	1,130	13,704	5,689 1 3	634 14 2	7,908 8 10	798 6 9	1175 10 10

TABLE B.—MANUAL AND TECHNICAL INSTRUCTION, 1904.—SCHOOL CLASSES.

Controlling Authority.	Subjects of Instruction and Number of Classes in each Subject.																Payments up to 31st December, 1904.	
	Total Number of Schools.	Elementary Handwork.	Drawing in Light and Shade (Blackboard Drawing).	Elementary Design and Colour Work.	Cookery.	Dressmaking.	Needlework.	Woodwork.	Chemistry.	Physics.	Botany.	Elementary Agriculture.	Ambulance and First-aid.	Swimming and Life-saving.	Dairying.	Total Number of Classes.	Capitation.	Grants for Buildings, Furniture, and Apparatus.
																	£ s. d.	£ s. d.
Education Board, Auckland ..	79	205	1	15	47	..	19	43	..	..	..	..	3	1	..	334	1,066 19 5	85 18 2
Education Board, Taranaki ..	36	83	3	9	..	..	8	2	..	3	3	..	2	..	1	114	236 19 7	228 2 0
Board of Governors, High School, New Plymouth	1	..	..	2	..	1	..	..	..	..	..	..	..	..	..	3	16 5 0	..
Education Board, Wanganui ..	81	119	9	9	6	1	29	16	1	1	..	13	2	1	..	207	312 10 1	439 0 6
Board of Governors, High School, Palmerston North	..	..	..	..	3	..	..	3	..	2	1	2	1	..	..	12	..	..
Education Board, Wellington ..	96	192	5	18	34	2	19	..	2	..	..	8	2	..	..	282	720 13 7	218 7 5
Board of Governors, Wellington College and Girls' High School—																		
Girls' High School	1	..	3	1	..	..	..	..	..	..	5	..	..	..	..	9	29 0 0	..
Education Board, Hawke's Bay ..	20	45	2	16	..	4	2	2	1	..	..	2	5	1	..	80	181 16 11	36 13 6
Education Board, Marlborough ..	9	5	..	..	..	..	4	..	..	..	..	..	2	..	..	11	12 1 9	7 13 7
Education Board, Nelson ..	41	51	..	..	6	2	16	2	..	..	..	..	12	6	..	95	291 9 5	64 17 5
Board of Governors, Nelson Colleges—																		
Boys' College	1	..	..	..	..	..	..	1	3	..	..	..	..	..	..	4	..	..
Girls' College	1	..	..	..	4	..	..	..	..	..	..	..	..	..	..	4	53 4 3	..
Education Board, Grey.. ..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	3 19 9	..
Education Board, Westland ..	11	14	..	..	..	..	1	1	..	..	..	..	..	..	..	16	21 16 10	23 3 9
Education Board, North Canterbury	111	209	..	1	17	1	30	26	..	..	..	..	..	20	..	304	981 15 10	45 6 10
Board of Governors, Canterbury College—																		
Boys' High School	1	..	..	..	..	..	..	3	1	1	..	..	..	..	..	5	34 10 0	..
Girls' High School	1	..	3	..	2	2	..	..	..	2	3	..	..	1	..	13	33 11 8	..
Board of Governors, Ashburton High School	1	..	..	..	..	..	2	2	..	..	..	..	..	..	..	4	28 13 4	..
Education Board, South Canterbury	41	52	..	1	3	3	21	3	..	..	3	..	..	3	..	89	208 10 5	12 11 11
Board of Governors, Timaru High Schools—																		
Boys' High School	1	..	..	..	..	..	..	2	..	..	..	..	..	1	..	3	28 10 0	69 7 4
Girls' High School	1	..	..	..	2	2	..	..	..	..	3	..	..	..	..	7	18 10 0	1 15 0
Education Board, Otago ..	67	52	..	..	19	..	28	16	1	..	..	21	..	3	..	140	942 0 3	38 15 7
Board of Governors, Otago High Schools—																		
Girls' High School	1	..	..	..	3	..	..	..	..	..	..	..	..	..	..	3	120 15 0	..
Education Board, Southland ..	120	184	..	2	7	..	41	7	1	..	..	1	4	..	..	247	715 10 8	75 15 4
Board of Governors, Southland High Schools—																		
Boys' High School	1	..	..	..	..	..	..	..	2	..	..	..	..	2	..	4	53 7 6	..
Girls' High Schools	1	..	2	..	3	..	..	..	..	..	2	..	2	2	..	11		
Totals	725	1,221	28	74	156	18	221	129	12	9	20	47	35	41	1	2,001	6,112 11 3	1,347 8 4

TABLE C.—SUMMARY OF EXPENDITURE BY GOVERNMENT ON MANUAL AND TECHNICAL INSTRUCTION FOR THE YEAR ENDING 31ST DECEMBER, 1904.

	£ s. d.	£ s. d.
Capitation		11,801 12 6
Subsidy of £1 for £1 on contributions		1,175 10 10
Grants—		
Buildings and apparatus	9,255 17 2	
Class material	798 6 9	
		10,054 3 11
Training of teachers—		
Auckland Education Board	578 0 0	
Taranaki "	100 0 0	
Wanganui "	150 0 0	
Wellington "	200 0 0	
Hawke's Bay "	150 0 0	
Nelson "	125 0 0	
Grey "	75 0 0	
Westland "	150 0 0	
South Canterbury "	125 0 0	
Otago "	200 0 0	
		1,853 0 0
Railway fares of instructors of training-classes		241 15 8
" students attending registered classes		122 7 1
Expenses in connection with examinations—		
Science and Art, Board of Education, South Kensington	167 16 0	
City and Guilds of London Institute	350 16 4	
		518 12 4
Inspectors—		
Salaries	716 13 4	
Travelling-expenses	262 1 11	
		978 15 3
Scholarships		634 14 2
Mounts, &c., for plaster casts		19 11 0
Publications, &c.		20 2 8
Sundries		4 15 7
		£27,425 1 0
Less recoveries (examination fees, £105 2s. 6d.; proceeds of sale of material used at examination, £2)		107 2 6
Total		£27,317 18 6

TABLE D.—EXPENDITURE BY EDUCATION BOARDS AS CONTROLLING AUTHORITIES OF SCHOOL, SPECIAL, AND ASSOCIATED CLASSES, FOR THE YEAR ENDING 31ST DECEMBER, 1904.

	On Maintenance of Classes (*e.g.*, Expenditure out of Capitation, Voluntary Contributions, Subsidies, Fees, &c.)			On Material for Class-work.	
	School Classes.	Special Classes.	Associated Classes.	Special Classes.	Associated Classes.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Auckland	1,924 1 8	1,057 13 1	..	137 5 3	101 4 9*
New Plymouth	130 8 11	231 13 0	..	63 3 2	..
Wanganui	615 9 1	988 10 10	..	72 8 2	..
Wellington	625 8 7	1,333 14 3	..	..	89 7 6
Hawke's Bay	259 15 4	380 4 9	..	65 17 9	..
Marlborough	9 19 3	..	..	..	..
Nelson	302 13 6	128 19 0	..	7 0 11	..
Greymouth	3 19 9	90 3 6	..	19 15 6	..
Hokitika	14 12 6	145 1 2	..	..	..
Christchurch	288 19 6	229 0 7	1,490 6 2	65 8 4	42 14 9
Timaru	196 6 6	138 8 0	378 5 8	..	..
Dunedin	844 12 10	1,006 5 1	570 7 0	76 13 7	93 16 0
Invercargill	589 19 7	532 1 3	..	114 3 10	..

	On Buildings.					
	School Classes.		Special Classes.		Associated Classes.	
	Buildings.	Furniture, Fittings, and Apparatus.	Buildings.	Furniture, Fittings, and Apparatus.	Buildings.	Furniture, Fittings, and Apparatus.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Auckland	46 10 8	69 2 8	218 17 10	996 19 2	..	..
New Plymouth	366 19 11	225 14 5	21 4 6	93 10 11	..	..
Wanganui	..	835 16 5	54 15 4	140 15 1	..	..
Wellington	..	334 5 11	..	..	40 0 0	465 2 3
Hawke's Bay	176 13 6	134 5 6	117 4 3	61 11 3	..	..
Marlborough	..	..	..	..	..	..
Nelson	..	82 9 3	..	40 2 6	..	..
Greymouth	..	..	..	..	..	..
Hokitika	..	29 14 9	..	20 16 7	..	..
Christchurch	..	171 2 6	25 10 0	164 2 5	218 13 0	230 19 5
Timaru	..	46 18 11	9 15 0	28 0 1	1,400 0 0	500 8 1
Dunedin	..	242 15 8	..	200 14 5	287 14 6	154 11 5
Invercargill	..	204 11 0	56 18 6	81 8 4	..	..

* School classes.

TABLE E.—EXPENDITURE BY EDUCATION BOARDS FOR THE YEAR ENDING 31ST DECEMBER, 1904, IN RESPECT OF RECOGNISED PUBLIC-SCHOOL CLASSES FOR INSTRUCTION IN VARIOUS BRANCHES OF HANDWORK.

Education Board.	Subjects of Instruction.																																							
	Elementary Handwork (Brush Drawing, Modelling, &c.)			Elementary Agriculture.			First Aid and Ambulance.			Swimming and Life-saving.			Cookery.			Woodwork.			Dairy-work.			Dressmaking.			Needlework.			Science.			Total.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Auckland ..	489	11	10	..			11	0	0	3	10	0	..			..			..			..			98	15	0	..			602	16	10
Wanganui ..	298	1	2	142	12	11	4	17	6	14	0	0	122	13	0	563	7	7	..			5	0	0	144	19	5	131	15	7	1,427	7	2
Taranaki ..	127	0	3	..			0	13	6	..			..			95	19	9	33	5	3	..			59	19	7	50	13	0	367	11	4
Wellington ..	428	13	7	23	11	1	..			..			440	7	6	..			..			..			21	6	6	36	19	5	950	18	1
Hawke's Bay	111	7	7	32	12	6	21	6	3	4	12	6	..			278	14	0	..			35	3	0	9	10	0	8	13	6	501	19	4
Marlborough	25	4	3	..			..			..			..			..			..			..			9	19	3	..			35	3	9
Nelson ..	132	10	3	..			36	12	0	16	12	6	112	9	9	29	0	3	..			13	4	3	44	13	9	..			385	2	6
Grey ..	..			..			..			..			..			..			..			..			3	19	9	..			3	19	9
Westland ..	21	17	5	..			..			..			..			22	9	10	..			..			..			..			44	7	3
North Canterbury	220	3	6	..			..			43	10	8	..			..			..			..			196	7	10	..			460	2	0
South Canterbury	56	3	3	..			..			..			7	10	0	10	0	0	..			..			132	5	3	..			205	18	6
Otago ..	84	0	5	89	18	0	..			7	18	2	370	18	5	336	0	3	..			..			198	13	3	..			1,087	8	6
Southland ..	214	18	2	5	8	9	..			..			133	0	0	165	1	4	..			102	14	6	215	10	3	..			836	13	0
Totals ..	2,209	11	8	294	3	3	74	9	3	90	3	10	1,186	18	8	1,500	13	0	33	5	3	156	1	9	1,135	19	10	228	1	6	6,909	8	0

BOARD OF EDUCATION, SOUTH KENSINGTON.—ART AND SCIENCE EXAMINATIONS, 1904.

["C" represents candidates; "P" passes.]

Subjects of Examination.	Auckland.		New Plymouth.		Wanganui.		Palmerston N.		Wellington.		Masterton.		Napier.		Blenheim.		Greymouth.		Christchurch.		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.
Art—																										
Freehand drawing	25	5	..	..	18	6	3	2	..	..	1	..	3	1	..	..	1	1	14	7	17	11	7	1	89	34
Model	17	14	..	..	1	1	5	5	..	..	1	1	3	3	..	..	1	1	13	6	22	18	6	2	69	51
Geometrical drawing	4	3	..	..	4	3	2	2	..	..	..	..	..	..	..	..	..	..	..	..	8	6	..	..	18	14
Perspective	3	3	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	9	8	..	..	14	12
Blackboard-drawing	..	..	..	..	..	..	..	..	..	..	1	1	..	..	3	..	1	1	..	..	..	..	..	..	5	2
Drawing common objects from memory	..	..	..	..	1	..	..	..	..	..	1	1	3	3	..	..	1	..	..	..	..	..	..	..	6	4
Memory drawing of plant-form ..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	2	7	6	..	..	10	8
Drawing in light and shade ..	15	15	..	..	2	2	4	4	1	1	..	..	5	4	..	..	..	..	1	..	5	4	3	2	36	32
Design	..	..	..	..	1	1	..	..	2	2	1	..	..	..	..	..	..	..	1	1	5	5	..	..	10	9
Painting from still life	1	1	..	..	..	..	2	1	..	..	3	1	1	1	..	..	..	..	2	2	3	3	..	..	12	9
Principles of ornament	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	1	..	..	..	3	2
Anatomy	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	..	..	2	1	1	1	..	..	5	4
Drawing from the antique ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	..	..	3	2
Drawing from life	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	1	1	2	..	..	..	5	2
Modelling the head	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	..	..	2	2	..	..	..	..	4	4
Architecture	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Students' works	3	2	..	..	..	..	2	1	17	7	..	..	*4	1	..	..	..	..	2	..	13	5	..	..	41	16
Science—																										
Practical plane and solid geometry	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	5	5	..	..	6	6
Machine construction and drawing	24	14	1	1	3	3	..	..	1	1	..	..	..	..	..	..	..	..	..	..	9	9	..	..	38	28
Building construction and drawing	7	5	..	..	2	2	..	..	7	6	1	1	1	1	..	..	..	..	2	1	4	3	..	..	24	19
Mathematics	..	..	..	..	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3
Applied mechanics	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	2	2
Steam	3	2	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	5	4
Theoretical inorganic chemistry ..	..	..	..	..	5	5	..	..	1	1	..	..	..	..	..	..	..	..	..	..	2	2	..	..	8	8
Magnetism and electricity ..	8	7	..	..	7	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	16	15
Sound, light, and heat	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	1
Agricultural science and rural economy	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Botany	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	1
Human physiology	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	1
Totals	110	71	2	2	47	33	18	15	40	28	11	5	20	14	3	..	4	3	43	24	123	95	16	5	437	295

* A book prize was gained by a Napier student.

CITY AND GUILDS OF LONDON INSTITUTE.—TECHNOLOGICAL EXAMINATIONS, 1904.

Subjects of Examination.	Auckland.		New Plymouth.		Wanganui.		Wellington.		Napier.		Greymouth.		Christchurch.		Dunedin.		Invercargill.		Totals.	
	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.
Plumbers' work (preliminary) ..	14	12	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	16	13
Principles of plumbing (ordinary) ..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Plumbers' work (ordinary) ..	9	9	7	5	3	3	12	10	3	3	..	..	..	..	..	..	..	..	34	30
Principles of plumbing (honours) ..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	2	1
Carpentry and joinery (preliminary)	1	1	..	..	1	1	1	1	..	..	..	..	..	..	..	..	..	..	3	3
Carpentry and joinery (ordinary) ..	1	1	3	2	1	..	..	..	..	..	..	..	..	..	1	1	..	..	6	4
Electric light and power (preliminary)	..	..	..	..	..	..	5	5	..	..	..	..	..	..	1	1	..	..	6	6
" " (ordinary) ..	..	..	1	..	..	..	3	1	..	..	..	..	1	1	1	1	..	..	6	3
" " (honours) ..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	.	..	..	..	1	1
Wiremen's work	..	..	..	..	..	..	4	1	..	..	..	..	..	..	..	..	..	..	4	1
Telegraphy and telephony (ordinary)	..	..	..	..	..	..	2	1	..	..	..	..	1	1	..	..	..	..	3	2
Mechanical engineering, Part I. (ordinary)	2	..	..	..	..	..	2	1	..	..	..	..	..	..	2	1	..	..	6	2
Mechanical engineering, Part II. (ordinary)	3	1	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	5	1
Painters' and decorators' work (ordinary)	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	1
Brickwork (ordinary)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	1
Gas-manufacture (ordinary) ..	..	..	..	..	1	1	..	..	..	..	..	..	1	1	..	..	..	..	2	2
Woodwork, first year	42	35	..	..	1	1	..	..	6	6	1	..	6	3	18	16	37	18	111	79
Woodwork, final	1	1	..	..	..	..	..	..	1	..	..	..	3	2	..	..	10	5	15	8
Cookery	36	33	..	..	..	..	..	..	..	..	..	..	..	..	33	32	44	37	113	102
Totals	109	93	11	7	10	8	32	22	10	9	1	..	13	9	59	53	91	60	336	261

No. 2.

REPORT OF THE INSPECTORS OF TECHNICAL INSTRUCTION.

SIR,—

We have the honour to make the following report on the state and progress of manual and technical instruction in the colony during the year ending the 31st December, 1904.

A. MANUAL INSTRUCTION.

The increase in the number of schools in which instruction was given in one or more of the various branches of elementary handwork may be taken as an indication that teachers generally are realising more and more that the work of the standards is likely to be helped rather than hindered by the judicious introduction of suitable forms of handwork. These should be treated not so much as separate subjects, for which a place has to be found on the time-table, but as valuable aids to the teaching of not a few of the other subjects prescribed for the standards. The fact that in some schools handwork still continues to be taught as an isolated subject, having little or no direct bearing on other subjects, is probably due to the influence of certain of the manuals dealing with handwork on the one hand, and to the absence of opportunities for proper training of teachers on the other. The branch of handwork known as paper-folding, for example, is not unfrequently treated solely from the point of view of the production of more or less complex objects, some of which can only be regarded as puzzles in paper. The benefit to the pupil is not, it is to be feared, commensurate with the time spent in the drill necessary for the production of these objects. The making of objects, the different stages in the folding of which cannot easily be represented by drawings well within the comprehension of the pupils, should be avoided. A lesson in paper-folding affords abundant opportunities for concrete illustrations of considerable value in teaching elementary notions of number and area, as well as the simple geometrical notions and problems prescribed for the lower classes. Of the various branches of elementary handwork, modelling in plasticine or in clay, brush drawing, and work in paper, carton, and cardboard are the branches most generally taken up. In a number of schools, modelling is being utilised with good results in connection with the teaching of geography; brush drawing is successfully combined with nature-study, and with elementary design; while work in paper, carton, and cardboard, according to the standard in which the work is taken, is found to serve the very valuable end of enabling pupils to apply in a practical way, their knowledge of geometrical figures and operations. In the case of the smaller schools, where it is not practicable to provide for the instruction of the upper standards in woodwork, it is suggested that a not unworthy substitute is to be found in a suitable course in cardboard work. Handwork in some form or another is now being taught in each of the education districts, in schools of all grades, and, in an increasing number of schools, in all the standards. In not a few cases the time-tables show that well-graded courses of instruction, suitably linked with the general work of the school, have been arranged, and we are not aware that the results have been other than satisfactory. It is not too much to expect that, in the near future, there will be few schools in which handwork has not its place as a recognised aid alike to teacher and to pupil.

As regards what may be termed the more specialised forms of handwork—namely, cookery, woodwork, dressmaking, swimming, and elementary agriculture, we have to report that satisfactory progress continues to be made in the various education districts in connection with arrangements for the establishment of classes for instruction in these subjects. In the case of cookery and woodwork, the initial cost of providing the necessary accommodation and equipment has compelled controlling authorities to adopt the central system, whereby classes from several schools are enabled to receive instruction at a conveniently placed centre. While this system has much to commend it, it has its drawbacks, not the least of which are — (1) a tendency to dissociate the work of the class from the general work of the school, and (2) the time lost by classes in getting to the centre, and the consequent disturbance of the school arrangements. The first drawback can be got rid of to a large extent by having the classes taught by instructors who are either on the regular staff of the school or who have themselves been school-teachers. There seems to be no reason why this drawback should not in time disappear almost entirely. As regards the second, it is not so easy to suggest a remedy. Up to the present, in spite of the attendant difficulties, a number of schools in the vicinity of centres have managed to arrange matters so that the upper standards have been able to take advantage of the instruction provided thereat. The difficulties to be met and overcome are surely outweighed by the resulting benefit to the pupils.

The true place of woodwork in relation to the public-school curriculum appears to have been realised by most of the instructors. In some cases, however, the work at the bench is not so closely connected with the drawings as it might be. Not only should the bench-work be carried out directly from the pupils' own drawings, but the completed exercises and models should themselves be utilised wherever possible as objects from which pupils may be taught how to make freehand dimensioned sketches, and isometric and pictorial views. During the year 129 woodwork classes were recognised in connection with fifteen centres and schools, as against 100 classes and eleven centres and schools during the previous year.

There has been a corresponding increase in the number of cookery classes, 156 classes having been recognised in connection with fourteen centres or schools. The numbers for 1903 were 131 and eleven respectively. As regards the character of the instruction, it may be said that there is evidence that more attention is being given to instruction in the principles of cookery, though there is still room for considerable improvement in this respect. Pupils are too often taught how to prepare this or that dish without being also taught the reasons for the various operations involved in its preparation No doubt the various methods of preparing food, the economics of cookery, marketing, the use and care of the range, &c., have their proper place in a course of cookery, but a cookery course that treats only of such matters fails as a factor in the all-round education of the child, inasmuch as it does not give sufficient scope for the training of habits of observation and clear reasoning. If an instructor once realises that the school kitchen is something more than a kitchen, that it is a laboratory in which certain investigations and experiments with the view of testing a recipe or demonstrating a principle may be carried out, it is tolerably certain that the pupils of her class will benefit accordingly, even if they cannot at the end of the course emulate their elders in the preparation of what are called dainty dishes. Classes for instruction in elementary agriculture have practically been confined to two or three education districts. We hope next year to be able to report a considerable increase in the number both of districts and of schools in which this important subject is being taught. There are indications that an effort is to be made, in some districts at least, to provide suitable preparatory courses for teachers. One of the chief hindrances of the present time to the establishment of classes on this subject is the almost total absence in the past of opportunities for teachers to obtain the necessary training. It may be mentioned here that it is doubtful whether a teacher who has not been trained to observe, and who has not been trained in scientific method, is likely to benefit to the fullest extent from a course of instruction in rural science. In the circumstances such a course must necessarily be all too short—too short, that is, from the point of view of the training of the untrained teacher. For after all it is method, not matter, that is all-important, and a knowledge of method cannot be acquired in a few lessons. It seems, then, that the best that can be hoped for now is to provide for practical instruction in rural science in schools where there are teachers who have been trained, or who by virtue of a natural bent have trained themselves, not only to observe, but also to draw proper conclusions from their observations. At the same time opportunities should be provided whereby the younger teachers would receive the necessary training to enable them to take up the subject in the schools. In such a colony as ours, where pastoral and agricultural pursuits must always take a pre-eminent position, it is imperative that there should be afforded opportunities in our rural schools for the systematic study, as far as may be, of the subjects that relate to those pursuits. At the same time it seems necessary to emphasize the fact that a knowledge of rural science alone will not tend to keep the country-born in the country. An all-round education is just as necessary, if not more so, for the would-be farmer as for the town-bred lad. Agriculture is as much a business as a science. The person who is not a good business man is not likely to become a good farmer, however much he may know of science. The farmer, to be successful, must know not only how to grow, but how to sell. On these grounds it would appear that the chief purpose of the curriculum of primary schools, district high schools, and secondary schools in country districts should be (1) to give a general education, including a training in habits of observation, so that pupils may have an intelligent acquaintance with some of the facts and laws of nature; and also (2) to foster the natural activities of hand and eye. Such a curriculum is contemplated in the various regulations issued under the Education Act. Its full development, with such adjustments as experience may dictate, must necessarily be a matter of time and opportunity.

Of the remaining branches of handwork, the only one that calls for special comment is dressmaking. This subject is being taken up in an increasing number of schools, and is, generally speaking, well taught. In some cases, however, especially where the instructor is not, or has not been, a

school-teacher in the ordinary sense of the term, there is a tendency to regard the making of of certain garments as the chief, if not the sole, object of instruction. In other words, no attempt is made to make the course educative rather than utilitarian in character, or to link it in any way with other subjects of the school course, such as drawing. There is also evidence of a tendency to utilise methods of drafting patterns based on principles that for obvious reasons are not explained to the pupils. While well-fitting, nicely-finished garments are no doubt very desirable, it is in our opinion a grave mistake, if a natural one, to make the production of such garments the sole object of a course in dressmaking for school-children. It cannot be stated too often or too emphatically that in the case of school classes for instruction in handwork it is the means and not the end that is all-important. The real test of the work of such classes is not, as is too often supposed, what may be termed the output of the classes, but rather the character of the operations and methods involved in the production of the output. The number of recognised school classes in operation during 1904 in the several education districts, together with the subjects of instruction, is set forth in the table on page 5.

B. Technical Instruction.

The reports supplied by controlling authorities and attached to this report give full details of the work of the various technical and art schools and classes during 1904. There are now over twenty schools equipped in a more or less complete manner for the carrying-on of technical, continuation, and art classes. In addition to the classes at these schools, classes were also held at about thirty other places in such buildings as were available for the purpose. It is worthy of note, in connection with the first establishment of classes, that controlling authorities have in most cases endeavoured to utilise wherever possible available buildings, either in the shape of public-school class-rooms or of suitable rented rooms and workshops. There is little doubt that this is the better course to pursue in connection with the inauguration of schemes for technical instruction in the smaller centres, since it enables those interested in the classes to form a more accurate estimate of the real requirements of the district before taking steps to provide permanent accommodation.

During the year buildings for technical and school classes have been completed at Gisborne, Hastings, Timaru, Waimate, and Kaitangata, while grants have been made to controlling authorities for the erection of, or additions to, buildings at Wanganui, Nelson, and Dunedin. Grants have also been made from time to time for the provision of, or necessary additions to, furniture, fittings, and apparatus for classes in various parts of the colony. A review of the year's work shows that satisfactory progress has been made in the direction of providing and extending facilities for technical instruction not only in the larger centres, but also in country districts, and, although the progress made appears to be regarded in some quarters as not altogether commensurate with local requirements and conditions, yet we venture to express the opinion that, taking all the circumstances into account, the present condition of technical education throughout the colony is at least as satisfactory as that obtaining in other young and scattered communities. We believe that a sound system of technical instruction, adapted to the varying conditions in different parts of the colony and to the needs of those whom it is intended to benefit, can be established without the necessity arising at the outset for elaborately equipped institutions on the lines of the technical schools and colleges of older countries, where the conditions are altogether different from those that obtain in a young colony such as ours. When it is remembered that in the process of the development of a young country the demands on the public funds must necessarily be heavy, and that provision for technical education is only one of the many ends in view, it would certainly appear wiser to provide first of all for the barest essentials for many schools than to equip a few in accordance with the latest developments elsewhere. Technical schools exist or should exist for the benefit of the pupils, not of the instructors, and still less for the purpose of providing fine buildings equipped with elaborate furniture, fittings, and apparatus, when the local needs for some time to come call merely for buildings and equipment of a much simpler character. Surely we cannot expect to be able to begin at the point at which older countries have only now arrived after a long period of preparation and effort.

The success of a technical class may be said to depend not only on the efficiency of the instruction and the suitability and sufficiency of the equipment, but also on the extent to which the students are able to benefit by the instruction, and on the number of students so benefited. It is unfortunately evident from a perusal of the reports on the various schools and classes that a by no means small proportion of the students attending the classes are unable to benefit to the fullest extent by the instruction, even where it is of a quite elementary character; and, further, that it is too often a difficult matter to get students to take up courses of work adapted to their occupations and callings. It would seem that this state of things alone renders it undesirable at present to do other than proceed very gradually in the matter of extension, especially in the direction of higher technical education. At the same time, however, we should endeavour to educate the public mind to the importance of serious and systematic study on the part of those by whom technical instruction in the true sense of the term should be regarded as a vital necessity. It is suggested that valuable assistance in this direction might well be forthcoming from firms and others giving employment to those who would be benefited by regular attendance at technical classes. Much also can be accomplished by endeavours to get hold of pupils before they have had time to lose the habit and regular and systematic study. The regulations providing for free technical education have enabled controlling authorities to achieve something in this direction, as is shown by the fact that whereas in 1903 less than £100 was paid by the Government to controlling authorities on account of free technical education, in 1904 over £600 was distributed, and there are indications that a considerably larger sum will be expended during 1905. As regards the subjects of instruction taken up by the free pupils or holders of junior technical scholarships, it is a matter for regret that, with so large a range of subjects from which to select, the subjects most generally taken up have been those connected with commercial pursuits. It is to be hoped that the returns for this year will show a more satisfactory state of affairs.

The regulations at present in force require a junior technical scholar to make during the year a minimum of twenty hour-attendances in each subject taken up in order to qualify for capitation. Though this does not appear to impose any great hardship on students availing themselves of free technical education, yet it is a regrettable fact that quite a large number of scholars have failed to comply with the regulations. By this action they have imposed considerable hardship on controlling authorities who, while providing for the instruction during the time the scholars chose to attend, have through no fault of their own been unable to claim the extra capitation on account of the instruction given to these scholars. The steps that have, we understand, been taken by the controlling authorities concerned to guard themselves against such loss in future will, it is hoped, prove effective in putting a stop to what is really a breach of faith on the part of pupils taking advantage of free technical education. There are indications that in at least one education district steps will shortly be taken to provide for the instruction during the day of pupils who have left school and are eligible to hold junior technical scholarships. The experiment will be watched with much interest.

There is little evidence as yet of any definite movement on the part of controlling authorities and others interested in the matter to arrange for classes in country districts for instruction in subjects having a direct bearing on agricultural and pastoral pursuits. The returns in respect of classes established in country districts show that the subjects most commonly taken up are those relating to commercial pursuits. Commercial subjects have their place, no doubt, in a scheme of technical instruction suited to country districts, but they certainly require to be supplemented by subjects having more direct bearing on rural occupations. It is to be hoped that the instruction that is now being given in primary schools in certain districts in elementary agriculture will lead presently to a demand on the part of the pupils for instruction of a more advanced and specialised character after leaving school. The character of such instruction would, of course, be determined by the nature of the staple industries of the various districts. It is not too much to expect that local bodies in country districts will before long follow the example of the local bodies in some of the larger centres, and co-operate with controlling authorities in arranging for instruction that must directly benefit the communities of which they form a part. It is suggested that the establishment of classes for instruction in subjects bearing on rural pursuits might well mean the presence in the district concerned of an expert whose help and advice, apart from the instruction he would give in connection with the classes, should prove of no small value to the farmers in the neighbourhood.

The art classes in the colony continue on the whole to do good work. There is, however, room for improvement in the case of certain of the classes in the direction of substituting more modern methods of instruction for those now in use. There is also a need for greater prominence and more facilities to be given to instruction in the various branches of applied art.

It seems necessary again to call attention to the desirability of making the instruction in connection with adult cookery classes more truly technical. The instruction is too often confined almost entirely to the preparation of dishes. We should like to see such instruction supplemented by instruction in principles, and by suitable experiments and investigations on the part of the students. We are aware that in the case of many cookery classes the circumstances are such as to render it difficult to introduce much, if any, of the kind of work indicated, but at the same time it must be here stated that classes that exist solely for the purpose of teaching how to cook are not, strictly speaking, classes for technical instruction within the meaning of the Education Act.

There has been, especially in the larger centres, a considerable extension in the direction of instruction in electrical and mechanical engineering, in plumbing, and to a less extent in the various branches of physics, and in chemistry.

Special classes for the training of public-school teachers in drawing, and in subjects of handwork presented for school classes have been held during the year in each of the education districts. In this connection we would suggest that Education Boards should consider the advisability of making some provision for the training of teachers (and especially the younger teachers in country schools) in subjects connected with rural life and occupation. The annual grants made to Education Boards since 1901 for the maintenance of training classes for teachers have hitherto been expended on courses that have not, except in a few cases, included instruction in the subjects mentioned. There would therefore appear to be good reason for making a change in the direction we have suggested.

The number of recognised technical continuation and art classes, and the average attendance at each, are given in the table on pages 3 and 4.

The art and science examinations of the Board of Education, South Kensington, and the technological examinations of the City and Guilds of London Institute were conducted as usual by the Department. The results, which are given in the tables on pages 7 and 8, may be summarised as follows: Of 437 candidates who sat for the art and science examinations, 295 passed; 41 students' works were sent Home for examination in connection with art certificates, and of these 16 were accepted by the examiners—a book prize was also gained by a Napier student; 336 candidates sat for the examinations of the Institute, of whom 261 passed. At the Institute examinations for teachers in cookery and woodwork, 102 teachers passed in cookery and 87 in woodwork. The art and science examinations were held at twelve centres, and the technological examinations at nine. The following extract from the annual report of the Institute is of interest: "The number of separate subjects in which the candidates are examined in the colonies increases from year to year, and likewise the number of centres from which the candidates are drawn. Some of the papers sent from New Zealand to England for examination, particularly those in plumbing, were of a high order of excellence. The percentage of failures in New Zealand is less than in the Mother-country, although a smaller proportion of the colonial candidates qualify in the honours grade."

M. H. Browne,
E. C. Isaac,
Inspectors of Technical Instruction.

The Inspector-General of Schools, Wellington.

No. 3.

MANUAL AND TECHNICAL INSTRUCTION IN THE SEVERAL EDUCATION DISTRICTS.

AUCKLAND.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Manual and Technical Education.—The report of the Director shows what has been accomplished during the year. Besides the work done in the Auckland Technical School, in the three manual-training schools, and in the special classes held at the Kauaeranga School, Thames, fifty-nine schools have carried on instruction in handwork and sixteen in needlework. Swimming classes have been established in Auckland, and are largely attended by boys and girls of the town and suburban schools.

EXTRACT FROM THE REPORT OF THE CHIEF INSPECTOR OF SCHOOLS.

Handwork in some form or other is now taken up in a large number of schools, and is generally popular. On the whole it is bringing forth good results. It is especially valuable in the primer classes, where it introduces a pleasant variety of useful employments, and has by its attraction helped to keep up a more regular attendance. The opportunities for language-training that it affords might in these classes often be turned to better account. At the manual-training centres in the city and suburbs of Auckland the pupils have done highly creditable work, as the Director of Technical Education has publicly testified. This performance speaks well for the general training the pupils have received in the schools. Under the advice of Mr. Harry Wallace, the drawing of plain and coloured patterns and designs, many of the latter original, has made very satisfactory progress in the schools he has been able to visit. In many other schools promising work in brush drawing is being carried on, and pupils and teachers alike display considerable enthusiasm for it. It is desirable that brush drawing should be taken up in all schools in which teachers can give competent direction of it, for it imparts a much better training and yields a better means of artistic expression than pencil drawing, while, above all, its practice demands greater honesty and fidelity in the effort put forth by the pupils. Of the many new developments of recent years, this is, in my judgment, the most valuable and the least ephemeral.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF TECHNICAL EDUCATION.

During the past twelve months very considerable progress has been made in this district in manual training and technical education, and it is in a much more optimistic spirit that I pen this report than was the case on a similar occasion a year ago.

Manual Training or Handwork in Primary Schools: Cookery and Woodwork.—The teaching of these subjects has up to the present been confined to the pupils of the higher standards of such of the city and suburban schools of Auckland as are within easy reach of one or other of the three manual-training schools at Newton, Newmarket, and Ponsonby respectively. Excellent work is being done in these schools, and the opposition which was at first manifested by certain parents to their children attending these schools has rapidly disappeared, as they have come to understand that the pupils are not being taught to become "cooks" and "carpenters," but are being trained to habits of neatness, cleanliness, accuracy, resourcefulness, and self-reliance, and that their powers of originality and observation are being developed in a manner that cannot be otherwise than of inestimable value to the formation of character. That the Board is to be congratulated on having obtained from England such excellent teachers for cookery and woodwork is acknowledged on all hands, and it is very satisfactory to know that the Department's Inspectors are constantly advising teachers from other parts of the colony to visit Auckland and see how manual training is being taught there. It is very gratifying to know that both Thames and Whangarei are about to be provided with manual-training schools, in which cookery and woodwork will be taught, and it is to be hoped that ere long the Government will be able to provide similar schools for Waihi, Cambridge, Hamilton, and Northern Wairoa. Some form of handwork, such as brush drawing, plasticine-modelling, paper cutting and folding, cane-weaving, free-arm drawing, &c., is now taught in most of the public schools, as the number of teachers who have received special training for teaching these subjects is rapidly increasing. The Board's art specialist, Mr. Harry Wallace, late Organizing Inspector in Art and Hand-and-eye Work to the Burslem School Board, who arrived in Auckland in March last, has spent a considerable portion of his time in visiting the city and suburban public schools to advise the teachers as to the best methods of teaching the various branches of handwork, and under his guidance excellent progress has been made

The Training of Teachers in Art, Science, and Handwork.—Classes were held, as in the previous year, in cookery and woodwork at the three manual-training schools, and excellent work was done. Forty-two candidates presented themselves for examination by the City and Guilds of London Institute in woodwork (first year), and of these thirty-five were successful. In cookery, thirty-three out of thirty-six who sat for the London examination passed. The Board also held examinations in July last in the theory and practice of teaching cookery and woodwork respectively, with the result that nineteen out of twenty-four teachers passed in cookery, and twenty-two out of thirty-two in woodwork, the standard required for passing in each subject being a high one. Classes in freehand, model, blackboard, and brush drawing were conducted in the evening and on Saturday by Mr. Harry Wallace, and upwards of two hundred and fifty teachers attended, and splendid progress was made. The Board is to be heartily congratulated on its recognition of the value of art training for teachers in the decision it has made to grant a ten-pound bonus to every teacher that obtains five First-class Advanced Art Certificates from the London Board of Education. Science classes for headmasters and assistant teachers were also conducted by Mr. John Henry, M.A., B.A., B.E., and by myself.

Agricultural Education.—In May last a scheme of agricultural education for the Auckland District was prepared by me and approved by the Board. The scheme provided for agricultural education to commence in the primary schools in the form of "nature-study," in which school gardens would play a prominent part, to continue in the secondary and agricultural schools, and to culminate in the Agricultural College. In order to initiate the scheme, I advised the Board to engage an agricultural expert, who would first train the teachers so as to enable them to carry out the preliminary work in their schools. It was estimated that in the beginning the cost would be £500 per annum. Of this the Board was willing to provide £300, if the various branches of the Farmers' Unions would contribute £100 a year, which, with the Government subsidy of £100, would make up the £500 required. Of the ninety-four branches of the Farmers' Union, to whom circulars were addressed, only fourteen condescended to reply, and of these only one was willing to make any monetary contribution. At a subsequent meeting of a committee representative of the Education Board and of the Auckland Agricultural Association it was decided to ask the Government to provide agricultural experts, as indicated above, for the four chief educational districts of the colony, and this is as far as the matter has advanced at the present time.

Technical Education in Country Districts.—During the year evening technical classes were held at Thames, the subjects taken up being chiefly commercial. A special report of the hon. superintendent, with my remarks thereon, has been previously submitted to the Board. It is to be hoped that the example set by Thames will be followed by other places. As far as possible the subjects chosen should be those immediately applicable to the district. The tendency seems to be to set too much value on commercial subjects, so as to enable the country youth to obtain positions in the town. New Zealand must of necessity be an agricultural country, and the attitude taken up in the matter of providing education should be rather in the direction of encouraging young people to follow country pursuits.

Technical Education and Manual Training Exhibition—An exhibition was held at the Auckland Technical School from the 25th January to 11th February inclusive, embracing the following: (1) Work done by students attending the evening classes of the Technical School in carpentry and joinery, cabinetmaking, plumbing, &c.; (2) work done by teachers attending the special art classes; (3) woodwork done by pupils of primary schools attending the Newmarket, Newton, and Ponsonby Manual-training Schools; (4) handwork, including paper folding, cane weaving, plasticine modelling, brush drawing, &c., done by pupils in the primary schools. The exhibition created a great deal of interest, and was visited by several thousands of people, including many teachers from the country, who were granted free railway passes. It is hoped that similar exhibitions will be held each year.

Auckland Technical School.

At the beginning of the year considerable difficulty was experienced in commencing the session, owing to no reply being obtainable from the Department with reference to the Board's application for an additional building for carpentry and joinery, cabinetmaking, smithing, and turning and fitting. Eventually it was decided to utilise the woodwork-room of the Newton Manual-training School for the carpentry and joinery and cabinetmaking, and to abandon for the session the teaching of smithing and turning and fitting, &c. About the middle of the year a grant of £690 was made by the Department for the fitting up of a machine-shop and smithy, and later on £200 was granted for a temporary iron building for housing the equipment, as well as an additional sum of £262 for extra machinery. As a result, a building has been built and equipped at a cost of about £1,150, in which much useful work in smithing, farriery, turning and fitting, &c., should be done. Owing to lack of accommodation at Rutland Street, it was also found necessary to utilise the cookery-room at Newton for such subjects as dressmaking, drawing, &c. The total number of individual students enrolled, exclusive of teachers, was 312, and the number of class entries 796. Including those attending the teachers' classes, the number of individuals was 637, with a total number of class entries of 1,709.

In June last a large number of our students sat for the examinations of the City and Guilds of London Institute, with the following very gratifying results: Plain cookery, 33 passes; woodwork—final 1 pass, first year 35 passes; plumbers' work—ordinary grade 9 passes, preliminary grade 12 passes; mechanical engineering, 1 pass; carpentry and joinery—ordinary grade 1 pass, preliminary grade 1 pass: making a total of 93 passes.

Several students also sat for the examinations of the Board of Education, South Kensington, London, in June and July last, with the following results: Magnetism and electricity, 6 passes; building-construction, 5 passes; machine construction and drawing, 4 passes: total, 15 passes.

Commercial Department.—The subjects taken up in this department were commercial arithmetic, commercial geography, commercial correspondence and *précis*-writing, French, typewriting, book-keeping, and shorthand. In each of these subjects much more satisfactory work was done than in the previous session, and five students completed the first year's course for the Diploma of Commerce. It is very satisfactory to note that the Chamber of Commerce has agreed to recognise the certificates of the school by giving preference—other things being equal—to applicants for clerkships, &c., who hold such certificates. The Chamber also decided to award two silver medals each year—one for males and one for females—to those students who stand highest in the examinations for the Diploma of Commerce.

Domestic Department.—Plain cookery (theory and practice) and dressmaking were the only subjects dealt with in this department last session. An attempt was made to hold a class for laundry work, but the entries were so few that it had to be disbanded.

The number attending the cookery classes, too, was anything but satisfactory. This, I think, is to be deplored, as with the generally unsatisfactory state of domestic service, it would seem to be of advantage for mistresses to be able to impart special knowledge such as can be obtained from the technical school to their servants, even though they may not require to make use of it themselves.

Mechanical Engineering Department.—Instruction in the following subjects was given: Machine construction and drawing, practical mathematics, practical geometry, applied mechanics, and steam. The lack of early mathematical training was very decidedly shown in those subjects which have mathematics as a basis, the majority of students having had only a very imperfect knowledge even of arithmetic. Only one student was successful in passing the full first year's course for the Diploma in Mechanical Engineering, whilst two obtained the full second year's certificate.

Electrical Engineering Department.—Magnetism and electricity, practical mathematics, machine construction and drawing, electric lighting and power distribution, applied mechanics, and steam were the subjects taught in this department during the last session. The electrical classes were considerably handicapped at the beginning of the session, owing to lack of apparatus. During the year about four hundred and fifty pounds' worth of equipment was obtained, so that this department is now fairly complete as far as elementary work is concerned. For the Diploma in Electrical Engineering four students obtained the full first year's certificate, and one the second year's.

Building Trades Department.—Instruction was given in this department in practical mathematics, carpentry and joinery, freehand, model, and geometrical drawing, handrailing and staircasing, and building-construction. On the whole, this was the most successful department of the school last session. The advantage of having a thoroughly skilled mechanic, who is also a trained teacher, for such subjects as carpentry and joinery and handrailing and staircasing was clearly demonstrated, and under Mr. Trendall's guidance some excellent work was done. The building-construction classes, under Mr. G. W. Allsop, A.R.I.B.A., were again most successful, not a single failure in the local examinations having been recorded. Eight students were successful in passing the first year's examination for the Diploma in Carpentry and Joinery.

Cabinetmaking Department.—The subjects dealt with in this department were as follows: Theory and practice of cabinetmaking, freehand, model, and geometrical drawing, practical mathematics, and perspective. It is much to be regretted that so few students who are really engaged in the cabinetmaking trade attended the classes. Those, however, who did attend made very satisfactory progress. For the Diploma in Cabinetmaking one student obtained the first year's certificate, and one the second.

Plumbing Department.—Instruction in this department was given in practical mathematics, drawing for plumbers, physics and chemistry, and theory and practice of plumbing. This department is a most important one, the City Council having decided to recognise the Technical School as an institution at which all the apprentices in plumbing in the city shall receive a technical training. Early in the year the Council set up a Board of Advice in connection with the examination of plumbers, the Board being composed of the City Engineer, the City Sanitary Inspector, a representative selected by the master plumbers, a representative selected by the journeymen plumbers, and the Director of Technical Education. This Board made the following recommendations to the Council, which were adopted: (1.) That no plumber shall receive a license to do sanitary work in the city without having first passed an examination. (2.) That until the end of 1907 the examination shall be a practical and *viva voce* one only. (3.) That provisional licenses shall be granted to journeymen and master plumbers until the 31st March, 1906. (4.) That until the end of 1907 plumbers who possess one of the following qualifications shall be granted a license without further examination: (*a*) First-class Ordinary Certificate of the London City and Guilds; (*b*) Certificate of the Worshipful Company of Plumbers, London (by examination); (*c*) Final Certificate of the Wellington Technical School; or (*d*) Final Certificate of the Auckland Technical School. (5.) That after the 31st December, 1907, no plumber who has served his apprenticeship in Auckland shall be granted a license unless he has attended four years at the Auckland Technical School and obtained the Diploma in Plumbing. (6.) That after the 31st December, 1907, any plumber who has not served his apprenticeship in Auckland, and who wishes to obtain a license, shall be required to pass the Diploma Examination of the Technical School, unless he can produce evidence to the Plumbers' Board of having passed an examination of equivalent value. (7.) That after the 31st December, 1907, no plumber shall be granted a master's license unless he has been a licensed journeyman for at least two years, and is able to pass a special examination embracing preparation of plans and specifications, sanitary law, &c.

As the result of the adoption by the Council of these recommendations, a large number of journeymen and master plumbers (forty-three) attended the school, and some excellent work was done. Of the nine students who entered for the Ordinary Grade Plumbing of the City and Guilds all were successful, whilst twelve passed the preliminary grade out of fourteen entries. For the Diploma in Plumbing three students succeeded in passing the first year's examination, and three the second.

Painting and Decorating Department.—This was the most disappointing department of the school, as, although special courses of instruction, both for apprentices and for journeymen, in the theory and practice of painting and decorating were arranged, no students presented themselves. This is to be specially regretted when one looks around and sees the preponderance of inferior painting, and the very small amount of really first-class work. A special drawing class for painters was arranged, under the direction of Mr Wallace, the Board's art specialist, but as only two or three students joined the class who were engaged in the painting trade, others were admitted who required any special art training in connection with their trade or occupation. Amongst those who joined this class were monumental masons, stained-glass workers, architects, &c. Considering that only one evening per week was devoted to this class, really excellent work was done.

Speaking generally, the work done in the Technical School during the last session showed marked improvement on that of the preceding year. There were fewer students attending who

came because their parents paid their fees, and who had no real interest in their work. There is no doubt that the work of the previous year has given the institution a reputation such that only those who were really in earnest and who were prepared to work hard joined the classes last session. The number of examination-papers worked was 407, of which 285, or over 70 per cent., obtained passes, compared with 211 passes out of 395 papers, giving a percentage of 53, last year.

The outlook for technical education in Auckland is decidedly more hopeful that it was a year ago. The City Council has generously given an excellent site for a Technical College, and Auckland students, both in local and "Home" examinations, have shown themselves worthy of a well-equipped up-to-date building, in which they can prosecute their technical studies. That such a building is urgently needed is acknowledged on all sides, and a generous Auckland gentleman, who wishes to remain anonymous, has promised a sum of £500 towards a new building, provided that four others will donate like amounts. The Government seems unwilling to find money for a permanent structure, except in the way of pound-for-pound subsidy on voluntary contributions, and if Auckland is to possess within the next few years a Technical College worthy of the name, it will, I feel sure, be owing to the public spirit of its citizens. In conclusion, I wish to tender my sincere thanks to the Board for the generous manner in which they have received my proposals, and the very free hand that they have given me in the administration of my department. I wish also to express to my staff my deep appreciation of their loyalty to me personally, and of the earnestness and enthusiasm that they have shown in carrying out their duties.

GEORGE GEORGE, F.I.C., F.C.S.,
Director of Technical Education.

Summary of Income and Expenditure for the Year 1904.

AUCKLAND TECHNICAL SCHOOL.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
Fees paid by students (less rebates)	679	16	3	Balance from 1903	1,137	6	0
Capitation grants (1903)	347	12	1	Salaries of instructors, &c.	1,493	16	9
Grant for special continuation and technical classes at Thames	69	18	3	Buildings, furniture, fittings, &c.	1,107	12	0
Grant for technical scholars at Thames classes	56	11	8	Incidentals	193	14	0
Grant for furniture, fittings, &c.	925	15	9	Materials	137	5	3
Grant for materials	20	0	3	Rent and rates	108	5	0
Donations and contributions	24	18	0				
Micellaneous receipts	46	4	2				
Balance	2,007	2	7				
	£4,177	19	0		£4,177	19	0

Assets.	£	s.	d.	*Liabilities.*	£	s.	d.
Capitation for 1904	434	18	10	Balance brought down	2,007	2	7
Grants for materials (1904)	62	13	1				
Subsidy on donations	10	18	0				
Balance Dr.	1,498	12	8				
	£2,007	2	7		£2,007	2	7

MANUAL TRAINING DEPARTMENT.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
Capitation on account of cookery and woodwork classes	977	12	0	Balance from 1903	1,402	13	0
Capitation on teachers' special cookery and woodwork classes	109	19	0	Materials	101	4	9
Grant (1902–3) for training of teachers	328	0	0	Incidentals	87	19	9
Grant (1904) for training of teachers	250	0	0	Salaries of instructors	1,440	6	4
Capitation for school classes (ordinary)	395	15	7	Buildings, furniture, fittings, &c.	115	13	4
Miscellaneous receipts	31	3	1	Payment to school classes	393	13	1
Contributions and donations	9	9	0				
Balance	1,439	11	7				
	£3,541	10	3		£3,541	10	3

Assets.	£	s.	d.	*Liabilities.*	£	s.	d.
Capitation for 1904	921	18	3	Balance brought down	1,439	11	7
Balance	517	13	4				
	£1,439	11	7		£1,439	11	7

VINCENT E. RICE,
Secretary and Treasurer.

EXTRACT FROM THE REPORT ON THE TECHNICAL AND CONTINUATION CLASSES AT THAMES.

The excellent start that has been made with evening classes at Thames is deserving of every praise and encouragement. The number of students who availed themselves of Junior Technical Scholarships for so small a place was very gratifying. In the choice of subjects too great attention was paid to commercial subjects, and not enough to the engineering and handicraft side; but with the advent of a new Technical and Manual-training School for Thames this will be corrected in the future. On looking down the list of enrolments for each subject one cannot but be struck by the large numbers who took up shorthand and typewriting, compared with those who studied such subjects as commercial geography and commercial arithmetic. In my estimation, this is to be regretted, as shorthand is a subject of very little educational value, and of no practical value whatever to the student until he has acquired that proficiency which will enable him to write it faster than longhand. The knowledge of typewriting, too, is of little value except to those who

possess machines of their own, or who wish to earn their livelihood as typists. Commercial geography and commercial arithmetic, however, apart from their educational value, are of far-reaching utilitarian importance. The students attending the classes were examined on the same papers and at the same time as the students of the Auckland Technical School. Whilst the percentage who passed may be considered a satisfactory one under the circumstances, it is to be regretted that so small a number presented themselves for examination. In conclusion, I wish to pass special tribute to the untiring zeal and enthusiasm shown by the hon. superintendent of the classes, Mr. W. H. P. Marsdon, to whom the success of the classes is so largely due. His report is appended.

GEORGE GEORGE, F.I.C., F.C.S.,
Director of Technical Education.

In February last the Director of Technical Education for the Auckland District was written to on behalf of the Kauaeranga School Committee with regard to the working of technical and continuation classes. The matter having been clearly explained, and the benefits to be derived fully pointed out by the Director, the Committee, at its meeting in March, decided to make immediate application through the Board of Education to the Minister of Education for the recognition of classes, to give the use of the school buildings free of charge, and to appoint a subcommittee to attend to all details.

The Technical Class Committee, consisting of Messrs. John McDonald, John E. Ensoll, E. J. Milnes, and J. L. Walton, with the headmaster, Mr. W. H. P. Marsdon, as hon. secretary, considered it desirable to deal, at first, with commercial subjects chiefly. In due time the Education Department sanctioned the formation of classes for the following subjects: English literature and commercial correspondence, practical mathematics, shorthand, commercial arithmetic, typewriting, commercial geography, book-keeping, and singing (tonic sol-fa and staff notation), and Misses L. Gibbons, E. Renshaw, and E. Wilcox, and Messrs. Grigg, Hammond, and Marsdon were appointed instructors, the last named also acting as hon. superintendent. Work was commenced on the evening of the 17th April, upwards of eighty students being in attendance. In July, the standard examinations having taken place, a second series of classes was sanctioned, and considerable increase in numbers resulted, the roll-number during the second term being 112. The students were drawn from all sections of the community, and it speaks well for their enthusiasm when it is stated that many, after a day's work, not only in offices and shops, but also in factory, farm, foundry, and mine, came considerable distances to avail themselves of the advantages afforded them.

The work of each class is briefly dealt with below:—

Book-keeping.—The teaching of this subject was undertaken by Miss Elizabeth Wilcox, who has had considerable experience, not only as a teacher, but also as a practical book-keeper. Those students who were in earnest did very satisfactory work, but a large number would have done better had they previously taken up a course of commercial arithmetic.

Commercial Arithmetic.—Miss Ellen Renshaw, an ex-public-school-teacher of several years' experience, took this subject. The text-book used was Pendlebury's "Commercial Arithmetic."

Commercial Geography.—A small class took this subject. The lessons were made as practical as possible, samples of the chief commercial products being shown and illustrative diagrams used. The class had, unfortunately, to be closed after a few weeks' work had been done, as a considerable number of the students left the district. The instructor was Mr. W. H. P. Marsdon, headmaster of the Kauaeranga School.

Commercial Correspondence.—This subject was dealt with by Mr. W. Hammond, assistant master at the Kauaeranga School, in a very capable manner, and the students received much valuable instruction.

English Literature.—The book studied was Kingsley's "Westward Ho!" There was very considerable difficulty at the outset in obtaining an adequate supply of the text-book. Progress was, at first, greatly retarded in consequence. The instructors were Miss Lena Gibbons, who was for some years in the service of the Board of Education, and Mr. W. H. P. Marsdon.

Practical Mathematics.—The instructor, Miss E. Renshaw, was obliged to make several subdivisions in the class owing to the varying capacity of the students. The progress of the earnest workers—young men from the foundries, &c.—was much interfered with owing to there being an exceptionally busy period, which necessitated their working overtime at night.

Shorthand.—Good work was done by a large number of students. The instructor was Miss E. Wilcox.

Typewriting.—Mosher's "touch" method was adopted with very considerable success, notwithstanding that the class, a large one, was greatly handicapped by the obviously inadequate supply of machines. Five only—two Foxes, two Yosts, and one Hammond—were provided. If work in future sessions is to be satisfactorily coped with, a largely increased number of machines is absolutely essential. The instructor was Miss E. Wilcox. Generally speaking, the students have but little time for practice. The great majority are employed till 5 or 6 o'clock, and they attend class from 7 p.m. till 9 p.m. All come on three evenings per week, and many on four or five.

Summary of Income and Expenditure for the Year 1904.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
Students' fees	9	9	0	Salaries of instructors	121	0	0
Capitation for first term	126	9	11	Advertising and stationery	6	9	6
Examination fees	5	0	6	Cleaning, cartage, &c.	6	12	0
				Examination fees	5	0	6
				Balance	1	17	5
	£140	19	5		£140	19	5

Assets.	£	s.	d.	*Liabilities.*	£	s.	d.
Balance brought down	1	17	5	Salaries due to instructors	224	6	6
Capitation for second term	244	6	6	Balance	21	17	5
	£246	3	11		£246	3	11

W. H. P. MARSDON,
Hon. Superintendent.

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

The attendance at the school has been the largest of any year since its foundation, the total number of attendances registered being 39,997 for the forty weeks the school was open, or as nearly as possible 1,000 per week. The general character of the work also seems to me to be distinctly above the average, and the students as a whole have certainly displayed a greater interest in their work than I have noticed in some years. The evening attendance was, as usual, much greater than that of the day classes, the greatest number of individual students present at an evening class being seventy-five, and at a day class forty, which figures give a fair idea of the relative attendances of day and evening. The number of students on the roll at the beginning of the year was 352, and at the present time is 400. The subjects taught at the various classes have included freehand and model drawing, geometry, perspective, light and shade, monochrome painting, modelling, still-life painting, drawing and painting from the antique and from life. The life classes have been much better attended than usual, and some very good work has been done, particularly in line drawing, which several students have taken up with a good deal of success. At the annual examinations of the Board of Education, London, 84 candidates entered, and 64 of these obtained passes. The particulars are as follows: Freehand drawing, 30 passed; model-drawing, 15 passed; light and shade, 5 passed; geometrical drawing, 4 passed; perspective, 6 passed; blackboard drawing, 4 passed.

Only three works were submitted to the London Examiners for teachers' certificates, and of these two were accepted.

E. W. PAYTON, Director.

Statement of Receipts and Expenditure for the Year ending the 31st December, 1904.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
Balance at beginning of year	87	0	5	Administration—			
Grants from Government—				Salaries of instructors	658	6	8
Capitation on classes	495	16	6	Office expenses (including salaries, stationery, &c.)	89	16	0
Furniture, fittings, apparatus	32	9	9	Advertising and printing	1	15	6
Subsidies on voluntary contributions ..	150	0	0	Lighting and heating	16	5	8
The trustees for the Elam School of Art ..	276	6	8	Insurance and repairs	2	2	9
				Material for class use	11	16	2
				Life models	6	3	9
				Buildings—Furniture, fittings, and apparatus	79	11	5
				Balance at end of year	175	15	5
	£1,041	13	4		£1,041	13	4

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

Audited and found correct—G. O'HALLORAN, Jun., F.N.Z.A.A.—Auckland, 27th January, 1905.

TARANAKI.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Teachers' Classes.—Classes in cookery, woodwork, and botany and kindergarten work were taken at the winter school held between the 27th June and 9th July, and were well attended and much appreciated by the teachers.

Plumbing classes have been held at New Plymouth and Stratford, and the pupils attending these classes have been very successful in gaining certificates at the City and Guilds of London and Wellington Technical Examinations, thus qualifying themselves to carry out work in the boroughs without having to get permits from the local Sanitary Inspector. School classes under that part of the Education Act relating to manual and technical instruction have been established at about one-third of the schools in the district on very successful lines.

WANGANUI.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Manual and Technical Instruction.—Early in the year Mr. Ritchings Grant, of the Wanganui Boys' District High School, was appointed instructor of the woodwork classes at Palmerston North, Wanganui, and Hawera. At the first-named place the classes were held in the High School. The class for teachers in Palmerston North was poorly attended. The teachers' class in Wanganui was fairly attended. Cookery classes in Palmerston North and Hawera were begun in August. At the latter place, owing to the refusal of the Government to grant a sum sufficient for the erection of a suitable room, work was carried on at a great disadvantage in the science-room. During this year classes will be held at Wanganui, in addition to Palmerston North and Hawera.

Other handwork classes were held during the year, as follows: Kindergarten, &c., at 43 schools, cottage-gardening at 13, chemistry at 2, ambulance-work at 2, chip-carving, swimming and life-saving, perspective, and dressmaking, each at 1 school.

The capitation earned during the year 1903 was paid over to the head teachers. The purchase of material was made a first charge, and the balance was distributed among the teachers who gave the instruction. At the end of the year the Board decided to retain the capitation and supply all material required. Instruction in needlework was given during the year at twenty-nine schools in charge of male teachers, the average attendance at which did not exceed forty. In some cases difficulty was found in obtaining suitable teachers, owing, no doubt, to the low rate of capitation allowed by the regulations. The Board is giving every encouragement in the formation of classes in manual and technical instruction. Good work continues to be done in the technical schools at Wanganui and Palmerston North; at Hawera the classes are poorly attended. During the second quarter advantage was taken in Wanganui of the regulations regarding Junior Technical Scholarships, and the classes in English, typewriting, shorthand, and other subjects were made free, the result being a large influx of new pupils.

Training of Teachers.—The midwinter holidays were extended by a week to enable teachers to attend a winter school for the training of teachers. The subjects taken were kindergarten-work, nature-study, agricultural science, needlework, the work of schools below Grade 4, physical exercise, free-arm drawing, cardboard-modelling, and experimental science. The majority of teachers who attended, over two hundred in number, took several subjects.

Extract from the Report of the Inspectors of Schools.

Manual Training.—It is with pleasure we record a decided movement in respect of manual training. Its claims are now more fully recognised than ever before, and in the majority of the schools room is found on the time-table for at least one of the recognised branches. Teachers, too, are more alive to the importance of manual training as a basis for mental development and as a source of increased interest on the part of the pupils in the general work of the school. It may not be out of place to state here a few of the reasons adduced by educationalists for giving manual training so prominent a place in the work of the primary school.

1. The psychological reason: Manual training aids in mental development. Some modern psychologists state the position much more strongly. They assert that unless suitable manual training be given between the ages of four and sixteen certain parts of the brain are only partially developed. At any rate, it is undoubtedly true that a sounder mental training is secured when manual training is made to play a prominent part in the life of the child. All experience attests the fact, and the unquenchable desire of the growing child to do and make on its own account is a fact too well known to be ignored.

2. Manual training tends to develop the power of attention. "This is due partly to the pupil's interest in the work and partly to the nature of the exercises given. The correct construction of a piece of work can be accomplished only by a careful concentration of the mind upon the task." The boy who finds little to interest him in the ordinary lessons of the school becomes keen and alert in the presence of tasks in which he himself is the chief agent.

3. Manual training exercises a potent influence for good over the whole work of the school. An increased amount of attention gained in one subject is available for all the rest of the work as well, and the interest aroused in one subject may be the salvation of a pupil so far as his whole school career is concerned. This has been proved over and over again; and it is a significant fact that manual-training exercises provide the only real avenue of approach to a very large number of our pupils. "Learn by doing" should ever be the motto of the schoolroom, and if we cannot apply it always, let us at least do so as often as we can, so that the appetite of the growing pupil for "doing" may be satisfied, and thus his interest in the school be better maintained.

So far as this district is concerned, we are in respect of manual training but yet in the beginning of things. We are feeling our way with a good deal of hesitation, and often with misgivings; but let us be assured that we have entered upon a right departure and move steadily on, trusting to the enlightenment of experience to guide us towards the best subjects and into the best means of dealing with them. Each teacher has his own problem here, and, though he may be helped by others towards its solution, the solution must in the end rest with himself. Each must choose and act according to that for which he is most suited.

The great success attending the establishment of the woodwork and cookery classes at Palmerston and Hawera, and of the woodwork class at Wanganui, urges us to seek a further development of this scheme; and we trust that before long these two subjects will become part of the course of instruction at all our centres. Is it vain to hope that at some not far distant day provision for cookery and benchwork will be part of the equipment of every school, and that the training given by a suitable course in these subjects will soon be deemed as important as the learning of problem in stocks and compound interest?

We are pleased to find, especially in the larger schools, that sewing, perhaps the most important subject for girls, is being taught in a more educative manner, and that the practice of many teachers in cutting out and placing the pupils' work for them—a task that makes extraordinary and quite unnecessary demands upon the teacher—is giving way to the more rational and the only educative one of insisting that the pupils shall place and cut out for themselves. Most of our large schools are now provided with sewing-machines, and the girls in the upper classes obtain valuable practice in the use of these.

Perhaps the most important development of the work of our rural schools has been the establishment of cottage-gardens. A very large number of teachers encourage the formation of flower-borders around the school, and this is an excellent thing; but we refer here to those gardens whose aim is to teach the elements of agriculture, and where operations are upon a much larger scale. This work was inaugurated under the provisions of the manual and technical regulations, the initial cost of tools, &c., being provided out of a special grant by the Education Department, and the upkeep maintained by a liberal capitation. It is felt on all hands that this is a step in the right direction. No more practical move has before been made. The work has

been enthusiastically taken up by several teachers under the Wanganui Board; their efforts have been supported loyally by the parents, and the pupils have taken to the new departure with great zest and interest. The great possibilities latent in this movement can scarcely be estimated, and it is to be hoped that the Minister of Education will do all he can not only to maintain the gardens already established, but furnish the means for the establishment of more. Such gardens should be part of the equipment of every rural school.

Extract from the Report on the Wanganui Technical Classes.

Science and Literary Classes.

The year has seen the inauguration of free classes, with very satisfactory results. Sixty-three scholarship students were enrolled during the second term, sixty-eight during the third, and 106 during the fourth. The majority of these have honestly endeavoured to improve themselves educationally, and to equip themselves for the battle of life. Their conduct, with very few exceptions, has been most commendable.

The English class, which is compulsory for all scholarship-holders, has studied the rules of composition, the history of the English language, and Shakespeare's "Merchant of Venice." Such a course of study cannot fail to be of the utmost value. The syllabus for the coming year has been enlarged, to include a weekly exercise in spelling and dictation. The work of the mathematics class has been suited to the varying needs of the students, whose regularity attests to the interest they have in their studies. The commercial subjects—shorthand, book-keeping, and typewriting—have all been most satisfactorily taught. In the typewriting class, 77 per cent. of the students voluntarily presented themselves for examination, with very good results. Great difficulty has been experienced in accommodating thirty students with four machines, and, consequently, the results are all the more creditable. In connection with these classes, it is suggested that classes in advanced book-keeping and commercial law be formed for those who have passed through the senior book-keeping class. In the electricity class, during the fourth term, experts have been engaged for the senior section, an innovation that has been attended with success, as the increased attendance shows. The class in woodwork has not been so largely attended as the quality of the instruction deserves. We are hopeful that, now that the class is becoming more widely known, a better attendance may be obtained during the coming year. During the fourth term the number of students outgrew the accommodation at our command, and, with the addition of mathematics as a compulsory subject in the free classes, another room will be needed, capable of accommodating fifty students. We have been greatly inconvenienced during the whole of the last term by being compelled to accommodate the mathematics and book-keeping classes in one room.

Examinations were conducted in each class during the closing week of the term, at which 109 students voluntarily presented themselves. Thirty-nine first class, twenty-one second-class, and twenty-four third-class certificates were granted.

To induce the students to make greater efforts to gain efficiency, prizes have been offered by His Worship the Mayor, the Chamber of Commerce, the Wellington Piano Company, the Chronicle Newspaper Company, and by Messrs. A. D. Willis, H. I. Jones and Sons, A. Hatrick, J. Duncan, L. Cohen, and Treadwell and McBeth. We are grateful to these donors for their kindly interest in our classes. One cannot speak too highly of the members of the staff, who have all worked enthusiastically on behalf of their students. Whatever success has been achieved is due almost entirely to their efforts. The prospects for the coming year are exceedingly bright, and, if the present number of students be maintained (and we have every reason to believe that the steps now being taken to make the benefits of the school known to the public will be successful), the Board will be set free from all anxiety on the question of financing the science, literary, and commercial side of the school.

Arthur Varney, A.C.P.,
Director, Science Department.

Art, Plumbing, and Wood-carving Classes.

The number of students who attended the different classes of the school during the four quarters was: Day class for drawing and painting, 20; evening class for drawing and painting, 30; life class, 6; building-construction, 17; machine-construction, 12; practical, plane, and solid geometry, 37; teachers' Saturday class, 18; art class, 29; practical plumbing, 28; theoretical plumbing, 19; wood-carving (three classes), 101: total number of individual students, 189.

Drawing and Painting.—The same course of instruction has been pursued as last year. The standard of work has been more than maintained in painting from still life and flowers. There has not been so much work from life as last year, but the quality has improved. The class for school-children has been largely attended. Good work has been done by the pupils, who have made marked progress. I would like to call parents' attention to the fact that this class is held at such an hour as to enable school-children to attend. Parents should avail themselves of the opportunity of obtaining for their children a thorough art training. The fees are very low. The pupil-teachers' class has been poorly attended owing to the removal of teachers, while the work in some cases was good; as a whole, it was only fair.

Practical Plumbing.—The number of students in attendance at this class has steadily continued to increase. It was found necessary at the beginning of the year to remove to a larger room, until the workshop was built at the school. Last quarter it was found necessary to add to the equipment and appoint an assistant instructor. I expressed a hope in my last report that an up-to-date plumbing workshop would be provided in the near future. I have again to call your attention to the need for such a shop. I trust that the Department will make the necessary grant to build and furnish it. Some of the students who have attended the class for six months had never done a piece of leadwork previous to their coming to the school. A two-year

course of work is necessary if success at the examination is to be assured. The Wanganui Sanitary and Plumbing Board of Control, under the Department of Public Health, held a practical and theoretical examination for certificates of competency. Five students presented themselves, and all passed. The theoretical class in plumbing was well attended in the fourth quarter, and good work was done. Mr. J. Bruce, who kindly took charge of this class up to the second quarter, resigned, and Mr. Arnold was appointed in the fourth quarter.

Building-construction.—The attendance at this class has fluctuated during this year owing to the students being called away to work in various parts of the districts. The students worked steadily through the session, and good results were obtained at the examination.

Machine-construction.—The work of this class was of good quality, and a number of drawings were executed during the year. We are still in need of more mechanical models to enable students to draw direct from the object. The attendance has been fair.

Wood-carving.—The attendance has considerably increased in numbers, and if as many students enrol next year another class will be necessary. The students have turned out excellent specimens of work. Several specimens were shown at the various shows and exhibitions, and several prizes were gained.

Thanks are due to the Borough Council for their annual subscription towards the plumbing class; to Miss Alexander, Messrs. Ferguson, A. Hatrick, Pyle, H. Purser, H. I. Jones, R. and E. Tingey, and A. D. Willis for donations and prizes in connection with various classes; to the master plumbers for a scholarship for apprentice plumbers; to the Wanganui Builders' Association for three scholarships in connection with the building-construction class, and one in connection with the plumbing class. I have to thank my staff for their hearty co-operation in the past year's work.

DAVID E. HUTTON, A.M.C.R.,
Director, Art Department.

EXTRACT FROM THE REPORT ON THE PALMERSTON NORTH ART CLASSES.

Classes were held by Mr. L. J. Watkin on the same lines as for last year. The average number of students attending day classes was 19; general evening classes, 12; evening life class, 6; teachers' Saturday art classes, 40. About two-thirds of the latter classes were pupil-teachers. The subjects taught included freehand, model-drawing, light and shade, painting in oils and in water-colours, geometrical drawing, brushwork and design, building-construction, machine-drawing, signwriting, drawing from life, &c. The general attendance of the students has been good, and some good work has been done. Prizes were obtained in the industrial classes at the Palmerston Agricultural and Pastoral Show by students of the school in various branches of drawing and of painting.

For the first time the examinations of the Board of Education, South Kensington, were held in Palmerston North in connection with the school. Seventeen students entered, the subjects taken being freehand, model-drawing, light and shade, geometrical drawing, and painting from still life.

The Saturday art classes for teachers having grown too large to be properly managed single-handed, at the beginning of the third quarter the Wanganui Education Board appointed Mr. Herbert Gabites as assistant instructor. His assistance has been most valuable, and his work in the highest degree satisfactory.

EXTRACT FROM THE REPORT ON THE HAWERA ART CLASSES.

During the year classes in painting, freehand, model and geometrical drawing were held. The classes were not well attended, except the Saturday classes for pupil-teachers.

EXTRACT FROM THE REPORT ON THE SCHOOL CLASSES FOR WOODWORK AND COOKERY.

Classes for woodwork were conducted at Hawera, Palmerston North, and Wanganui by Mr. R. Grant. The total number on the rolls at the end of the term for each place was as follows: Hawera, 58; Wanganui, 153; Palmerston, 164; whilst the average attendance was—Hawera, 57; Palmerston, 157; Wanganui, 153.

The course of instruction included twelve simple models, each one involving a principle; also lessons on timber, the growth of trees, the proper use and manipulation of tools, &c. The drawing for each model was taken in connection with the work. The three centres were visited by Mr. Isaac, the Department's Inspector, who expressed himself as satisfied with the work that was being done throughout the district; he also gave many useful hints as to the future conduct of the classes. It might be mentioned here that a woodwork exhibit and a drawing exhibit were sent to the Wanganui Agricultural Show, each of which was awarded a first prize.

By degrees the rooms are being fitted up in an attractive manner. The specimens of New Zealand woods supplied by the Department have been supplemented from the instructor's private collection. Blackboards are badly needed for each of the rooms; there are many other requisites also which can be made in the room, but which take time to complete. Teachers' classes were conducted in Wanganui and Palmerston North. The Wanganui class was attended by eighteen teachers, and the Palmerston North class by nine teachers.

Cookery classes were conducted at Palmerston North and Hawera by Miss B. Mollison. At Palmerston seven classes were held weekly, with a roll-number of 138, and an average attendance of 122; and at Hawera three classes, with a roll-number of sixty-eight, and an average attendance of fifty-seven. The course of work at each place comprised instruction and practice in the chief ways of cooking meat; also pastry-making and puddings. In addition to these school classes, a teachers' class was held at Hawera, with an average attendance of six out of seven teachers. The programme followed was that laid down by the City and Guilds of London Institute.

WELLINGTON.

Extract from the Report of the Education Board

Manual and Technical Instruction.—Cookery classes were conducted in Wellington throughout the year, and in the country districts. The equipment at the latter leaves much to be desired if the best results are to be attained. The number of schools in which the ordinary subjects of manual and technical instruction were carried on increased last year from sixty-three to ninety-six, the programme, in addition to ordinary subjects of manual and technical instruction, included cottage-gardening and elementary agriculture, eight classes; dressmaking, one; chemistry, two; first aid and ambulance, one; swimming, three. The capitation of 10s. per head for sewing in schools conducted by a sole male teacher is not sufficient to pay capable instructors. My Board is of opinion that the study of subjects such as gardening and agriculture should be encouraged as far as possible, especially in the country. Schools were treated as liberally as possible in the supply of material and apparatus, the expenditure on which amounted to £510 10s. 7d., derived from capitation and special grants. Technical classes under the control of local managers were successfully established at Petone during the year, and local donors, with praiseworthy liberality, contributed £167 13s. 7d.; and at Carterton similar classes on a smaller scale were also conducted, for which £8 17s. 6d. was locally contributed. The administration of the Wellington Technical School is now entirely under the Technical Education Board, the Board's representatives on which were the Chairman and Messrs. Allan and Hogg. The Government grant of £200 for instruction of teachers in subjects manual and technical has enabled a large number of teachers to render themselves more efficient in this part of the school work.

Extract from the Report of the Inspectors of Schools.

Handwork is finding more favour with our teachers. Eighty-six schools have claimed capitation under the Manual and Technical Instruction Act, and nearly all the subjects mentioned in clauses 19, 20, and 21 of the regulations under the Act are represented on these claims, plasticine and brush drawing being the favourite subjects. Other subjects represented are first aid and ambulance, swimming, cottage-gardening, elementary agriculture, elementary physics, and elementary chemistry. Some schools are following the excellent example of Mauriceville West with regard to "agricultural knowledge" combined with cottage-gardening. Two schools, which are earning the chemistry grant under the regulations of the Manual and Technical Instruction Act, are doing practical laboratory-work. The cooking classes under Miss Millington and Mrs. Neeley were continued as before, and the Saturday classes for teachers at Wellington, Masterton, and Pahiatua were well attended.

Extract from the Report of the Director of the Wellington Technical School.

The number of students enrolled during the year was as follows: First quarter, 1,135; second quarter, 1,210; third quarter, 1,139; fourth quarter, 1,007, a considerable increase as compared with the previous year.

Art Department.—The work generally in this department has been satisfactory. The day classes were well attended. The introduction of a life class (drawing from the head) during the latter half of the year has helped very considerably to keep up the interest, and some very good work has been done. The prize offered by the New Zealand Academy of Fine Arts for the best study of a head from life, in colour, was won by a student of this class. A new feature was the recognition of a landscape class by the Department. The class was a success, and one of the students won the landscape prize at the New Zealand Academy Exhibition held towards the end of the year.

A number of works for the Art Masters' and Art Class Teachers' Certificates were sent to the Board of Education, South Kensington, for examination, and, with the exception of two or three, were all accepted.

In the report of the examiners these works were described as an "excellent set." The results of the personal examinations held by the same body were also very satisfactory. In the Students' Prize Section of the New Zealand Academy of Fine Arts, open to Australasia, and in the Catalogue Cover Competition, open to professional designers, the prizes for landscape, still life, modelling, *repoussé*, antique, head from life in colour, wood-carving, and design for catalogue cover were won by students of the Art Department. The life class has been exceptionally good in the evenings, and has done excellent work. A few costumes subscribed for by the students were of considerable advantage, but the school sadly needs a few historic costumes for the use of students (who are becoming more numerous each year) in black and white and illustration. The class in design has again been well attended, and a quantity of good work was done. There was a home-work display in the recent exhibition of work at the school, which was well commended. Students of this class worked out a number of designs for various firms and others in Wellington. *Wardell's Magazine, St. Peter's Club Magazine,* Academy Catalogue cover, Post-office Christmas card, the merit certificate in connection with the Cadet Industrial Exhibition, and posters in colour for the Art and Science Departments may be cited as examples.

Modelling and Casting.—This class has been well attended, and some good work was done in the plasterers' section. The school is sadly in need of a properly equipped casting-room.

Wood-carving and Repoussé classes were successfully carried on, some good works being executed and exhibited in the Academy of Fine Arts Exhibition, and also in the Exhibition of School-work.

Elementary Art and General Drawing.—These classes have been fairly well attended, but the subjects of instruction are not sufficiently varied, and time should be found for classes in nature-drawing, elementary colour-work, and elementary principles of ornament, instead of confining the attention of the student to shading and model-drawing. The syllabus for 1905 has been arranged

to include both these necessary subjects, and also such important subjects as anatomy, historic ornament, principles of ornament, perspective, and geometry for art students.

Teachers' Saturday Morning Classes.—These classes have been very largely attended, the subjects of instruction being nature-drawing, and common-object drawing on blackboards, brush-work, and elementary modelling, light and shade, and painting for those who have been through the elementary courses. The courses of instruction fulfil the requirements for drawing for the D certificate. A class for teachers in the Wairarapa district was formed at Masterton, the instructors going up weekly from Wellington, so that the courses might be conducted on the same lines as in the Wellington Technical School.

Engineering Section.—Courses in mechanical drawing, machine-design, and applied mechanics have been successfully carried on, in spite of the unpreparedness of many of the students for any higher work. The classes in experimental mechanics have been greatly handicapped by lack of special accommodation and suitable apparatus for the use of students themselves. The full benefit of a course in practical mechanics can only, I think, be secured when each student separately makes for himself not only the experiment, but also the analysis of his observations and the deductions to be drawn from them. The school at present possesses no laboratory in which the students may carry out work of this character. The lack of engineering workshops has also militated against the complete training of students in the science of engineering, besides preventing the use of home-made apparatus, suited to the special necessities of the school. The lack of preliminary training in mathematics and natural philosophy has in all the engineering classes handicapped the students and increased the difficulties of the teachers very considerably. A class in practical mathematics designed to remedy this evil in part has met with considerable success, and should become an important feature of the courses. Elementary classes in applied mechanics and strength of material, which are to be established in 1905 on a sounder basis, should do much to remove the disadvantages under which students of mechanical and electrical engineering at present labour.

With the erection and equipment of suitable workshops and laboratories, with the preparation of boys from the primary schools during two or three years before apprenticeship, with the growth of the institution, and the rearrangement of courses in mechanical and electrical engineering, the defects and difficulties of the present position should be overcome in the course of a few years, and students of the school will then be able to obtain at least a solid foundation on which to build their knowledge of engineering science. In electric light and power distribution classes have been conducted during the year, but the lack of necessary laboratory and workshop accommodation and equipment has greatly hampered the work of students. The work of this class was under the charge of Mr. S. Richardson, M.I.E.E., until the middle of the second quarter, when Mr. Richardson resigned and the Director took over the work. The surveying class was carried on efficiently by Mr. Walter Robinson during the year, but the number of students was very small.

Architectural Section.—Mr. Charles Lawrence continued to instruct the classes in building-construction, and with the improved furniture granted by the Department the classes have been in a much better position than in previous years, and have done some excellent work. The classes in carpentry and joinery have been well attended, and the work done has been satisfactory. Lectures in theory were added to the syllabus during the year. Mr. Alexander Graham conducted these classes with energy and success.

In plumbing, theory and practice, the work was carried on by Mr. G. Reed, assisted by Mr. Wells. Both Mr. Reed and his assistant appear to be thoroughly competent teachers, and the work done has been good. New workshop accommodation is, however, urgently required, the present building being unsuitable and insanitary. The standard of the local examination has been maintained at a very high level.

General and Commercial Classes.—Mathematics: The classes in pure mathematics have been fairly well attended and have been successful. Mr. A. C. Gifford has conducted these classes throughout the year. In accordance with the movement in the direction of making the courses in geometry and algebra bear more directly on one another, modifications have been introduced into the teaching during the year, with good results. Book-keeping: The teaching in this subject has been most efficiently carried on during the year by Mr. T. K. Clarke, who has spared no pains to make the class a success. These book-keeping classes are undoubtedly meeting a decided want in the town, and the successes of students, both in examination and also in business, have been very gratifying. In the shorthand and typewriting classes excellent work has been done by Miss Williams, both in the day and evening classes. Students completing their course have no difficulty in obtaining positions in business houses in the town. Students in the day classes have a considerable amount of practice in office-work, and in business letters, &c. Arithmetic: This class, under Mr. Martyn Renner, has done good work, and has been fairly well attended. Latin and English: These classes, under Mr. Renner, have shown good results in the Junior and Senior Civil Service Examinations. French: The absence of a steady demand for instruction in French, and the difficulty of obtaining satisfactory tuition prevented the class from being a success during the year. Tailor's Cutting: A class of tailor's cutting was established in the last quarter of the year. Various circumstances prevented the attendance being large, but the class gives promise of being a successful one, and appears to meet a want in the town. The classes have been under the care of Mr. D. Morrison, who has excellent qualifications. Both the master tailors and the journeymen tailors appear to be well satisfied with the establishment of the class. Dress-cutting and Dressmaking: Classes in these subjects were established in the last quarter of the year under Miss E. Forbes, whose system of teaching seems to be well adapted for technical-school work. The attendance was satisfactory, and will probably largely increase when suitable accommodation can be provided.

General.—In regard to the classes generally, a certain amount of reorganization appeared to be necessary in order to bring the school more into line with modern developments, especially

in the engineering and other technical classes, which seem to have received less attention hitherto than their importance demands. A great difficulty has been the lack of uniformity of students in the various classes of the school, and the absence of gradation of the work. Elementary and advanced students attended the same class, with the inevitable result that the teacher's time was frittered away in individual tuition in many cases where class teaching would have been much more suitable. There has been, and still is, a painful lack of proper accommodation and equipment for many of the classes outside the Art Department, and even for these art classes the rooms and equipment are far from being entirely suitable. Another disadvantage under which the school labours arises partly from the floating character of the population of the town, and partly from the fact that in any miscellaneous class more advanced students are with difficulty kept, so that for both reasons the class itself tends to become a procession of students, who stay for a term or two and then leave the school, with the merest smattering, to make room for fresh students. Under the system of having four terms in the year, and of admitting students at half term as well as at the beginning of each term, this evil is exaggerated. This system, however, has been adopted in order, apparently, to maintain the number in attendance as high as possible, so as to keep the revenue of the school at a sufficiently high level to meet the expenditure. It is by no means certain that in this respect the system does not defeat its own object. At the same time, we would suggest that classes in advanced subjects, being, as a rule, small in numbers, should be able to earn capitation at a much higher rate than the large elementary classes. It appears, however, that by running large elementary classes sufficient capitation may be earned to make up the loss in fees and capitation on the more advanced classes, and it is in this direction that a solution of the financial question may be found. These elementary classes must be made a satisfactory nursery for future advanced students, if the system is to become self-supporting in every sense on the basis of the present scale of fees and capitation. With our present limitations of room, and having regard to the class of evening student that we can attract, these elementary classes must be conducted during the daytime, and must therefore be confined largely to younger boys and girls undergoing preparation for apprenticeship. We are in hopes that arrangements may be made for admitting apprentices to day classes in future years, so that the science of his trade may be learned by the apprentice at the same time as the practice. It is only by a connected training beginning as soon as the student leaves the preparatory school, and extending up to the end of his apprenticeship, that we can hope to prepare the young New-Zealander to meet competition from men trained in other parts of the world. Unless we can give the student such preparation we feel that the system must fall short of its object. Under the arrangements subsisting hitherto, a long hiatus generally occurs in the education of the student, lasting from the time that he leaves school till the time—often some five or six years later—when he wakes up to the fact that his knowledge is not sufficient for his trade or profession. After this hiatus the student enters the evening classes of the technical school, and attempts to pick up the lost threads of his training, and to furbish up knowledge, which was probably of the wrong kind to begin with, and has lain rusting under the dust of years since he left school. The process is painful to the student and heartbreaking to the teacher, and has the serious drawback of discouraging further effort and of postponing—often indefinitely—any real advance of the student in the knowledge for which he comes thirsting to the school. The courses of the school have been reorganized for the year 1905, by permission of the Department, in the following ways: (1.) The evening classes have been arranged so as to separate more completely elementary and advanced students. (2.) Day classes for the preparation of boys and girls for apprenticeship have been established with a view to providing a nursery for the evening classes, and so meeting as far as possible the present difficulties of the evening work. W. S. La Trobe, Director.

Statement of Receipts and Expenditure for Year ending 31st December, 1905.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
Balance at beginning of year	10	14	0	Administration—			
Grants from Government—				Salaries of instructors	2,523	15	4
Capitation on classes	732	1	2	Advertising and printing	112	13	6
Capitation on technical scholarships	12	1	0	Lighting and heating	151	2	6
Furniture, fittings, apparatus	400	3	8	Insurance and repairs	139	6	4
Material	89	7	6	Rent	40	0	0
Subsidies on voluntary contributions	129	5	0	Examinations, &c.	29	19	6
Other receipts, viz.—				Material for class use	145	7	3
Fees	1,585	9	0	Other expenses, viz.—			
Voluntary contributions	131	1	6	Cleaning	125	7	6
Rent, Industrial Hall	40	0	0	Library and prizes	65	3	4
Instruction of teachers	140	0	0	Travelling	102	13	7
Sale of lead	46	3	9	Model fees and incidentals	59	1	5
Wellington College and Girls' High School drawing classes	120	0	0	Buildings—Furniture, fittings, and apparatus	233	18	1
Rent, Victoria College	97	10	0				
Balance at end of year	194	10	11				
	£3,728	8	4		£3,728	8	4

W. A. Evans, Chairman
W. S. La Trobe, Secretary } of Managers.

Extract from the Report of the Managers of the Petone Technical Classes.

The Managers have pleasure in reporting that the work of the various classes carried on in the Technical School has, in their judgment, been very successful. The number of pupils who have attended the school the past session has amply shown the need for such an institution in Petone. The Managers hope to be able to arrange for the examination of the various classes towards the end of the incoming session, and to issue certificates to the students. The number

who attended the school during the past session was eighty-three. The amount of fees received from the pupils was £90 10s., the amount due to the Board on capitation being £41 12s. 6d., and for rent of building for carpentry, drawing, and machine-construction classes £20 to date. The amount paid in salaries to teachers and custodian was £121 16s. The Managers received pound-for-pound subsidy on the donations received from the Gear Company, £50; Petone Borough Council, £30; Wellington Meat Export Company, £25; Wellington Woollen Company, £25; Petone Working-men's Club, £25; and on other donations amounting to £11 17s. 9d.: total, £166 17s. 9d. We intend to arrange for classes for the following subjects next year (the session to commence the first week in March): (1) English, and the subjects for the Junior Civil Service and Matriculation Examinations; (2) shorthand, typewriting, and correspondence; (3) carpentry and building-construction; (4) mechanical drawing and machine-construction; (5) dressmaking; (6) drawing and painting. If suitable arrangements can be made cookery classes will be started. The Education Board has acquired a large building for the purposes of a secondary and technical school, and we hope to accommodate the classes in this building next year, and it is our aim to have a building erected for the carpentry classes alongside the school. The Managers desire to express their gratitude for the generous manner in which the various local bodies mentioned in the report have contributed to the funds of the school, and, owing to the amount of work and continued expense that still lies before us in seeking to place the school in a satisfactory position, we would again appeal to these contributors for a continuation of their support.

ALEXANDER THOMSON, Chairman.
J. G. CASTLE, Hon. Secretary.

Statement of Receipts and Expenditure for the Year ending 6th March, 1905.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
Grants from Government—				Administration—			
Furniture, fittings, apparatus	56	2	6	Salaries of instructors	115	2	0
Material	9	1	3	Office expenses (including salaries, stationery, &c.)	1	3	6
Subsidies on voluntary contributions ..	166	17	9	Advertising and printing	3	12	6
Other receipts, viz.—				Lighting and heating	3	6	2
Fees	90	15	0	Insurance and repairs	1	8	6
Voluntary contributions	166	17	9	Rent	18	9	0
Interest and discount	1	0	8	Material for class use	12	6	9
				Sundries	7	8	3
				Buildings—Furniture, fittings, and apparatus	122	14	9
				Balance at end of year	205	3	6
	£490	14	11		£490	14	11

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

I hereby certify that I have examined all the accounts and receipts in connection with the above statement, and find the same correct.—R. W. SHORT, Auditor.

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

The Managers again desire to record their appreciation of the manner in which they have been assisted by the Masterton Trust Lands Trustees, who voted the sum of £100 in aid of the maintenance of the technical classes. Chiefly owing to the financial assistance thus rendered by the trust the Managers have not only been enabled to carry on the technical classes, but have also endeavoured to strengthen their efficiency. The thanks of the Managers are also due to the Education Department for the liberal manner in which the school has been dealt with during the past year. In addition to the usual capitation payments, grants amounting to £26 6s. 4d. have been paid by the Department in aid of purchase of material, apparatus, &c., required in connection with working of the classes. During the year three sessions were held, and classes were established in the following subjects: Drawing, painting, woodworking, plumbing, wood-carving, general knowledge, Civil Service subjects, book-keeping, shorthand, and typewriting.

The drawing and painting classes were under the instruction of Mr. G. R. Irvine. The average number of pupils on the roll was forty-four, with an average number of twenty-nine in attendance. A number of the pupils sat for the South Kensington Examinations held here in July last, but up to the present the results of those examinations are not made public. The woodworking class was in the hands of Mr. C. J. Ashton, and proved one of the most popular classes under our management. The attendance at the class was very well maintained, the average roll-number for the three terms being eleven, whilst the average attendance for the same period was nine. The plumbing class was carried on under the instruction of Mr. A. J. Parton, and, like the woodworking class, proved most successful. The average number of pupils on the roll was twelve, and the average attendance for the three terms nine. In December last an examination under the auspices of the Wellington Technical School was held in Masterton, when several of our local students succeeded in passing in the theory and practice of plumbing, thus qualifying themselves for a master plumber's certificate, a result creditable alike to both students and instructor. At the request of a number of pupils it was decided to form a class for wood-carving, and place the same under the direction of Mr. S. E. Wright. The class was successfully started, and ran for the three terms, with an average roll of eight, whilst the average attendance was six. The class in general knowledge was again successfully carried on by Mr. J. E. Thwaites. This class may be regarded as an introductory class to the Civil Service class, and gives promise of proving specially useful during the coming year. The average number of pupils on the roll was seven, whilst the average attendance was six. The shorthand, typewriting, and book-keeping classes were carried on under the management of Mr. S. E. Wright, the average number on the

roll being thirteen, whilst the average attendance of pupils was ten. A class in Pitman's shorthand has also been carried on by Miss Butement, the average number of pupils on the roll being four, and the average attendance also being four. The Civil Service class was carried on under the direction of Mr. A. N. Burns, B.A., and has again proved itself of great benefit to candidates preparing for the Civil Service and other examinations. The average roll-number was eight, whilst the average attendance for the three terms was seven. This class has been the means of supplying a long-felt want, and should therefore command a considerable amount of support during the coming year.

At the close of the instruction for the year a free exhibition of work done by the students belonging to the classes in drawing, painting, woodworking, wood-carving, and plumbing was held, and proved most successful in affording the public, who attended in large numbers, some idea of the scope and character of the work carried on by this institution. Many of the comments passed by persons well qualified to judge were most favourable, and as a result it is anticipated that the number of pupils entering the classes for this year's work will be largely augmented.

In April last the Managers succeeded in making terms with the Trust Lands Trustees for the renting of buildings suitable for workshops. These premises have now been fitted up, and the classes in woodworking, wood-carving, and plumbing were successfully carried on therein during the year. Though still far from perfect, this arrangement is much in advance of all previous efforts, and there is little reason to doubt that when the necessary repairs have been effected, these premises will prove eminently suited for the accommodation and requirements of classes such as those indicated. In their report last year the Managers referred to the very uncertain nature of their tenure of the present site of the Technical School. Though the building itself has been donated to the association for temporary use as a technical school, yet the removal of the building may be called for at the shortest notice. Under these circumstances it will easily be seen how urgent is the necessity for moving in the direction of the establishment of a permanent building.

In conclusion, the Managers express the hope that the public may now be induced to take a greater interest in matters connected with this institution, and afford it that amount of support and encouragement to which it is fairly entitled. At present, notwithstanding the many difficulties and drawbacks by which it is hampered, the work is being pushed steadily on. Given, however, a fair amount of support and sympathy, there is every prospect of its developing into one of the most useful institutions of its kind in the colony.

A glance at the accompanying statement of receipts and expenditure shows that the receipts for the year ending the 31st December, 1904, amounted to the sum of £519 14s. 3d., whilst the expenditure for the same period was £509 5s. 8d., thus leaving the sum of £10 8s. 7d. to be carried forward to next year's operations.

Statement of Receipts and Expenditure for Year ending 31st December, 1904.

Receipts.	£	s.	d.
Balance from 1903	85	12	4
Grants from Government—			
Capitation on classes	103	6	9
Buildings	13	0	0
Furniture, fittings, apparatus	2	4	0
Material	11	2	4
Subsidies on voluntary contributions	76	13	1
Other Receipts—			
Fees	116	15	0
Voluntary contributions	109	19	9
Refund for gas used, South Kensington Examinations	1	1	0
	£519	14	3

Expenditure.	£	s.	d.
Administration—			
Salaries of instructors	324	12	1
Office expenses (including salaries, stationery, &c.)	36	6	4
Advertising and printing	17	10	0
Lighting and heating	12	5	3
Insurance and repairs	4	12	9
Rent	37	5	0
Examinations, &c.	1	2	6
Material for class use	16	8	10
Other Expenses—			
Caretaker	14	6	0
Cartage	1	11	3
Bank charges	1	5	3
Furniture, fittings, and apparatus	42	0	5
Balance, 31st December, 1904	10	8	7
	£519	14	3

EDWIN FEIST, Chairman of Managers.
N. B. BUNTING, Secretary.

HAWKE'S BAY.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Technical Education.—The work of the Board in the matter of technical education has been greatly hindered by circumstances over which members have no control. This district extends for 350 miles along the East Coast, and population is not only scattered, but there are separate centres requiring special help so as to benefit the smaller schools. The Board is anxious to see woodwork and cookery classes established at such centres, but up to the present it has not been possible. In Napier there is the semblance of a Technical School carried on in rooms quite unsuitable, and the Minister requires the local body to provide a suitable site before making a grant to erect a building. The Board hopes to be able to announce shortly that a suitable site has been acquired. The Gisborne Technical School is in full working-order, and classes have been formed in plumbing, woodwork, and cookery, and they give promise of excellent results. The teachers' Saturday classes are proving of much value to the district, and are greatly appreciated by the majority of teachers. In Napier seventy-one teachers availed themselves of the classes in handwork and eighteen others in woodwork, and the class at Dannevirke in handwork was also well attended. The Board closed temporarily the Gisborne classes, the expense being too heavy under the con-

ditions of working, but now that the Technical School is in working-order a woodwork class and a cookery class have been opened, and teachers have been asked to attend. Classes for teachers in nature-study and elementary agriculture are contemplated, but at present the Board thinks that there are sufficient demands on what is supposed to be the resting-time of teachers, and they will be deferred until the completion of the present course.

EXTRACT FROM THE REPORT OF THE INSPECTOR OF SCHOOLS.

Technical Classes.—The school classes under the Manual and Technical Instruction Act are making but slow progress. Gisborne has now a Technical School, and both school and special classes have been established. Hastings has a room for woodwork, but Napier is yet without a properly equipped Technical School, and other places have been unable to proceed with classes in woodwork and cookery, there being no rooms available. The proposal to employ instructors in cookery and dressmaking for six months alternately in Gisborne and Napier as centres, is likely to be of much benefit to the places named, and, should the plan prove successful, other classes will be started in the southern part of the district. The Saturday special classes for teachers have been carried on at Dannevirke and Napier as centres. The Gisborne centre was discontinued owing to the heavy expense incurred, but the classes are being resumed at the Technical School—in cookery for the lady teachers and woodwork for the men. Other classes will be started when suitable instructors can be obtained. In Napier seventy-one teachers attended special classes in design and brushwork in plant-form, and eighteen men teachers joined the class in woodwork. The efforts that were made some time ago by the Board to interest the local public bodies in helping to provide for the salary of a special instructor in botany and agricultural science, following upon the lectures delivered to farmers by the Inspector-General of Schools, show the lack of interest manifested by public bodies generally in the promotion of technical education. I still think, however, that grants-in-aid would be given if the aim that the Board has in view were better understood. Two hundred and fifty pounds a year from seven or eight public bodies represents but a small sum from a large and rich district like Hawke's Bay, especially when it is proposed to expend twice or thrice that sum in furthering the agricultural and pastoral interests of the district.

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

Napier.—The class in the theory and practice of plumbing was carried on through the year by Mr. Kershaw, of the Health Department, as instructor. The class was subsidised by the Napier Borough Council, and the Council's by-laws required the attendance of local uncertificated plumbers at the class. An examination was held under the authority of the Health Department, and the results obtained were good. Nine candidates sat for examination, of whom three passed in both theory and practice, two in theory only, and two in practice only. At the time the question of a uniform examination throughout the colony was discussed. It was hoped that some arrangement of the kind could be brought about, so as to secure that plumbers examined under one local authority should be recognised by another. The class was well supplied with tools and fittings, and the grants made by the Department from time to time were of a liberal nature. The dressmaking class was carried on by Mrs. Thomas as instructor, and was well supported, though the need of a suitable building was felt. The Langer chart system was taught, and seemed popular with the students.

Dannevirke.—The class for plumbing was carried on by Mr. Kershaw. Considering the size of the town, the attendance was good. A local committee was set up to supervise this and other classes, and to them the thanks of the Board were due for securing grants in aid of the class from the Dannevirke Borough Council and the Waipawa County. The programme of work was on the same lines as that taken at Napier. In tools and apparatus the class was well found. The class in drawing and painting was started in the middle of the year, with Miss Baker as instructor. The attendance was good. Classes of this kind seem very popular with the students, and the action of the Department in encouraging this kind of work by grants and capitation was appreciated by those benefiting. Continuation classes for typewriting, book-keeping, and shorthand were carried on by Mr. Simmers, of the District High School. The attendance at this class was fairly large. Students, however, are not found willing to take the three subjects required by regulations to enable the class to come under the heading of a "technical class." It is hoped that an amendment will be made in the regulations to allow of typewriting and shorthand when taken together being recognised as "technical" subjects. Shorthand itself is a subject requiring much more time and teaching than many others recognised as "technical" subjects. Saturday classes for teachers were carried on by Miss Baker at the southern end of the district in design, model, and brush drawing, and in light and shade from models and casts. These classes are rendered possible through the Department's grant of £150 for the training of teachers. The classes were popular and helpful to teachers.

Hastings.—The woodwork class for artisans was conducted by Mr. Phillips as instructor. The programme of work included framing and bracing, construction of joints and scarfs, roofing, rafters, &c., sashes, mantelpieces, staircase-work, and circular joinery. The value of classes of this kind is not sufficiently appreciated by apprentices. The class had the use of the tools and room granted by the Department for the Hastings District High School. The class in dressmaking was carried on by Mrs. Thomas on the lines followed out by her in Napier. The attendance was good considering the population of the place. The instructor of the shorthand class was Miss McDonald, the assistant instructor at the Napier Technical School. Lessons were taken on Wednesdays and Saturdays. The class seems a good one, and one likely to last.

The work of the year shows a steady advance on that of 1903, and, in addition to the classes mentioned, others are in process of formation at Waipawa and Waipukurau, so soon as the Department can see its way to deal with the applications submitted. The Waipawa School Committee

have secured promises of grants in aid from the County Council and Town Boards, and are anxious to see the classes at work. In the matter of the teaching of agriculture, the Technical Committee of this Board, taking advantage of the interest in the subject aroused by the lecture given by the Inspector-General of Schools before the Hawke's Bay Branch of the Farmers' Union, approached that body with the object of securing its co-operation in introducing classes for the teaching of agriculture in this district. The various local bodies were asked for their support, and the Patangata and Waipawa Counties, Napier Borough, and Hawke's Bay Agricultural and Pastoral Society expressed their willingness to assist. Their support was not sufficient to carry out the scheme of work, and the matter is in abeyance. The Department is to be thanked for its liberal assistance in the recognition and equipment of classes, and, although at times the regulations seemed complicated and unnecessarily exacting, yet these seeming defects may disappear as the work becomes better known. Instructors are to be thanked for the care and interest shown by them in their work. The report by Mr. Anderson on the classes of the Napier Technical School is attached hereto.

G. T. Fannin, Secretary.

Extract from the Report on the Napier Technical School.

The number of students registered in each class during the year is as follows: Art classes—General drawing, light and shade, and design, 44; sketching from nature, and painting from still life, 16. Teachers' classes—Stencil-cutting, design, modelling, brushwork, and model-drawing, 71; woodwork, 18. Other classes—Woodwork, 34; shorthand, 44; typewriting, 25; book-keeping, 8; building-construction, 3; plumbing, 20.

Art classes: All the classes were satisfactorily attended. Much good work was done by the senior students, many of whom are in their third year of study. Teachers' classes: In the classes for hand-and-eye work decided advance was made, the quality of the work all round was good, and many teachers are giving instruction in the various branches in their schools. The text-books granted by the Department have been most useful in these classes, and are greatly appreciated by the many earnest students of the school. The teachers attending the woodwork classes worked well in preparation for the City and Guilds' Examination, and of the eight who entered for the first-year test, not a single failure was recorded. Evening woodwork class: This class was conducted during the year for boys only, and to those attending the primary schools free instruction was given. Shorthand and typewriting: These subjects were highly popular, and the attendance at times severely taxed the very limited accommodation. The book-keeping and building-construction classes had to be abandoned after the first quarter; although the instructors were well known and thoroughly qualified, the attendance was so unsatisfactory that it was not considered worth while to continue the classes. Theoretical plumbing: Not very much interest was taken in this important branch of plumbers' work, although those attending the classes last year were earnest enough in their preparation for their compulsory examination, in which most of the candidates were successful.

R. N. Anderson.

Extract from the Report of the Technical Classes conducted by the Gisborne High School Board of Governors.

Owing to the non-completion of the Technical School buildings work was not commenced until June, when technical classes for dressmaking, woodwork, plumbing, and mechanical drawing, and continuation classes in English, shorthand, book-keeping, and mathematics were started. The attendance was disappointing, the dressmaking and plumbing classes being the most popular. Good work was done in the various classes. In the second quarter, owing to the warm weather, the dressmaking and plumbing classes did not resume work, and the attendance at the other classes fell off considerably. The register of the mechanical drawing class was lost in the fire which destroyed the district school, and we were therefore unable to claim the capitation earned by that class for the second quarter. The cookery and science rooms were not completed until the end of the year, consequently these subjects were not taken in hand, but we are in hopes of being able to start cookery for both school and adult classes in February next, as negotiations are proceeding with the view of engaging an instructor. Financially the classes did not pay, but, with the assistance of a sum of £10, being part of the balance from the old Technical Classes Committee formed some years ago, we nearly paid our way. We must express regret at the small amount of interest taken in the classes by the general public, and would earnestly appeal to parents and others interested in our young people to encourage them to take advantage of the facilities offered to them to improve their education. In other parts of New Zealand technical classes are well attended, and we see no reason why Gisborne should be behindhand in the matter.

W. Morgan, Chairman.

Statement of Receipts and Expenditure for the Year ending 31st December, 1904.

Receipts.	£	s.	d.
Balance at beginning of year	9	9	8
Grants from Government—			
Capitation on classes	19	12	8
Buildings	853	13	4½
Furniture, fittings, and apparatus	136	16	1½
Fees	61	13	6
Trustees for the Evening Classes Committee, being a payment on account of a sum of £50 lent to the committee	10	0	0
	£1,091	5	4

Expenditure.	£	s.	d.
Administration—			
Salaries of instructors	75	8	0
Lighting and heating	6	11	1
Sundries	6	3	6
Buildings—			
Contracts (new buildings, additions, &c.)	824	13	4½
Architect, &c.	29	0	0
Furniture, fittings, and apparatus	136	16	1½
Balance at end of year	12	13	3
	£1,091	5	4

C. A. de Lautour,
Secretary to Controlling Authority.

Examined and found correct.—F. A. Coleman, F.N.Z.A.A., Auditor. 9th June, 1905.

MARLBOROUGH.

Extract from the Report of the Education Board.

Handwork and Technical Instruction.—During the past year school classes were held in needlework, ambulance, brushwork, and plasticine-modelling. A "continuation" class and teachers' classes were established, the subjects of the latter being first aid and ambulance and brushwork. The total receipts on account of the classes held in 1904 were: for apparatus, £7 13s. 7d.; capitation, £26 5s. 2d. During the current year it is hoped to have rooms for cookery and woodwork built, so that the children of Marlborough may be able to express their ideas not only in words but in the concrete, a part of culture that requires attention in an age that looks not only for thinking but for doing.

Extract from the Report of the Inspector of Schools.

Handwork of some description was practised in eighteen schools. The branches undertaken were modelling in plasticine, brushwork, flower and vegetable gardening, bead-work, mat-weaving, tablet-laying, making of fern baskets, paper-weaving, work in worsted, embossing, perforated-card work, and ambulance. If the Education Department could see its way to grant capitation on agriculture as a school subject from Standard I. upwards, there is little doubt that this branch of handwork would be much more widely taught. The elements of the subject are not so abstruse as to be beyond the capacity of ordinary children in the lower classes. Where this subject is taught, the gardens should be placed in parallel strips with rows of the same kind of vegetable stretching in one line through all the gardens; it could then be seen at a glance which section had the best growth, and the whole of any particular line of crop might be sold to provide a prize for the one providing the best specimens, and so on with each class of vegetable in turn. It would probably be found that boys would select the seed sown, and only sow from good samples; the effects of various manures would also be watched. Judging by accounts from Canada and the United States, the farmers in the neighbourhood of the schools generally take great interest in such experiments. Several teachers showed commendable energy in working up exhibits of handwork for the Marlborough Industrial Exhibition, and the outcome of their efforts provided a valuable object-lesson to visiting teachers and pupils.

Classes for teachers in brushwork and first aid and ambulance began in the latter half of the year. Classes in other subjects are in contemplation. The amended regulations maintain the higher rate of capitation in woodwork and cookery. It would economize time if the ordinary register sufficed for school classes in ambulance.

Late in the year an attempt was made to establish technical classes in Blenheim, but the advance of summer and the attractions of the Marlborough Exhibition militated against success. This endeavour will be renewed in 1905. The Borough Council was approached *re* granting a site, but could not see its way to do so. It would greatly assist advancement in handwork-studies if the Department could arrange in the different education centres for periodical exhibitions of the work done in modelling, drawing, &c., at the higher schools of art in the colony.

The revised regulations for Junior Technical Scholarships propose a definite examination to the candidates. An increase may therefore be looked for in the numbers taking advantage of these scholarships. The regulations also postulate attendance at a class for advanced arithmetic and a technical subject, as well as at one for advanced English. By relaxing the time-limit for continuation classes these scholarships would benefit teachers in small country schools, encouraging them in the work of Standard VII. According to the reports of the Mosely Commissioners, education, both primary and secondary, in American schools is free, and books are provided. We have therefore still heights to reach.

NELSON.

Extract from the Report of the Education Board.

Manual and Technical Instruction.—Modelling in plasticine has been taught in 22 schools, brushwork in 3, paper-folding, bricklaying, &c., in 6, ambulance and first aid to the injured in 16, swimming and life-saving in 9, cookery in 3, woodwork in 1, and dressmaking in 1. Needlework, under Regulation 26, (*e*), has been taught in 19 schools in sole charge of male teachers. Technical classes in dressmaking have been held in 3 schools, and continuation classes in shorthand at 1. Special classes for the instruction of teachers have been held in Nelson for drawing of various kinds and for woodwork, and at Westport for brushwork. It was a matter of regret that the Board was not authorised to accept a tender for the erection of the Nelson Technical School before the end of the year; in fact, it is nearly two years now since application was first made for a grant of £1,000 to have the school started. A site for the erection of the Technical School at Westport has been secured, but the Board's application for a grant for a building has again been postponed. The Technical School building at Reefton has been in use during the year for cookery and woodwork during the day and for dressmaking in the evening. It is expected that fuller use will be made of the building during the present year.

Extract from the Report of the Inspector of Schools.

Handwork.—Thirty-two schools (double the number reported last year) have taken up some form of handwork with very satisfactory results. The chief branches undertaken have been plasticine-modelling, brushwork, and ambulance, while in some preparatory classes bricklaying and paper-folding are carried on.

At some of the larger schools school classes have been conducted in cookery, woodwork, and dressmaking; also technical classes in dressmaking and continuation classes in shorthand.

Further, classes for the instruction of teachers have been held in ambulance, and brushwork, drawing (brushwork, free-arm, blackboard, and model), and woodwork.

In nineteen schools managed by male sole teachers needlework has been taught as a branch of technical instruction.

Since our last report the Reefton Technical School has been built, equipped, and largely employed throughout the year, and we are pleased to state that the grant has at length been made for the Technical School at Nelson.

GREY.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Technical Instruction.—By the receipt of a grant of £75 for the instruction of teachers, the Board was enabled to establish Saturday classes for teachers, and to assemble the teachers during the midwinter holidays for some days' training. The Board has reason to believe that the money thus spent is wisely spent—in fact, if the scheme were extended, good results would follow.

WESTLAND.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Manual and Technical Instruction.—Ten school classes in handwork, recognised by the Education Department, were in operation during the year. The lower classes of a number of other schools have received instruction in handwork. The capitation received serves as a contribution to the cost of material and text-books supplied by the Board.

The special class in woodwork carried on in a special building attached to the Kumara School has continued in operation, and closed the year with twenty-five students. Of these, twenty-one are pupils of the Kumara Public School.

The school class in woodwork attached to the Hokitika District High School was closed at the beginning of the year owing to the death of the instructor. It was reopened in May under the direction of the headmaster, and has included twenty-two pupils of the school.

The Saturday classes for the instruction of teachers in physics and chemistry were continued until the 28th May, and were then closed. A further vote for the instruction of teachers has been received, but has not yet been applied to the purpose for which it was granted, as the Board is awaiting a reply to an application for a grant for a building to be devoted to practical science and cookery. When this is received, the Board will be able to decide as to the manner in which the vote will be expended.

REPORT OF WOODWORK CLASSES AT KUMARA AND HOKITIKA.

Kumara.—This class at the end of the year consisted of twenty-five pupils, of whom twenty-one are from the Kumara Main School. The instructor is Mr. G. A. Bell, and the progress of the class continued satisfactory. The use of the pencil and compass receives attention, but no systematic correlation with solid geometry it attempted.

Statement of Accounts.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
Balance, 1st January	7	12	8	Salary of instructor	61	8	6
Fees of students	3	12	0	Balance, 31st December	12	11	8
Government capitation	61	8	6				
Sale of furniture	1	7	0				
	£74	0	2		£74	0	2

Hokitika.—Owing to the death of the instructor at the end of the previous year the class remained closed until May, when it was reopened under the direction of Mr. H. G. Wake, B.A., headmaster. The instruction has been very thorough, and has included full instruction in solid geometry in connection with the exercises in woodwork. The class closed with a roll-number of twenty-two.

Statement of Accounts.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
Balance, 1st January	4	15	0	Salary of instructor (1903)	9	1	0
Grants from Education Board	1	8	0	Tools and appliances	14	8	4
Government capitation	9	1	0	Advertising and carting	0	3	0
Grant from High School Board	5	0	0	Balance, 31st December	6	14	2
Fees of students	4	10	0				
Sale of planes	5	12	6				
	£30	6	6		£30	6	6

NORTH CANTERBURY.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Manual and Technical Instruction.—To the several centres previously actively engaged with technical or school classes, that of Kaiapoi was added during the year. The subjects taken have not differed materially from those of previous years, and the prominence mentioned in the last report as being attached to dressmaking has been sustained. There has been some increase in the number of school classes compared with 1903, and good work has been done at many of the schools. The requirements of the new syllabus have no doubt deterred some teachers from commencing handwork.

The space at the Board's disposal in this report hardly permits of any lengthy reference to the circumstances which have led up to the unsatisfactory position of the Christchurch technical classes. Briefly, the facts are as follows: In September, 1904, the Board of Managers gave up its management of the classes on the ground of insufficient and unsuitable accommodation. In order to prevent the classes from falling through, the Education Board agreed to carry them on temporarily, at the same time expressing the opinion that without the necessary financial assistance the work could not be placed on a satisfactory and permanent footing. The Board's appeal to the local bodies failed to elicit that support which the subject deserved, and as a consequence there is still much uncertainty as to the continuance of the classes. As the capitation paid by the Department is not sufficient to meet the expenditure entailed by the appointment of a director, whose services are indispensable if technical work is to be carried to a successful issue, the Board

is of opinion that without the co-operation of the Christchurch citizens, through their representatives, the classes cannot be continued. Towards the end of the year, and again during February, a summer school for instruction of teachers in cardboard-modelling was held under the direction of Mr. E. C. Isaac, one of the Department's Technical Inspectors, good work being done on both occasions. The requirements of the several schools and the absence of pupil-teachers at the annual examinations interfered with the attendance at the earlier course, but that during the week in February was extremely good, the average per lesson being about sixty-five. The Board is much indebted to the Department for having placed at its disposal Mr. Isaac's services, which were much appreciated by those in attendance at the classes.

EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

Manual Training.—Manual occupations occupy much the same position in the schools as in the previous year. In woodwork little tendency towards extension has been shown. Another small centre was opened during the year, and steps are now being taken to make suitable provision for one more. In practical domestic economy the interest awakened has been sustained, but there is yet room for much expansion, and probably further provision in the chief centre of population will soon be, if it is not already, necessary. At the Christchurch School of Domestic Instruction, classes of girls numbering in all approximately four hundred pupils from eight or nine city and suburban schools, continue to receive a training in plain cooking. The instruction is popular, and though it is to be regretted that the accommodation available forbids the use of cottage stoves or ranges, which are indispensable to a proper degree of efficiency, we have reason to believe that much good is done. Three other centres are established. In woodwork, at present there are four centres.

In the lower classes paper-folding, brushwork, and plasticine-modelling hold the chief place. Of the educational value of brushwork we think highly, but only on the condition that the exercise is pursued far enough up in the school to make it applicable to design, and to the expression of flower and plant forms as an adjunct of nature-study. Of the plasticine-modelling, to which we assign the premier position, we have great hopes. It is the form of occupation that seems to us to afford the best promise of fruitful development, and in connection with geography may be expected to receive a considerable impulse in the immediate future.

EXTRACT FROM REPORT OF THE CHRISTCHURCH TECHNICAL CLASSES.

At the commencement of the year Junior Technical Scholarships were offered to those entitled to the privilege in accordance with the regulations; this eventually led to a very large increase in the number of students, resulting in the accommodation at the disposal of the Managers being overtaxed, and the classes for a time were therefore carried on under some disadvantage and inconvenience. The uncertainty of the continuation of the classes, however, had a prejudicial effect upon the number of students, and the overcrowding was not afterwards experienced. During the years the following classes have been held: Continuation classes for arithmetic, mensuration, algebra, commercial arithmetic, correspondence, drawing, and English: total entries, 1,273. Commercial classes for typewriting, shorthand, book-keeping, and commercial law: total entries, 1,297. Technical classes for cabinetmaking, plumbing, wool-scouring, dress-cutting, tailoring, carpentry, iron and brass moulding, coachbuilding: total entries, 703.

The attendance at the continuation and commercial classes has been fairly good, but the privileges available to the technical scholars have not been fully appreciated, many falling out after receiving instruction for a short time. In the practical classes the entries and attendance have been unsatisfactory, and with such an excellent opportunity for young tradesmen to improve themselves it has been disappointing to have to close some of the classes for want of sufficient students. The need of a capable director to organize and supervise the classes at work has been very evident during the year. Owing to the above causes the work of the year has not been so satisfactory as it otherwise would have been, but there is strong evidence that the classes are much needed, and that with more suitable and permanent class-rooms, with capable supervision under a qualified director, thoroughly up to date in all branches of education, and the continued financial support of the local public bodies, the important work of technical education would be as successful in Christchurch as in other centres.

In October last the Managers elected by the contributing bodies resigned office, and the control of the classes became vested in the North Canterbury Board of Education, which in the circumstances undertook to continue the classes temporarily. Attached hereto is a statement of the receipts and expenditure for the year.

T. GARRARD,
Secretary and Superintendent.

Statement of Receipts and Expenditure for the Year ending 31st December, 1904.

Receipts.	£	s.	d.
Balance at beginning of year	37	2	10
Grants from Government—			
Capitation on classes	435	5	3
Capitation on technical scholarships	142	19	6
Buildings (Rent)	175	4	0
Furniture, fittings, apparatus	215	3	8
Material	42	14	5
Subsidies on voluntary contributions	265	15	0
Other receipts, viz.—			
Fees	481	13	0
Voluntary contributions	245	0	0
Sale of text-books	8	10	0
	£2,049	7	8

Expenditure.	£	s.	d.
Administration—			
Salaries of instructors	1,058	17	0
Office expenses (including salaries, stationery, &c.)	199	18	0
Advertising and printing	120	11	1
Lighting, heating, and charing	107	4	1
Rent	195	4	0
Examinations, &c.	16	16	0
Material for class use	63	17	9
Text-books	8	13	2
Buildings—Furniture, fittings, and apparatus	186	7	6
Balance at end of year	91	19	1
	£2,049	7	8

H. C. LANE,
Secretary to Controlling Authority.

8th May, 1905.

Audited and found correct.—R. HILL FISHER, Auditor. 20th March, 1905.

EXTRACT FROM THE REPORT ON THE CLASSES CONDUCTED BY THE LYTTELTON TECHNICAL CLASSES ASSOCIATION.

During the year classes for instruction in woodwork, cookery, and dressmaking were held weekly during four terms each of ten weeks. The woodwork class consists entirely of public-school pupils, and the boys have been both regular in attendance and attentive to the instruction given them. The class for adults in woodwork, which was well attended when the classes were first started, has had to be abandoned owing to the attendance gradually diminishing. The cookery classes, both school and adult, were most successful for the earlier terms, but the attendance at the evening (adult) class fell off rather seriously towards the close of the year. There can be no two opinions as to the good results of the instruction in this section, many of the pupils having been most apt in acquiring knowledge and appearing to take the keenest possible interest in the work. The children's cookery class certainly supplies a want. The attendance at the dressmaking classes has been excellent, and increased to such an extent that two distinct classes had to be formed. The system taught is that known as the Fr'isco system, which appears to meet in every respect the requirements of the pupils, many of whom have made rapid progress in mastering its details.

G. LEWIN, Hon. Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1904.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
Balance at beginning of year	59	2	6	Administration—			
Grants from Government—				Salaries of instructors	76	10	0
Capitation on classes	32	10	6	Advertising and printing	2	10	0
Buildings (rent)	40	0	0	Lighting and heating	5	2	7
Other receipts, viz.—				Rent	40	0	0
Fees	22	13	4	Material for class use	1	18	8
Voluntary contributions	10	0	0	Other expenses, viz.—			
				Bank fee	0	10	0
				Cleaning	8	10	0
				Balance at end of year	29	5	1
	£164	6	4		£164	6	4

S. R. WEBB, Chairman
GEO. LEWIN, Hon. Secretary } of Managers.

I hereby certify that the above balance-sheet is correct.—WM. MCAULIFFE, Auditor.

EXTRACT FROM THE REPORT ON THE CLASSES CONDUCTED BY THE RANGIORA TECHNICAL CLASSES ASSOCIATION.

The work done in the various classes has been of a highly satisfactory character, and appears to be much appreciated by the pupils, who have taken a deep interest in the work. The attendance has been very good, as shown by the attendance-sheets furnished to the Department each term. The instructors, Misses Rennie (cookery) and Fanning (dressmaking), are giving the Managers every satisfaction in the discharge of their duties.

JAMES MARSHALL, Hon. Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1904.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
Balance at beginning of year	25	9	5	Administration—			
Grants from Government—				Salaries of instructors	60	0	0
Capitation on classes	61	9	10	Office expenses	0	10	0
Buildings (rent)	4	0	0	Advertising and printing	2	18	6
Furniture, fittings, apparatus	10	5	1	Lighting and heating	1	8	6
Other receipts, viz.—				Insurance and repairs	0	9	0
Fees	20	19	3	Rent	4	0	0
Proceeds from sale of old range	8	0	0	Material for class use	8	0	0
Sale of chart	0	12	6	Other expenses, viz.—			
Sale of goods at cookery classes	1	1	9	Instructor's expenses	6	15	0
				Caretaker	9	0	0
				Bank charges and cheque-book	0	12	0
				Buildings—			
				Furniture, fittings, and apparatus	18	5	1
				Refunds for charts sold	1	17	6
				Balance at end of year	18	2	3
	£131	17	10		£131	17	10

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

I hereby certify that I examined the accounts and vouchers in connection with the Rangiora technical classes and found same correct.—C. J. JENNINGS, Auditor.

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE CHRISTCHURCH SCHOOL OF DOMESTIC INSTRUCTION.

The Managers are glad to be able to report the most successful year's work during the existence of the school. The numbers under instruction both in the technical and school classes have been larger than in any previous year; and whilst the cookery classes have, as usual, been most popular, there has been a considerable increase in the number of those who have received instruction in dressmaking. The laundry classes have been small. We are sorry to be obliged to add that whilst

the work of the school has been increased and its usefulness has been extended, with every prospect of advancing popularity, we are—at the end of the year—placed in a position of great uncertainty with regard to accommodation. Obliged to leave the building in which the work has been carried on for so many years, the school is at present without a habitation. The Premier has been interviewed, and a grant in aid of building has been promised, giving £1 for £1 on all subscriptions; but meanwhile we are out in the cold, our only refuge a building which will need considerable outlay to make it suitable to our purpose, and will even then be inconvenient. We have been negotiating for rooms in the Normal School, but, at present, without success. We have been offered accommodation in the unused South Belt School, but, though that building might easily be made to serve our purpose, its position is most unsuitable, and would much decrease if not entirely put a stop to the useful work which is being done by means of the adult classes, whilst it would be inconvenient to many of the city and suburban schools. The decrease in the adult classes would also diminish our income considerably. With sincere regret we have to announce the loss of one of our staff through continued sickness. Miss Rennie has been connected with the school for over six years, and has done good work on its behalf. Owing to her illness, the work of the other members of the staff has been increased considerably, especially as weekly classes have for some time been held in Timaru. Mrs. Gard'ner, by invitation, attended a winter school in New Plymouth during the year. Mrs. R. D. Harman held the usual examination at the end of the year, and says in her report, "The practical work was quite up to the usual standard of excellence, which can only be attained by steady training and hard study during the year. The papers were well written, showing a thorough knowledge of the various branches of cookery, also the cause and effect of the various methods employed. The students also obtained very high marks for neatness and tidiness."

Certificates were obtained by six students, the work of four students being highly commended.

Special classes have been held during the year for those working in factories and shops, for domestic servants, and for pupils of private schools. Demonstration lessons in advanced cookery have also been given from time to time by the principal, and have been much appreciated. The attendance was as follows: First term, 154; second term, 130; third term, 142. Pupils from the following public schools received instruction in cookery during the year: Richmond, 69; Normal School, 60; St. Albans, 59; West Christchurch, 52; East Christchurch, 99; Waltham, 65; Sydenham, 46; Halswell, 15.

The total number of pupils that attended the school during the year was 918.

C. M. Gray, Chairman.

Statement of Accounts for the Year ending 31st December, 1904.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
Credit balance at 31st December, 1903 ..	69	4	9	Salaries of instructors	270	10	10
Government Grants—				General expenses—			
Capitation on classes	104	5	6	Cleaning	29	8	0
For material	104	10	10	Telephone	7	5	6
For rent	43	0	0	Printing and advertising	23	17	6
Per North Canterbury Board of Education for capitation on school classes ..	303	18	2	Bank charges and cheque-book	0	17	6
Sales	75	14	9	Petties	17	10	0
Fees	122	19	1	Rent	91	13	4
Rent from sub-tenant	14	0	0	Material	156	10	4
				Lighting and heating	40	3	7
				Instruction in dressmaking and laundry ..	43	14	3
				Utensils and repairs	5	3	0
				Bonus to staff	35	0	0
				Examiner's fee	2	2	0
				Balance	113	17	3
	£837	13	1		£837	13	1

O'Bryen Hoare, Hon. Treasurer.

I have examined the vouchers, cash-book, and bank pass-book in connection with above and certify to the correctness of the above statement.—W. Ensom, Auditor.—25th January, 1905.

Extract from the Report of the Chairman of the Board of Governors of Canterbury College.

School of Art.

The Art Master reported: As compared with 1903, the numbers in attendance were:—1903: First term—day 34, evening 157, Saturday 74, total 265; second term—day 33, evening 144, Saturday 92, total 269; third term—day 32, evening 135, Saturday 98, total 265: grand total, 799. 1904: First term—day 51, evening 117, Saturday 84, total 252; second term—day 48, evening 134, Saturday 93, total 275; third term—day 52, evening 139, Saturday 103, total 294: grand total, 821. This shows an increase of twenty-two on the previous year, and is spread over the day and Saturday classes. An afternoon class for general art-work was started at the beginning of the year and held two afternoons a week.

Drawing and Painting.—The instruction has comprised drawing and painting from life, still life, landscape, and from nature, antique and elementary work. All students have also practised modelling, which has proved helpful in learning form. An increasing number have taken up applied art-work instead of painting.

Modelling, Moulding, and Casting.—This class was well attended by the painting students, with an average of nineteen per term. Very few of those taking "applied" relief work also took modelling. This is to be regretted, as it is of special value for this work. The instruction comprised modelling from the cast (ornamental and antique) and from life, also the carrying-out of original designs preparatory to the final work in carving and *repoussé*. The various methods of casting were practised.

Applied Art-work, Wood and Stone Carving, and Repoussé.—The nature of this work has been similar to that of last year, rather more taking *repoussé* than carving. A commendable feature is that almost all the work has been from original designs. The quality of work has improved. *Stencilling:* Some creditable though elementary work has for the first time been done in this direction. A few of the students applied their studies in plant form to stencil designs for cushions, table-centres, &c., carrying them out on silk, &c. A few others carried out designs in needlework. It is hoped to still further extend "applied" work in other directions, as in gesso, leather-embossing, &c. A valuable adjunct to this work is the class for plant form in relation to designs. This was held one afternoon a week, and attended by an average of sixteen students. As far as possible a plant in all stages of its development was taken, studying its growth, character, and decorative capacity, and then applied to the ornamental filling of spaces.

Painters' and Decorators' Work.—The attendance in this class has slightly improved, there being an average of fourteen per term. This is, however, still small considering the number of youths engaged in this business. During the second and third terms the class was held twice a week, with such success that it is to be a permanent feature. Various branches of work have been practised, including glass gilding and embossing, stencilling, grisaille, signwriting, graining, marbling, &c. The Painters' Union and Mr. Sey have again been helpful to the class. Prizes have also been given by Messrs. Davis, Bush, and Button.

Decorative Design.—Classes for the study of principles of ornament were held once a week in the morning and evening, and attended by an average of seventeen and twelve respectively. This was an improvement on the previous year and much better work was done.

Geometry and Pattern-drawing for Tinsmiths.—Similar to last year a short course in elementary geometry was given, followed by applications to trade requirements. Models were also made in cardboard and tin. The average attendance was eight. This was discouraging in view of the importance in giving to the workmen scientific methods instead of the rule of thumb so generally in vogue at present.

Geometry and Perspective.—There has again been a satisfactory attendance, especially in geometry. The average numbers being in 1903, 86; 1904, 81.

Architecture and Building-construction.—In the latter class there was an average attendance of thirty-three. The class in architecture was not held the first term, having practically died out at the end of 1903. A new lecturer was appointed, and the class started again the second term with an attendance of twelve. Last term there were thirteen. This is more satisfactory than it has been for some years past, and the term just commenced shows a still further advance of fifteen. After waiting for upwards of fifteen years we shall be able to get a few of the more necessary models required in these subjects, by means of the sum allotted for apparatus, &c.

Carpentry and Joinery.—The average on the roll for this class has been thirteen, compared with sixteen the previous year. It has been worked in association with building-construction and geometry, and has done good useful work.

Cabinetwork.—Up to the end of 1903 no separate class was held in this subject, the students taking their work as far as possible with other classes. At the beginning of last year it was placed under the separate charge of a well-qualified instructor, and bids fair to become a useful class. There was an average roll-number of eight.

Instruction of Teachers and Pupil-teachers.—This work has comprised freehand, model, geometry, perspective, brushwork, modelling in plasticine, cardboard modelling, free-arm and blackboard drawing, and carving. The last was the most largely attended, owing to the regulation making it compulsory for the D certificate. The same unsatisfactory arrangement was continued as to fees—viz., compelling teachers to take two particular subjects if they wished their fees paid, instead of allowing them a wider choice.

Scholarships.—Builders' Association: These were competed for in December. Both were given to candidates in the Senior Division; none in the Junior were considered well enough qualified. State school scholarships (boys): At the beginning of the year scholarships entitling to a year's free tuition were awarded to the head boy in drawing in fifteen district State schools. State school scholarships (girls): On the result of the annual competition, ten scholarships were awarded to girls from State schools. Free Studentships: Six studentships offered by the Board for annual competition on the past year's work were awarded.

Prizes were presented by Messrs. Whitcombe and Tombs, C. Kidson, A. W. Feilder, W. Sey, Bush, Button, and Davis, and by the Canterbury Society of Arts, the Architectural Association, and the Painters' Union for competition in various subjects, and were all awarded.

Local Examinations.—Second-grade passes: Freehand, 42; model, 56; geometry, 14; perspective, 10; blackboard, 38. Full second-grade certificates, 2. Passes in other subjects: Brushwork—elementary stage 13, advanced stage 4; modelling in plasticine—elementary stage 18; modelling from the cast—elementary ornament 5, elementary antique 2; plant form, 9; first-grade geometry, 22; tinsmiths' geometry and pattern-drawing—first year 2, second year 2, third year 1, mensuration 5; carpentry and joinery—first year 1, second year 5; building-construction—first year 5 second year 8, third year 5, fourth year 2; architecture, 11; cabinetwork—first year 4; cardboard modelling, 3; free-arm and blackboard drawing, 7; principles of ornament, 15.

Art and Science Examinations of the Education Department of Great Britain, 1904.—The number of passes was as follows: Freehand, 7; model, 6; still life, 3; plant-form, 2; drawing from life, 1; anatomy, 1; design (stage 1), 1; modelling head from life, 2; plane and solid geometry, 1; building-construction, 1.

Changes in the Staff.—At the beginning of the second term Mr. J. L. Balfour was appointed instructor in advanced drawing and painting, including work from the life, thus relieving the headmaster of most of this work and enabling him to give more time to other work and to general supervision. Mr. A. Ager was appointed in July to take charge of architecture and advanced

building-construction, and Mr. H. M. Johnston in February as instructor in cabinetwork. Miss A. E. Abbott resigned at the end of the year after four years' service.

Our thanks are due to all those who have by gifts of prizes or scholarships helped forward the work of the school, and to Messrs. Whitcombe and Tombs for the *Studio* periodical.

G. H. Elliott, Headmaster.

School of Engineering, Electricity, and Technical Science.

The Professor in charge reported:—

Students.—During the year 206 students attended lectures, the hour attendances per week averaging 1,451, an increase of 2½ per cent. in students and 6 per cent. in hour attendances on the number of the previous year.

Matriculated Students.—The full course for the University degree or the associateship was taken by fifty-two students, this being an increase of 8 per cent. in the numbers for 1903; and eight college students taking electricity and magnetism in their respective courses for degrees attended the lectures in this subject.

Results of Examinations.—University examinations, 1903: nine students passed part of the first examination for B.Sc. in Engineering; ten completed the first examination; and five passed part of the second examination. Associateship of the School of Engineering: At the annual examination, 1904, three students passed the Final Examination for the Associateship in Mechanical Engineering; two students of the Final Examination for the Associateship in Electrical Engineering; and the passes in the various subjects of these courses were as follows: Electricity and magnetism, 7; advanced electricity, 2; freehand mechanical drawing, 8; descriptive geometry (advanced), 7; steam-engine (elementary), 6; applied mechanics, 6; mechanics of machinery, 8; mechanical drawing (second year), 7; steam-engine (advanced), 4; strength of materials (elementary), 1; strength of materials, 5; theory of workshop practice, 9; elementary electrical engineering, 2; advanced electrical engineering, 2; mechanical drawing and designing, 5; mechanical drawing and designing (electrical), 2.

Evening Students.—One hundred and twenty-three certificates were awarded to students attending evening lectures who passed at the annual examinations as follows: First Class: Steam-engine (elementary), 10; elementary applied mechanics, 3; mechanical drawing, section I., 6; mechanical drawing, section II., 4; freehand mechanical drawing, sections I. and II., 6; descriptive geometry and setting-out of work, 21; elementary electricity, 4. Second Class: Steam-engine (elementary), 11; elementary applied mechanics, 9; mechanical drawing, section I. 13, section II. 3, section III. 1; freehand mechanical drawing, sections I. and II., 15; descriptive geometry and setting-out of work, 3; elementary strength of materials, 2; theory of workshop practice, 1; elementary electricity, 7; elementary electrical engineering, 4.

Course in Civil Engineering.—As authorised by the Board of Governors, the course in civil engineering was re-established this year. Two students entered for the complete course, and six availed themselves of the lectures in surveying.

Additions to the Staff.—The appointment of part-time lecturer in electricity was offered to and accepted by Mr. C. Coleridge Farr, D.Sc., Assoc.M.Inst.C.E., A.I.E.E.; whilst Mr. Lawrence Birks, B.Sc., Assoc.M.Inst.C.E., received the appointment of demonstrator in electrical engineering. On Mr. Birks resigning to take up the position of electrical engineer to the New Zealand Electrical Construction Company, applications were invited in England for the position of lecturer and demonstrator in electrical engineering, and the selected candidate was Mr. P. H. Powell, M.Sc.M. Eng., late Fellow of Victoria University, England. On account of ill health, the professor in charge was granted leave for the session by the Board. During his absence the work of the department was efficiently carried on by the staff under the supervision of Dr. Farr, whilst Mr. J. L. Scott rendered most valuable assistance by delivering the course of lectures on the theory of workshop practice.

Robt. J. Scott, M.Inst.C.E.,
Professor in Charge.

SOUTH CANTERBURY.

Extract from the Report of the Education Board.

Manual and Technical Instruction.—The number of schools that earned capitation for this work during the year was twenty-one. A few schools failed to earn capitation through misunderstanding the regulations, and many others did creditable work in such subjects as paper-folding, modelling in plasticine, and brush drawing, though the smallness of the staffs prevented the teachers from devoting the time to the subjects required by the regulations. In the two largest schools classes in woodwork for the upper boys and in cookery for upper girls were conducted during the year with marked success, and arrangements are being made for classes in the same subjects during 1905 in at least three other schools. In no other part of their school work do the children take a greater interest. In nineteen schools under male teachers, needlework was taught by special teachers, the average amount of capitation earned being £6 18s. 10d. Classes for the training of teachers in manual and science subjects were held during the year in woodwork, needlework, anatomy, &c., botany, and blackboard drawing. Nearly all the classes were carried on with considerable success, and generally the attendance of the teachers was satisfactory. The "associated classes" at Timaru, Waimate, and Temuka were continued during the year, and it may now be said that they are firmly established and that their success is assured. The Technical School buildings at Timaru and Waimate have been completed, and the fitting-up of the various rooms with furniture and apparatus is now also almost complete. It is hoped that before the end of this year a similar building will be erected at Temuka. The success of these classes is due almost entirely to the energy displayed by the local managers, and especially to the unremitting labours of the superintendents and directors.

Extract from the Report of the Inspectors of Schools.

Handwork of various kinds formed part of the regular course of instruction in twenty-two schools. For the most part such work was confined to the lower divisions of the schools, but in a

few the higher classes also participated in the instruction. In the Waimate District High School and in the Timaru Main School the girls of the upper standards did very good work in the cookery classes, while the boys took up woodwork with all the enthusiasm of a new game. In three or four schools the boys were fortunate in having the privilege of belonging to a swimming class. For years past children's gardens have been a pleasing feature of the surroundings of several schools, each child or group of children having a plot to attend to. So far these gardens have been kept for the recreation of the pupils during their hours of play, and for the beautifying of the playground; but with the introduction of nature-study to the course of instruction much more may be made of the gardens than formerly, and in a future report we may be able to record that school gardens are as common as they are now rare. If the lessons in nature-study are in all cases to have immediate reference to the local surroundings, surely in an agricultural district like ours the school garden will come to be regarded as indispensable.

During the winter months Saturday classes for the training of teachers were held in Timaru and Waimate. In Timaru botany, drawing, needlework, and woodwork were taken; and in Waimate botany, physiology, and drawing. Except in woodwork, the attendance in the Timaru classes was by no means satisfactorily maintained; at Waimate the attendance was very good. The progress made in woodwork was particularly noticeable, and the instructor has now a class of sixteen teachers who are being prepared for examination with the view of obtaining the certificate of the City and Guilds of London Institute.

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

The classes held during the winter months of 1904 were probably the most useful and popular yet held in Timaru. The total number of individual students was 310, taking about 440 subjects, while last year 254 pupils took 330 subjects. With the exception of those in senior shorthand and senior book-keeping, all the established classes were large and regularly attended, the classes in junior book-keeping and shorthand being worthy of special mention in this respect. Classes in woodwork and cookery were commenced in June, and were so successfully conducted that we expect that during the 1905 session we shall have at least two full classes in each of these technical subjects. The following shows the numbers attending the various classes in each term: Painting, 18; dressmaking, three classes, 68, 38; architectural drawing, 36, 20; wood-carving, 16, 14; drawing, 19, 13; modelling, 12, 5; junior shorthand, 33, 24; senior shorthand, 14, 12; typewriting, two classes, 42, 30; Latin, 13, 9; English, 30, 22; arithmetic, 21, 11; senior book-keeping, 7, one term only; cookery, two classes, 34, 28; woodwork, 24. Having received a petition from fifteen local plumbers to form a class in plumbing, the necessary apparatus and fittings have been applied for, and as it is desired to carry the class on throughout the year, the class will be commenced during the coming month. At the close of the session, examinations were offered in all subjects, and were held in shorthand (speed, theory, and elementary), book-keeping, English, arithmetic, and typewriting. It is confidently expected that during next session we shall be able to present pupils for the City and Guilds of London Institute's examinations in woodwork, cookery, and plumbing, and for the South Kensington examination in art subjects.

The new buildings were completed in June, and were at once made use of. We have now a well-fitted cookery-room and an excellently equipped carpenter's shop, and we are daily expecting the tools and fitings of the plumbers' shop. The art-room is practically unfurnished. The surroundings of the new school have not yet been attended to, as for some months we have been without funds; but, with the arrival of the subsidy and capitation, which are now due, the work of fencing and asphalting will be put in hand.

The thanks of the association are due to those citizens and local bodies who contributed to the funds. It is most encouraging to the managers to see interest being taken in the work by such bodies as the Builders' Association, who donated £5; it is by such interest on the part of the employers that the younger students are led to take up the work. Thanks are also due to Messrs. Wilson and Fleming, who conducted examinations, and to the local Press, to whose willing assistance is due in no small degree the success of the 1904 session.

G. CRAWSHAW, Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1904.

Receipts.	£	s.	d.
Balance at beginning of year	186	17	1
Grants from Government—			
Capitation on classes	59	6	6
Buildings	1,000	0	0
Furniture, fittings, apparatus	218	12	10
Subsidies on voluntary contributions	33	12	0
Other receipts, viz.—			
Fees	145	7	4
Voluntary contributions	41	9	6
Interest	1	9	11
Balance at end of year	49	6	6
	£1,736	1	8

Expenditure.	£	s.	d.
Administration—			
Salaries of instructors	245	0	0
Office expenses (including salaries, stationery, &c.)	53	2	3
Advertising and printing	4	10	9
Lighting and heating	9	1	3
Insurance and repairs	0	16	0
Rent	4	10	0
Material for class use	25	12	8
Buildings—			
Contracts (new buildings, additions, &c.)	1,068	15	0
Architect, &c.	62	16	0
Furniture, fittings, and apparatus	261	17	9
	£1,736	1	8

JAMES CRAIGIE, Chairman
G. CRAWSHAW, Secretary } of Managers.

I have examined the books and vouchers of the above association, and hereby certify that the statement of receipts and expenditure is correct.—WM. IRWIN, Auditor.

NOTE.—There is now due from the Department on account of 1904 capitation £151 9s. 1d., and subsidy on 1904 voluntary contributions £42 9s. 6d., so that the financial position of the association is most satisfactory.

EXTRACT FROM THE REPORT OF THE WAIMATE TECHNICAL CLASSES ASSOCIATION.

Classes for the following subjects were carried on during the year: Book-keeping, typewriting, shorthand, dressmaking, woodwork, cookery, English, arithmetic, and brush drawing. The roll-numbers were: Book-keeping (three classes), 94; typewriting (two classes), 45; cookery, 49; woodwork, 35; dressmaking, 41; English, 35; arithmetic, 12; brushwork, 10. On the completion of the Technical School the managers arranged for classes in cookery and woodwork. These classes have proved very successful. Before long the equipment of the laboratory will be completed, when classes for chemistry and elementary electricity will be commenced. It is the intention of the managers to systematize the subjects next year. The following courses will, it is hoped, be arranged: (1) Agricultural course, including agricultural chemistry, botany, mensuration, woodwork, book-keeping, wool-classing, and veterinary surgery; (2) domestic course, including cookery, dressmaking, and book-keeping; (3) commercial course, including book-keeping, shorthand, typewriting, and commercial correspondence.

During the year eight instructors have been employed, and the work, although not all one could desire, has steadily improved.

The managers have been put to considerable expense in the endeavour to provide suitable equipment for the classes. Their thanks are due to the members of the Technical Classes Association and the local bodies for their support, and also to the following:—Messrs. Nicol and Son, Messrs. Gregg and Co., Mr. Akhurst, and Mr. W. Coltman—for donations of material and special appliances.

It will be seen from the balance-sheet that, although there have been many calls upon the funds of the managers (as there always must be in connection with the establishment of classes), the financial position is satisfactory. The residents of the borough and county are now provided with an excellent opportunity of obtaining technical instruction at very moderate rates. In conclusion, the managers express the desire that still greater interest will be taken in the classes during the coming session, and that that interest will exhibit itself not only by an increased attendance at the classes, but by liberal donations by the local bodies and by the residents of the district.

A. S. MORRISON, Chairman.

Statement of Receipts and Expenditure for the Year ending 31st December, 1904.

Receipts.	£	s.	d.
Balance at beginning of year	7	11	9
Grants from Government—			
Capitation on classes	28	0	5
Buildings	400	0	0
Furniture, fittings, apparatus	283	7	5
Subsidies on voluntary contributions	17	6	0
Other receipts, viz.—			
Fees	41	4	6
Voluntary contributions	27	18	0
	£805	8	1

Expenditure.	£	s.	d.
Administration—			
Salaries of instructors	86	10	0
Office expenses (including salaries, stationery, &c.)	35	18	0
Advertising and printing	11	5	0
Lighting and heating	4	19	9
Insurance and repairs	2	10	0
Material for class use	7	5	6
Buildings—			
Contracts (new buildings, additions, &c.)	329	16	6
Architect, &c.	49	12	6
Furniture, fittings, and apparatus	276	15	4
Balance at end of year	0	15	6
	£805	8	1

A. S. MORRISON, Chairman
J. E. HUTCHINSON, Secretary } of Managers.

I have examined the books and vouchers of the above association, and hereby certify that the above statement of the receipts and expenditure is correct.—W. THOMAS, Auditor.

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

In presenting the second annual report of the Temuka Technical Classes Association, the Managers feel that there is reason for congratulation on the increased popularity and prosperity of the classes. The year was started with a credit balance of £20 0s. 4d., which, after the payment of all current expenses for the past session, has now been increased to £42 3s. 9d. About £40, apart from Government grants, has been expended in the purchase of necessary apparatus. The Road Board and Temuka District High School Committee again generously made donations towards our funds, but, unfortunately, the Borough Council did not see its way to renew the previous year's grant. The experiment of making technical education free, and relying solely on receipts from the Government and voluntary contributions to provide the necessary revenue, has been justified financially, and was to a considerable extent responsible for the large increase of pupils; but it is doubtful if the privileges offered were as valued as they should have been. Several of those who joined as junior technical scholars appeared to have done so mainly out of curiosity, and evinced little or no enthusiasm in the work they had commenced. It has also been generally observed by the instructors that a number of the younger pupils, for whom the benefits of the school are chiefly intended, received no encouragement from parents to pursue their studies. Did parents and employers but know the help they would accord the classes by taking an intelligent interest in the progress of the pupils, this help would be less sparingly given. Youths have attended the commercial classes, and because they have not become competent stenographers in a few weeks' time they have discontinued their studies, lacking that incentive to work which can often be fostered by home encouragement. The commercial classes were well instructed by Mr. J. Clark, and had the largest attendances of pupils during the year. A serious drawback to Mr. Clark's work was the irregularity of attendance on the part of many of the pupils. The dressmaking

classes, under Miss Fairburn, were the most successful of the session. The attendance remained good throughout, and excellent work was done. Wool-classing was very capably taught, and should have been one of the largest of the classes, but was not well patronised by the farming community. The photography class, owing to the irregular attendance of pupils, had to be discontinued at the conclusion of the first quarter. The English class was conducted on very good and interesting lines. Drawing in its various branches is not a popular subject in Temuka, but Mr. Goy's class certainly deserved much better support from the public than it received.

The roll-numbers of the several classes were as follow: Commercial classes (two), 81; dressmaking (two classes), 52; wool-classing, 15; photography, 19; English, 40; drawing, 13: total, 220.

During the past year the classes have been working under great difficulty through want of proper accommodation. Twelve months ago a promise was given by the Government through our representative for the district that a technical school would be erected in Temuka, but at the present moment the promise is no nearer being fulfilled than it was then. This procrastination on the part of the Government is seriously hampering our work, which cannot be carried out satisfactorily till necessary accommodation is provided. Last winter school classes had to be turned out into dark passages, sometimes artificially illuminated, that technical students might occupy the already overcrowded rooms in the school. It has been decided to commence cookery classes during the coming session. As a building will require to be rented and equipped for this purpose, all of our present balance will be thus absorbed, and our classes will be in financial danger, unless liberally supported by the public. It is hoped that local bodies and individuals will give such financial support this year as will enable the new classes to be successfully carried on.

A. A. Hintz, Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1904.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
Balance at beginning of year	20	0	4	Administration—			
Grants from Government—				Salaries of instructors	143	11	0
Capitation on classes	144	1	6	Office expenses (including salaries, stationery, &c.)	29	9	8
Capitation on technical scholarships ..	66	19	3	Advertising and printing	4	16	0
Subsidies on voluntary contributions ..	29	0	0	Lighting and heating	12	15	0
Other receipts, viz.—Voluntary contributions	29	0	6	Rent	3	6	0
				Material for class use	1	2	6
				Caretaker	5	0	0
				Buildings—Furniture, fittings, and apparatus	46	17	8
				Balance at end of year	42	3	9
	£289	1	7		£289	1	7

G. W. Armitage, Chairman
Alf. A. Hintz, Secretary } of Managers.

I have examined the books and vouchers of the above association, and hereby certify that the above statement of receipts and expenditure is correct.—G. Crawshaw, Auditor.—25th February, 1905.

OTAGO.

Extract from the Report of the Education Board.

Manual and Technical Instruction.—The number of schools in which handwork classes earning Government capitation were held is fifty-four, which is about 25 per cent. of the schools. Handwork was, however, taken up in most of the schools with a staff of two or more teachers, and in some with only one teacher, but, feeling unable to comply with the time condition of the regulations, a large number of teachers took up this class of work, but did not give to it the time necessary to qualify for capitation. When the scheme of instruction in the manual and technical subjects was initiated some four years ago, the teachers of this district evinced no great readiness to introduce the new subjects into their schools, the reason assigned being that, in their judgment, a considerable curtailment of the prescription of work in some of the other subjects was necessary before the study of the various branches of handwork could be entered upon by the pupils with advantage to the pupils and the general work of the schools; and many teachers contend that they are in no better case under the new syllabus. The Department makes no grant for apparatus or material for classes that do not conform to its regulations as regards duration of instruction, programme of work, &c., and the Board has no fund for the purpose, so that, in schools where unrecognised handwork classes are conducted, the cost of the equipment and maintenance must be provided from local sources—that is, by the School Committee or the teachers concerned. Apart from the elementary handwork of the infant departments, the subjects that seem to be most suitable and beneficial for the pupils of the schools of this district, and which, where instituted, have so far been very successfully carried on, are cottage-gardening and woodwork for boys and cookery for girls. Owing, however, to the necessity for special rooms, fittings, and apparatus for woodwork and cookery, these two classes are about the most costly to equip, and the Department seems disinclined to sanction the starting of instruction in these subjects in any but the larger centres. Cottage-gardening—in the Board's opinion a subject eminently suitable for the pupils of country schools—has been authorised by the Department in connection with twenty-one schools. Applica-

tions have been forwarded to the Department for recognition of these classes in fourteen additional schools, but the Department's sanction to these has so far been withheld. Recently the Board had its attention drawn to the fact that, according to newspaper reports, the Minister of Education had expressed his intention to withdraw the grants for this subject, but the Board hopes that in this he has been misrepresented. In twenty-six of the schools that have an average attendance below forty-one instruction in needlework has been given. Special classes for instruction of teachers in woodwork and cookery were held during the year. Thirty-two of the Board's female teachers sat for the London City and Guilds Examination in Plain Cookery, twenty-two obtaining first-class and ten second-class certificates. Eighteen of the Board's male teachers presented themselves for the London City and Guilds Examination in Woodwork (first year) and sixteen of them were successful in passing. A large number of country teachers have availed themselves of the Saturday forenoon classes in the various branches of drawing held at the Dunedin School of Art.

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

During the period over which this report extends—viz., from the 8th February to the 17th December—the total number of students who received instruction was 431. This number includes 141 teachers and pupil-teachers, forty-four students in training, seventy-seven 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.

Day and Evening Classes.—Classes for freehand and model drawing and drawing in light and shade were continued on the same lines as last year. The students worked well, and their progress on the whole was entirely satisfactory. Painting: The course of work comprised brushwork, painting in monochrome from casts, colour studies from groups of still life, and painting landscape and flowers from nature. Some very good studies were executed by the students, especially in landscape and still-life painting. Modelling: The students worked from casts, plant-form from nature, from their own designs, and from life. The advanced students produced several very fine studies of plants from nature and portrait busts from life, from which plaster casts were taken by means of gelatine or piece moulds. Drawing plant-form and design: The work in these classes maintained a high standard of proficiency, the pen-and-ink studies being especially good. Students of the Training College took a keen interest in all their work, which included freehand and model drawing, drawing in light and shade, blackboard drawing, and practical geometry. In future, the work of students in their second year will comprise modelling, brushwork, elementary design, and blackboard drawing. The pupil-teachers' course of instruction was similar to that of the previous year. Their attendance was regular, and they worked hard throughout the session. At their annual examination, held in July, twenty-nine passed in model-drawing, twenty-seven passed in practical geometry, and nineteen passed in perspective. Geometrical drawing (art) and the science course, which includes practical plane and solid geometry, building-construction, and machine construction and drawing, were well attended. The students evinced great interest in their work, which was of the most useful kind, and connected with their trades. Several very good specimens of draughtsmanship, executed by students of the machine-construction class, were exhibited at the annual exhibition. The classes held on Saturday were attended by sixty-six teachers and forty-one pupil-teachers. The teachers devoted the limited time at their disposal to those subjects which would be of the greatest utility to them in their ordinary school-work; while the pupil-teachers received instruction in their prescribed class subjects. All the students took great interest in the work, and showed an earnest desire to progress by taking full advantage of the privilege of attending these classes. Next session, brushwork and elementary design will be included among the subjects of instruction. Examinations were held at the end of the session, but a number of students having to attend other classes they were unable to be present. The results were as follow: Model-drawing, 10 passed; light and shade, 17 passed; modelling, 14 passed.

The following were the successes at the Science and Art Examinations of the Board of Education, South Kensington:—Art: Freehand drawing—first class 4 passes, second class 7 passes; model-drawing—first class 4 passes, second class 14 passes; drawing in light and shade—first class 2 passes, second class 2 passes; geometrical drawing—second class 6 passes; perspective drawing—second class 8 passes; design—second class 5 passes; memory drawing of plant-form—first class 2 passes, second class 4 passes; drawing from the antique—second class 2 passes; painting from still life—first class 1 pass, second class 2 passes; anatomy—second class 1 pass. Science: Practical plane and solid geometry—(stage 1) first class 4 passes, (stage 2) second class 1 pass; machine construction and drawing—(stage 1) first class 2 passes, second class 3 passes, (stage 2) second class 4 passes; building-construction—(stage 1) first class 1 pass, (stage 2) second class 2 passes.

The five following works for the Art Class Teachers' Certificate were accepted by the Board of Education, South Kensington: 1 drawing in light and shade, 2 groups of models (shaded), 1 drawing of plant-form from nature, and 1 sheet geometrical drawing. The annual exhibition of students' work was held at the beginning of the year, when the work of the various classes was well represented. I have to thank the members of the staff for the efficient manner in which they performed their duties.

DAVID C. HUTTON, Principal.

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

At the various elections in February all the Managers were re-elected, so that the Board of Management for the past year consisted of Messrs. A. Burt, D. R. Eunson, A. Marshall, B.A., and D. R. White, M.A. (elected by the Otago Education Board); Messrs. J. F. Arnold, M.H.R., A. Sligo, and G. M. Thomson, F.L.S. (appointed by subscribers to the association); and His Worship the Mayor (Mr. T. R. Christie) and Councillor T. Scott (representing the Dunedin City Council). Mr. A. Burt was re-elected Chairman, and Mr. D. R. Eunson Treasurer.

During the year there were, as usual, several changes in the teaching staff, but these are fully referred to in the Superintendent's report. The increased attendance of students at the classes also necessitated additions to the staff, the number of regular teachers employed being thirty-three. The number of students enrolled during 1904 was 1,036, as against 775 for the previous year. The great increase during the last session, made up for the most part of pupils admitted under the Technical Scholarship Regulations, taxed the accommodation of the present premises to such an extent at to interfere with the efficiency of the instruction given, besides causing a great amount of inconvenience to all connected with the work of the classes. The urgent necessity for additions to the present buildings was brought under the notice of the Premier by a deputation that waited upon him in November last, and as a result of the interview the Education Department has promised the sum of £2,000 as a grant in aid of building. This sum, however, is altogether inadequate for the purpose, the estimated cost of the necessary buildings being £3,500. The incoming managers will therefore have to face the task of raising locally the sum of £1,500, and your representatives suggest that the Committee make a strong effort to obtain this by means of contributions from local bodies, associations, unions, firms, and individuals. The Managers think that, considering the history of the association and the valuable work done by the classes during the past sixteen years, a special appeal which practically means giving the school a permanent home cannot but be successful. It is hoped that the various local bodies will recognise their responsibilities in this matter, contribute a proportionate part of the amount required, and so, in this respect, lighten the labours of your Committee. As it is not desirable to carry on under the congested conditions prevailing last season, it may probably be necessary to limit the admission of free pupils—that is, until the additional accommodation is provided.

The association is always prepared to establish and carry on classes in any particular subject when a demand for instruction in such subjects seems to exist, and during the past year, in pursuance of this policy, several new classes were formed. Of the new classes thus formed the most successful were those undertaken by Mr. G. M. Thomson for the instruction of teachers in elementary botany. The class for painters' work, re-established at the request of the apprentices, was also productive of interest and enthusiasm.

The thanks of the Board are hereby tendered to those who have assisted during the year to further the work of the school, especially to the supervising examiners, whose names are a guarantee of the kind of work done, and to the Press for the sympathetic co-operation and assistance it has extended. The work of the Superintendent and of the teaching staff has been carried on under great difficulties, but these have been met with energy and zeal, and excellent results have been achieved.

The statement of receipts and expenditure for the year shows the credit balance of £104 4s. 3d. on the 31st December, but since that date the allowances for the last term's work have been received, so that the position is in reality much better than is shown by the statement.

Statement of Receipts and Expenditure for the Year ending 31st December, 1904.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
Bank balance, 31st December, 1903	279	9	6	Salaries	1,054	12	9
Fees	502	18	6	Printing, advertising, &c.	56	5	9
Voluntary subscriptions	86	8	3	Rent	49	3	4
Dunedin City Council	75	0	0	Gas	24	7	3
Government Grants—				Insurance and rates	21	16	3
Capitation on attendances	235	7	3	Repairs and alterations	52	19	4
Capitation—Junior technical scholars	146	10	9	Fittings and apparatus	181	13	0
For fittings and apparatus	128	6	0	Material	152	17	10
For material	93	16	0	Railway fares refunded	5	1	6
Subsidy on voluntary subscriptions	155	5	0	Bank balance, 31st December, 1904	104	4	3
	£1,703	1	3		£1,703	1	3

Examined and found correct.—C. GRATER, F.N.Z.A.A., Auditor.—Dunedin, January, 1905.

Extract from the Report of the Superintendent.

To fill the several vacancies on the staff, and also to provide for the increased attendance, the following were, at the beginning of the session, added to the list of recognised teachers: Mrs. Isa Russell, dressmaking; Miss Lilly Wilson, cookery; Messrs. George W. C. Macdonald, French; Wilkinson L. Harrison, M.A., mathematics; Thomas B. Hamilton, B.A., practical mathematics; Arthur E. Moss, practical electricity; Robert Francis, wood-carving; James W. Nicholson, painters' work; and Robert M. Chadwick, mechanical engineering. Thus the staff for the year consisted of thirty-three teachers and the Superintendent.

The total number of students enrolled was 1,036, the number being made up as follows: Thirty-one at Port Chalmers, fifty at Mosgiel, and 955 at Dunedin. This represents an increase of 200 at Dunedin, but this numerical increase does not adequately represent the additional work undertaken, for this year the number of students attending more than one class was much greater than in former years.

In order to have properly accommodated all the classes a much larger number of rooms would have been required, and this insufficiency of accommodation, in several cases, necessitated the formation of classes too large not only for efficient teaching, but also for convenient supervision.

For Department purposes our classes are recognised as falling under one or other of the three following groups: continuation, commercial, technical.

Continuation Classes.—Large numbers of students have availed themselves of the instruction offered in the English classes, and also in those for mathematics. This is a matter for congratulation, since such training, especially at the age at which students reach us, will afterwards greatly facilitate their progress when they attempt to read and comprehend, as well as calculate and check

in the ordinary course of their technical studies. Indeed, the association, by the complete course which it offers in these subjects, as well as in arithmetic and penmanship, is doing much towards forming, in a direction not always recognised, a proper basis for technical education. Examiners and teachers of the classes popularly known as technical classes frequently refer to the insufficient and incomplete knowledge of the above-mentioned subjects possessed by students, and the consequent effect upon their progress. As an instance of this, the following is taken from the report on the work of the class for mechanical engineering: "The need of a preliminary class in junior English is, in some cases, painfully evident among the junior students. Several of these are unable to clearly state what they know, and this through mere inability to properly express themselves." Notwithstanding the crowded state of the English classes, the work seems to have been quite up to the standard of former years. The examiner of senior English writes, "There is evidence of sound training in general principles and along broad educative lines." Of the intermediate class the examiner says, "Many of the pupils of this class may be characterized as experts in the work professed"; while the examiner of the junior classes states, "The composition of these classes is excellent, and forms a special feature of the work."

With the view of conserving students' energies and directing their work in mathematics directly along the lines suited to their actual requirements, classes in practical mathematics were this year established and were, for a time, well attended. During the second quarter, however, the attendance fell off considerably. The experience with this class seems to support the statement that "the easier you make the work the less will the student appreciate the assistance thus rendered, and the more will he relax his own efforts"; and, after all, it is not the actual knowledge, but the training, that is of value, and should be the aim of our work.

The classes for Latin and for French were each subdivided and taught in sections. This entailed more time on the part of the teachers, but the results were such as to convince one of the necessity of subdividing the English classes as soon as rooms are available to accommodate the extra classes thus formed. The work of the other continuation classes does not call for any special remark.

Commercial Classes.—These have always been well attended, and this year all these classes, except that for commercial law, show marked increases. The consistent support accorded these classes seems to me to arise from the fact that most of the subjects of instruction of this group are such that the ability of the student can be noted, and progress more or less directly followed. Thus a diligent student of, say, shorthand, typing, or book-keeping soon gives evidence of increased ability and efficiency to an extent likely to attract an employer's attention, and thus such a student is sure, before long, to get some direct return for his labour of study. In previous years there has invariably been a tendency on the part of students to confine their attention too exclusively to one particular subject of the group, and to disregard the assistance likely to be rendered by a study of the kindred or complementary subjects. This year, however, there was an evident desire to take advantage of the instruction in auxiliary subjects, and about seventy students took what may be termed a full commercial course. Arithmetic was this year treated on more practical lines than hitherto, and the result was in every way satisfactory. The classes for book-keeping were crowded, but among those who entered the junior division were some who would have been more profitably employed in attendance at arithmetic and penmanship. The value of the work done in the senior division of the class is becoming known and valued by commercial men. For shorthand 144 students entered, and although many of these did good work, there remained a number who never got over the initial difficulties of the subject. In order to accommodate all those desirous of learning typing a few machines were borrowed, and an extra class started. The number of students who enrolled for penmanship and commercial correspondence was sufficient to have formed at least two classes, but there being no room available, a rather large and unwieldly class remained. However, here, as in English, notwithstanding the large class, the results of the examination by outside examiners show that creditable work has been done. "Taking into account the large number in the class and the insufficient accommodation," say the examiners, "we consider the results attained afford adequate evidence that the instructor has carried on the work with much ability and enthusiasm."

Technical Classes.—The classes for science come first in order, but do not call for lengthened remark. The chemistry class was, as usual, of a convenient and satisfactory size, most of the students being either chemists' assistants or students with a leaning towards pharmacy. The usual botany class is not being held during the spring session, but an effort will be made to form a beginners' class about the middle of January. The Saturday classes in the same subject, undertaken to meet the requirements of teachers, are well attended. The class for elementary physics was also a very satsfactory one, and it is worthy of note that telegraph operators formed a majority of the members of the class.

Owing probably to repeated change of teachers, the class for practical electricity was numerically weak, and did not justify the heavy outlay incurred for rent. In mechanical engineering the teacher has as many students as he could conveniently deal with, but among these was great disparity, both in ability and attainments. Into this class men engaged only at engineering work or at an allied trade or profession are admitted, but many of these youths are so anxious to reach engineering proper that they enter the class direct, shunning, as it were, the indispensable course in drawing and mathematics; then, either their study is protracted or the result is a failure. In plumbing, too, the apprentices evince a disposition to avoid the theory class involving drawing and calculation, and to combat this tendency I purpose next year so arranging the courses that attendance at the theory classes will become obligatory on the part of all plumbers taking the practical course. The class for painters' work was this year revived, and attended by sixteen apprentices. The fees of several of the boys of this class were paid by their employers, and this, to my mind, is evidence of acknowledgment of the benefit of increased ability and efficiency likely to follow attendance at the classes.

The students of the senior class for tailors' cutting have now attended regularly for three consecutive years. That is rather a unique experience in our work, and has been a great aid to the teacher by enabling him to overtake the complete syllabus of work mapped out. At the end of the term the students were subjected to a practical examination by an outside examiner. The cookery classes, four in number, were somewhat larger than usual, but a second teacher having been appointed the work was overtaken without much difficulty. Several of the students passed the London Guilds' examination, proving that the provision for instruction in the higher branches is ample. It is probable, however, that next year a more elementary course will be provided for young beginners. Since the introduction of the Fr'isco system into our school the number of students attending the classes for dressmaking has shown a marked and regular increase. In Dunedin, four classes, containing in all 120 students, were held, while the introduction of the same system at Port Chalmers and Mosgiel added another sixty-six to the number taught dressmaking through the association. Although the class for wood-carving continues to be popular it is not attended by the particular class of apprentices for whose special benefit it may be presumed to have been established. The class this session, as formerly, was composed for the most part of amateurs, and not to any extent by wood-workers.

Under the scholarship regulations 321 students were granted free tuition. A few of these did not continue their course beyond the first week, and nearly a third of the remainder were irregular in their attendance and attention to their work. At the same time, the scholarship list contains the names of our best and most consistent workers, and with certain preliminary precautions on the part of the association to insure regular attendance I consider the scholarship regulations may be made productive of much good, and this without in any way weakening the finances of the association. In addition to the free places granted scholarship-holders, remission of fees was allowed to thirty-two students, whose circumstances seemed such as to entitle them to this concession. Professors Shand, Black, and Gilray continue to grant free tuition in their university classes to the association's best students in physics, chemistry, and English respectively. The competition for these places has always a good effect on the work of members of the senior classes in the subjects mentioned, and these professors are entitled to the thanks of the association for thus encouraging students. This year James D. Thomson gains Dr. Shand's prize, Eric R. J. Crocker Dr. Black's, and William M. Uttley Professor Gilray's.

The association is again indebted to the honorary examiners, who undertake the work often at considerable trouble and inconvenience. As an instance, it was noticed that the ladies who examined the students of the cookery classes were engaged for eight consecutive hours over the practical work. The examination of the written answers of many of the other classes this year entailed the expenditure of much time.

Year by year until the present one, the review of a past session's work has always afforded me considerable satisfaction, for I have invariably felt that sound progress was unmistakably being made, that good work was being done, and that the doing was a source of pleasure to most of those engaged in it. This year, however, my impression is that owing principally to the crowded state of our school, and in a less degree to the large proportion of young pupils, the work has not been altogether satisfactory. The teachers have had to deal with classes rather large for comfortable teaching, and in some cases neither the attention nor the behaviour of students could be regarded as praiseworthy. The teachers are therefore all the more deserving of credit for the successful result of the year's operations. ANGUS MARSHALL, Superintendent.

SOUTHLAND.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Manual and Technical Instruction.—It will be seen from the report of the Director of Technical Instruction that substantial progress has been made during the year in his department. For various reasons, but chiefly owing to the delay experienced in securing a suitable site on which the principal section of the new Technical School could be placed, the erection of the building for which a grant has been set apart has not yet been begun. Tenders for the work will be invited without further delay.

The financial results of the year's operations, when the statement of assets and liabilities is taken into account, will be found quite satisfactory. In the director's balance-sheet the actual state of the accounts cannot be definitely set forth, owing to the fact that most of the expenditure has been incurred, while payment of the greater portion of the Board's claims for capitation, &c., could not be made till after the close of the year, when the returns on which the claims are based were forwarded and approved.

Instruction of Teachers.—The Board has to report that the annual vote for the instruction of teachers in the various forms of hand-and-eye work has been profitably spent. Classes were carried on with a considerable measure of success during the months of winter and spring, the practical outcome of which should be manifested in increased efficiency in the teaching of these subjects in the schools of the district.

A course of lessons in physiography was delivered by Messrs. F. W. Hilgendorf, M.A., B.Sc., Science Master in the Southland High Schools, and H. O. Stuckey, M.A., B.Sc., the latter succeeding the former on his leaving the district. The course was held on Saturdays and was attended by about a hundred and twenty teachers with commendable regularity, and much interest was evoked in the study of the subjects treated.

Financially, it may be noted that the special vote of £150 promised by the Department for this work was more than absorbed, and the current year's vote slightly anticipated.

EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

Handwork.—Particulars of the amount done in this department will be supplied by the Director of Technical Instruction. The quality continues to improve, and at some schools is exceptionally good. The whole scheme may be said to be still at the experimental stage, for it is yet to be shown that the results are commensurate with the time and money spent in securing them. In the light of our experience, we venture the opinion that primary education would be distinctly poorer if handwork were withdrawn from the curriculum. All of our teachers are willing, some of them eager, to give the scheme a fair trial. We hope before the beginning of next year to be in a position to recommend a course of handwork suitable for every grade of school in the district.

Special classes for the instruction of teachers were again carried on during the year, and the effect of the work done is already manifesting itself in the schools. We may be permitted to question the public utility of at least two of the classes, those in woodwork and cookery. To the students themselves the classes are no doubt valuable, but, as there is neither woodwork-room nor cookery-room attached to any school within the confines of the district, it cannot be said that the classes are furthering any practical end in our system of education. There is no escape from the conclusion that it would be cheaper and more effective to employ experts to do the work than to continue to train teachers for work there is but a remote prospect of their being ever called on to do.

Last winter we endeavoured, in conjunction with Mr. McCaw, to establish a winter school for the benefit of the teachers in the outlying parts of the districts. Unavoidable obstacles rendered the execution of the project impossible. We hope, however, to see the school established this winter. An endeavour will also be made to have an exhibition of handwork at the same time.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF TECHNICAL INSTRUCTION.

The attendance at the Invercargill classes reached much the same level as former years. The total number of students who enrolled in 1903 was 252 and 172 for the first and second terms respectively, while the figures for this year are 284 and 222, an increase of thirty-two in the first term and fifty in the second. For the first time, although the subject has been on the syllabus for a number of years, a class in sanitary plumbing was established. This is a subject of vital importance to the inhabitants of the town, and it is satisfactory to know that a sufficient number of young men engaged in this occupation, were found anxious to extend their knowledge of this most important science to justify the carrying-on of the class. In view of the recent advances in bacteriological research, the establishment by Government of a Health Department, and the activity displayed by the four large centres of this colony in sanitary science, Invercargill cannot long remain in its present anyhow sanitary state. From the Technical School must radiate the necessary theoretical and practical knowledge which will enable our young tradesmen to equip themselves for the impending change in sanitary methods, and in consequence the establishment of a fully equipped plumber's shop in connection with the school must be undertaken in the near future. The recent purchase of the section adjoining the school grounds is a step fully justified, as now there is ample room to erect a plumber's shop and other necessary buildings as occasion requires.

The dressmaking class still retains its popularity. Good earnest work was done by young tradesmen in the building-construction class; art is again beginning to show evidence of life; and the commercial classes have met the needs of aspiring students. The class which shows the greatest decrease in the number of students is that of mechanical drawing. In 1902 there were twenty-seven in attendance; in 1903 the number fell to fifteen; this year the number was five. This is owing to the depression which has recently overtaken the engineering trade in Invercargill. I regret that the number of students in the cookery classes shows a decrease, but this is only what may be looked for, as cookery is now taught in both the primary and high schools to girls in Standard V. and upwards. I have a word of praise for the teachers. Without exception they have conscientiously carried out the duties devolving upon them, and the success of the classes is in no small measure attributable to their whole-hearted enthusiasm. The question of holding examinations at the close of the session's work and of awarding certificates on the results obtained has been considered. The aim of the school is to prepare the students to sit for the examinations under the City and Guilds of London Institute in technical subjects, and under the Board of Education, London, in science and art subjects, but very few are willing to take the course of study necessary. It has been thought advisable, therefore, to prepare a scheme of local examinations in the various classes, and before the end of next year this matter will be in working order.

At Mataura classes in mechanical drawing, dressmaking, book-keeping, and arithmetic were held, the total roll-number being thirty. The residents of Mataura have consistently, year after year, shown such interest in the work, that the classes at this centre have always been maintained. The success of these classes is in no small measure due to the headmaster of the public school, who has at considerable personal inconvenience, devoted much time and energy to the furtherance of this branch of our education system. At Gore, the largest centre between Invercargill and Dunedin, no movement was made at all in the direction of establishing technical classes.

Continuation classes were conducted by the head teachers at Lumsden, Mataura Island, Papatotara, Te Tua, Tuturau, Waimahaka, and Wendonside, the subjects taught being those required for a Standard V. and Standard VI. pass and book-keeping. For these classes the teachers charge a fee from the students, registers are kept, and capitation is obtained from the Education Department on the attendances recorded therein. In this way the teachers receive a fair remuneration for their services, and the district is benefited through the increase of knowledge obtained by the residents. More advantage might very well be taken by many of our country teachers of the provisions of the Manual and Technical Instruction Act, in accordance with which continuation classes may be conducted in country districts.

During 1903 additional regulations under the Manual and Technical Instruction Act were gazetted by which provision was made for the free tuition of students who had obtained the proficiency certificate of Standard VI., on condition of their making at least twenty attendances at each of two classes (one of which required to be English of a standard higher than that for Standard VI.) during the year. It was thought advisable to put these regulations into operation only to a limited extent, as the additional capitation given on account of such students was less than the amount of the fees which they would have had to pay as ordinary students. It was hoped, however, that the attendance at the free classes would be so far in advance of what has hitherto been the case that the revenue would not materially suffer. Consequently the continuation classes were thrown open to students under these regulations, but the technical-class students paid the ordinary fees. The result did not realise expectations. The English, mathematics, book-keeping, and shorthand classes benefited by an increased number of students, the number being, 40, 13, 40, and 36 respectively, as against 13, 0, 32, and 10 for the preceding year. But, owing to a misunderstanding of the conditions, several students, while they attended the English class regularly, failed to make a sufficient number of attendances in their other subjects to entitle them to earn any additional capitation. To the credit of these students, be it said, however, that when appealed to, they nearly all paid as a fee a sum equal to the amount of capitation payable on their account had they attended the minimum number of times. Now that the regulations are better understood both by teachers and students, the Junior Technical Scholarship scheme is worthy of being extended and thoroughly tested. It is therefore proposed to make the technical as well as the continuation classes free next session, and then a definite pronouncement can be made on the financial position as gauged by actual results.

Of the utility and value of the scheme itself, there can be no question. It is a splendid idea, and worthy of hearty support, to give those who have passed the proficiency examination and who have to go out to work, an opportunity to continue their education for two or four years by allowing them to attend free evening classes.

When the Technical School buildings are completed, it would be worth the Board's while to take into consideration the question whether technical day classes might not be established. If fifty pupils who have gained the proficiency certificate came to the Technical Day School instead of remaining on in Standard VII. at the primary school, there would be obtained for each student an average capitation of about £13. This would represent a total income of £650. With this sum a sufficient staff of competent teachers could be paid. The staff required would be, say, one teacher for English, mathematics, and commercial subjects at £250; one assistant at £150, competent to take shorthand and typewriting; one teacher of domestic economy and cookery at £50; one woodwork instructor at £50; and one art teacher at £50. These last three teachers would also act as instructors to the primary-school pupils. This would leave a sum of £100 for maintenance, &c. Such a school could, I feel assured, be successfully established and maintained. At the present time there are sixty-seven pupils remaining in Standard VII. in the three town schools alone, and there would be no difficulty in pupils from Invercargill North, Waikiwi, Waihopai, Tisbury, and Clifton Schools attending. In the meantime, unless these pupils pass the proficiency examination before they are fourteen years of age, they are debarred from attending the High School. At the Technical School, age would be no bar to admission. The matter is worthy of the most careful consideration. Already other centres have decided on this course, and so may Invercargill.

Manual Instruction in Schools.

In my report last year, after dealing with the rapid extension of hand-and-eye work in the schools in this district, I said that I hoped the position reached would be maintained. I am pleased to be able to report that not only has the position been maintained but the work has been considerably extended. The number of schools in which handwork was taught in 1903 was seventy-three, and the number of children under instruction in manual subjects was 6,218. This year, the numbers are ninety-four and 6,518 respectively, not including advanced needlework pupils. This result has been brought about through the operation of three causes—first, the teachers themselves are now realising the value of hand-and-eye training as a means of stimulating and quickening the reasoning faculties of their charges; second, the Inspectors never miss the opportunity of impressing upon teachers the desirability of introducing handwork into the schools; and third, the new syllabus, while not making manual training in the schools compulsory, gives encouragement to teachers to introduce this branch of education into their curriculum, and to carry it on in some form or other from the infant department to Standard VII. From the number of applications that have been received this year, it is safe to assume that handwork is being greatly extended throughout the district, not only in an increased number of schools but also in the higher standards of nearly all the schools.

Considerable attention has been given to a selection of manual subjects suitable to the schools of this district, and teachers have been generally advised to confine their attention to the following leading subjects:—

For P–S2, paper-folding and plasticine-modelling; for S3 and S4, carton-work and brush drawing; for S5, S6, and S7, cardboard-work and brush drawing. In Invercargill and at Gore, while there exist fully equipped cookery and woodwork rooms, the pupils in S5, S6, and S7 are encouraged to take cookery and woodwork instead of cardboard-modelling and brushwork. In many schools other occupations are introduced by way of change into the infant divisions, such as stick-laying, brick-laying, paper cutting and mounting, drawing in crayons, &c. The reasons for the selection of the above course are briefly: Paper-folding, carton-work, cardboard-modelling, and woodwork develop the mechanical, while modelling and brush drawing develop the artistic side of the pupil's nature. Paper-folding is an easy and perfect introduction to geometrical forms; carton-work and cardboard-modelling, introducing as they do the use of the rule, the knife, and the compasses, develop still further the foundation laid in the paper-folding class;

while in the application and manipulation of rule and woodworking tools to the construction of joints in woodwork, combined with the necessary drawing, the pupil finds an exercise that taxes his intelligence and manipulative skill to the highest extent. In the same way the child's sense of proportion and form is developed through a series of exercises in plasticine-modelling, while in the brushwork exercises accuracy of form and proportion are combined with colour, and so the artistic side of the pupil is afforded an opportunity of revealing itself. Then in cookery for the girls, we have a most sensible and useful science; for in the midst of all the present-day turmoil regarding men's rights and women's wrongs, neither side has ever attempted to dispute the fact that woman reigns supreme in the kitchen.

Woodwork classes for the boys and cookery classes for the girls have been conducted in Invercargill and Gore. In Invercargill the teachers of the town schools have hitherto conducted their own classes in woodwork, but the cookery classes have all been taught by one instructor. The Gore classes were conducted by teachers from the Invercargill district. The work at both centres might be very largely extended. The principle of placing these classes in charge of their own teachers does not work well in practice. Generally, an assistant master is in charge of the woodwork class, and changes are often occurring through the assistant masters being promoted to new positions, with consequent disarrangement of the work. Besides, as the regulations allow only twenty-four pupils to be present at one class, and as the number of pupils in S5, S6, and S7 who are eligible to receive instruction would make four or five classes of this size from one school alone, it is easy to understand that headmasters are unwilling to part with the services of their assistants for periods totalling nearly two whole days a week. The result is, that little more than one-half of the pupils receive instruction in this subject. After an experience of some years, I am firmly convinced that, to do effective work, one qualified teacher should be placed in charge of the woodwork-room, as is now the case in the cookery-room. Then, not only could all the boys and girls in S5, S6, and S7 in the town schools, but also in North Invercargill, Waikiwi, Waihopai, Tisbury, and Clifton Schools, come and receive instruction at stated periods; and so might also pupils from Bluff and Greenhills without loss of much time, as the train arrangements suit. This is the plan adopted in Auckland and in other centres, with, to my mind, most excellent results. The system could also be adopted to a limited extent at the other centres.

The Education Department having intimated that the Singer Sewing-machine Company was prepared to supply to schools in which advanced needlework classes were taught, one of their high-grade sewing-machines at a very low figure, thirteen of the larger schools took advantage of the concession and applied to have their classes recognised. This is also a move in the right direction. Could cookery and advanced needlework be taught to all the girls in S5, S6, and S7 throughout the colony, it would be of infinite benefit to every resident therein ten years' hence.

The ordinary needlework classes in schools staffed by males only have been conducted by competent instructors resident in the neighbourhood of these schools. The capitation earned in connection therewith amounted to £239 12s. 3d.

Teachers' Training Classes.

Training classes for teachers have been held at Invercargill and Gore. Woodwork and cookery were taught at both centres, and in addition classes in physiography, blackboard drawing, cardboard-modelling, brush drawing, plasticine-modelling, paper-folding, and dress-cutting were held in Invercargill. The most popular class was that for blackboard drawing, at which 136 teachers were in attendance. The class was divided into four sections, one section receiving instruction on Friday evening and the other three sections on Saturday. The woodwork-room was specially fitted up, and a set of large models was prepared so that each student drew from his or her own point of view. Examinations were periodically held, and the report of the examiner showed that he considered good work was being done. The teachers have expressed a wish that a further series of lessons should be held this year, and if possible the request will be complied with. The other classes held were, on the whole, well attended. The teachers are to be congratulated on the continued self-sacrifice shown by them in attending these classes Saturday after Saturday for months on end in order to qualify themselves to meet the requirements of the new syllabus. The utmost good-fellowship prevailed during the entire period of instruction.

This year it is proposed to bring to a close, for a time at least, the woodwork and cookery classes, and to establish more classes in blackboard drawing and nature-study. The teachers around the Gore centre were somewhat neglected last year, but it is intended to make special provision for the teachers at this centre this season.

As in former years, a number of teachers presented themselves for examination in woodwork and cookery under the City and Guilds of London Institute. The number of teachers who passed was as follows: Woodwork—first year, 18; second year, first class 1, second class 4. Cookery—first class 16, second class 18.

At the art examination of the Board of Education, South Kensington, one student passed in freehand drawing, two in model-drawing, and two in light and shade.

In consequence of the large number of teachers who were in attendance at the training classes, the proposed winter school has been still further held over. It is proposed to hold in connection with the school an exhibition of hand-and-eye work. In June last Mr. E. C. Isaac, Organizing Inspector of Manual and Technical Instruction, paid his annual visit of inspection to this district, and inspected the work being done in the Technical School and in several of the primary schools. He also met a large body of the teachers in Invercargill and gave demonstrations in jack-plane drill and in blackboard drawing. During the year gifts of money and of goods were received from Messrs. Hayward Bros. and Co., of Christchurch, and Messrs. Manson, Thomson, Field, and Smyth, of Invercargill, all in aid of the cookery classes. These friends are thanked for their kindness. The work connected with this department of education is growing year by year, but the labour is made comparatively light because of the kindly consideration and for-

bearance manifested by all who are concerned therein, both here in Invercargill and at head-quarters in Wellington. The many teachers, too, with whom I have had to do were most obliging, and to all concerned I can only tender my sincere thanks. I have also to acknowledge the fairness of the Central Department at Wellington in responding to the various claims for grants and capitation made during the year. Through the generosity of the Board, I was enabled to visit the Technical Schools in Auckland, New Plymouth, Stratford, Hawera, Wanganui, Napier, Wellington, Christchurch, and Timaru, where on every hand I received the most generous consideration. The tour was full of interest, and I gained much valuable information which I hope to make available in the service of the Board. I desire here to record my thanks to all with whom I came in contact, and who assisted to make my tour helpful and highly instructive.

The balance-sheet refers to a period of nine months only. Hitherto the year has closed on the 31st March, by which time most of the grants on the year's operations were received from the Education Department. This was inconvenient, however, as the Treasurer's general statement was made out to the 31st December, and so it was decided to close the general account and the detailed account at the same period. This explains the apparent loss of £738 18s. 10d. on the year's operations. However, the assets at the 31st December, representing capitation payments earned and other grants due, amounted (subject to correction) to about £1,300. Most of this has already been received, so that the finances are still buoyant.

Balance-sheet for Nine Months ended 31st December, 1904.

Receipts.	£	s.	d.
Balance from year 1903	512	19	10
Central Account—			
Refund rent from Government	1	0	0
Students' fees	106	18	6
Government capitation	72	10	9
Material refunded	24	19	8
Junior Scholarship capitation	27	13	6
School Technical Account (Invercargill)—			
Grant for furniture and fittings	43	1	8
Grant for permanent apparatus	49	9	3
Voluntary contributions for prizes	4	0	6
Schools Technical Account (Gore)—			
Refund rent from Department	23	2	6
Government grant for furniture and fittings	17	5	7
Government grant for refund material	9	0	2
Schools Standard Account—			
Capitation on school classes	23	9	0
Government grants for permanent material	40	3	4
Mataura Technical Account—			
Students' fees	19	0	0
Refund rent from Government	0	10	0
Teachers' Training Account — Government grant for material	29	12	1
Balance	224	19	0
	£1,229	15	4

Expenditure.	£	s.	d.
Central Account—			
Advertising and printing	13	10	0
Apparatus	33	5	10
Material	42	11	11
Salaries	211	4	0
Rent of rooms	3	0	0
Rent of section	2	10	0
Rates on new section	4	7	7
Janitor and lighting	13	13	4
Administration expenses	100	0	0
Schools Technical Account (Invercargill)—			
Salaries	110	18	7
Material	30	2	6
Furniture, fittings, and apparatus	101	16	8
Sewing-machines	70	0	0
Prizes	3	12	6
Miscellaneous	1	10	0
Schools Technical Account (Gore)—			
Rent of Technical School	32	10	0
Schools Standard Account—			
Non-permanent material	119	11	1
Permanent material	47	2	0
Furniture and fittings	6	17	8
Teachers' Training Account—			
Salaries	128	10	0
Material	56	14	5
Coach fares paid	15	15	0
Teachers' hotel expenses	6	0	0
Miscellaneous, janitor, &c.	9	15	6
Administration (two years)	33	5	0
Central Building Account—Lining wall	1	7	0
Mataura Technical Account—			
Salaries	27	12	6
Rent of rooms	0	13	0
Printing syllabuses	0	9	6
Lighting and cleaning	1	9	9
	£1,229	15	4

W. A. McCaw,
Director of Technical Instruction.

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